Caring Beyond Health Care: Lessons Learned From a Community-Based Partnership to Reduce Hospital Readmission Among High-Risk Adults

Raven H. Weaver  
Washington State University

Cory Bolkan  
Washington State University

Susan L. Robbins  
Legacy Salmon Creek Medical Center

Brooke Benton

Eunsaem Kim  
Ajou University

Recommended Citation
Weaver, Raven H.; Bolkan, Cory; Robbins, Susan L.; Benton, Brooke; Kim, Eunsaem; Ensey, Melissa; and Kelly, David (2021) "Caring Beyond Health Care: Lessons Learned From a Community-Based Partnership to Reduce Hospital Readmission Among High-Risk Adults," Journal of Community Engagement and Scholarship: Vol. 14 : Iss. 1 , Article 16. 
Available at: https://digitalcommons.northgeorgia.edu/jces/vol14/iss1/16
Caring Beyond Health Care: Lessons Learned From a Community-Based Partnership to Reduce Hospital Readmission Among High-Risk Adults

Cover Page Footnote
Acknowledgement. The activities described in this article were performed under Contract No. HHSM-500-2014-QIN011I titled Medicare Quality Innovation Network - Quality Improvement Organization for Washington State, funded by the Centers for Medicare & Medicaid Services, an agency of the U.S. Department of Health and Human Services. The content of this article does not necessarily reflect the views or policies of the Department of Health and Human Services, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.

Authors
Raven H. Weaver, Cory Bolkan, Susan L. Robbins, Brooke Benton, Eunsaem Kim, Melissa Ensey, and David Kelly

This research from the field is available in Journal of Community Engagement and Scholarship: https://digitalcommons.northgeorgia.edu/jces/vol14/iss1/16
Caring Beyond Health Care: Lessons Learned From a Community-Based Partnership to Reduce Hospital Readmission Among High-Risk Adults

Raven H. Weaver, Cory Bolkan, Susan L. Robbins, Brooke Benton, Eunsaem Kim, Melissa Ensey, and David Kelly

Abstract

As population aging increases demands on the U.S. health care system, strong public outreach regarding community supports for older adults and clear partnerships between medical and community-based services are needed to identify, serve, and yield better health outcomes, especially for the most vulnerable populations. In this exploratory observational study, we aimed to implement a collaborative pilot project involving a cross-sector partnership between a community-based aging services organization (Area Agency on Aging) and a medical center, with the goal of reducing hospital readmissions. The medical center screened low-income, high-need, community-dwelling adults for social determinants of health (SDoH) needs prior to hospital discharge and actively referred individuals for community support. We report on the development and feasibility of the pilot implementation of a standardized SDoH screening and referral protocol. We also explored the impact of the screening intervention by examining the frequency of hospital readmissions in the 6 months pre- and postintervention. Among 99 patients screened, almost half had SDoH needs. Patients who were referred and subsequently used community-based services experienced a significant reduction in hospital readmissions. We discuss lessons learned about communication, data collection, and staffing issues that can inform future research on community-level processes and changes that can benefit a growing and diverse population of adults with complex care needs. Clinical-community partnerships contribute to sustainable practices that benefit vulnerable populations by providing care beyond the traditional health care setting—and ultimately support patients with high needs in their homes and communities.

The coming decades will bring unprecedented growth in the number of older adults around the world. In the United States, the number of adults aged 65 or older is expected to more than double by 2060 (Administration for Community Living, 2018). This demographic shift will place unparalleled demands on public health, aging services, and health care systems; it will also require innovative and integrated efforts, particularly in helping older adults to age in place, or “to remain in their own homes and communities safely, independently and comfortably, regardless of age, income, or ability level” (Centers for Disease Control and Prevention [CDC], 2009). Aging in place reflects the desire of nearly 80% of older people and is preferred by policy-makers as a cost-containment measure to avoid hospitalization or long-term care (Binette & Vasold, 2019; Office of Policy Development and Research, 2013). The growing interest in aging in place is also reflected in the global movement to promote age-friendly communities and livable community initiatives (Gonyea & Hudson, 2015; Greenfield et al., 2019). This renewed focus on communities has yielded new research exploring how relationships between community members affect older adults’ health and well-being, especially among individuals who may not have nearby family support (Greenfield & Reyes, 2015; Greenfield, 2018). Greenfield and colleagues have introduced a concept known as “community gerontology,” through which they advocate for researchers, practitioners, and policy-makers to organize and advance research and outreach related to community-level change processes that can enhance well-being among a diverse population of older adults. We situate the present study within this framework as a guide to better understand community partnerships as both a fundamental context of aging and a venue for creating change within communities.

Home and Community-Based Services

Home and community-based services (HCBS), such as home health, personal care, and case management, are often used to support community-dwelling older adults as they age in place and to prevent or delay hospitalization or placement in long-term care. In the United
States, older adults and family caregivers tend to use HCBS at low rates due to limited awareness of and barriers to using them (Brossoie et al., 2010; Casado et al., 2011; Lindquist et al., 2018). Furthermore, relatively few adults intentionally plan for or actively contemplate their future care needs (Gould et al., 2017), which may reflect overall trends of negative perceptions and attitudes toward aging (Swift et al., 2017). Individuals who can proficiently use proactive coping skills to plan for and anticipate future challenges tend to have higher socioeconomic status (i.e., income and education level) in comparison to their less-resourced counterparts (Ouwehand et al., 2009). There remains a need for community outreach and education that raises public awareness of available community supports for older adults and family caregivers, especially among individuals with fewer resources, in order for families to prepare and plan for later life needs and changes.

Older adults are likely to seek and receive information about HCBS through their health care providers. However, clinicians often have little awareness of what is available in their communities or which services most benefit their patients' diverse needs (Lincoln, 2019; Ploeg et al., 2017; Siegel et al., 2018). In addition, despite the strong evidence of the influence of social determinants of health (SDoH) needs (e.g., food insecurity, housing instability, transportation needs) on health risks and outcomes (Greysen et al., 2014; Hood et al., 2016; Hu et al., 2014; Sattler et al., 2015; Thornton et al., 2016), only about 25% of hospitals and less than 16% of physician practices screen patients for all five SDoH prioritized by the Centers for Medicare and Medicaid Services (CMS; Fraze et al., 2019). This highlights an important opportunity for clinical and community-based collaboration to address both health and social needs in the community, especially among adults at high risk of rehospitalization. For older adults specifically, growing evidence indicates that meeting SDoH needs can improve health (Gottlieb et al., 2013) and reduce medical care costs (Taylor et al., 2016). Thus, cross-sector partnerships have the potential to produce better outcomes for vulnerable populations discharged from inpatient settings back into the community (Mays et al., 2016; Towe et al., 2016; Winters et al., 2016).

Cross-Sector Partnerships to Facilitate HCBS

Many community-based service organizations are well positioned to support clinicians’ efforts to address complex health needs in the community by assessing individuals’ multifaceted social needs. In particular, within the United States, the 1973 amendments to the Older Americans Act mandated the development of a national aging services network; currently, over 600 Area Agencies on Aging (AAAs) exist to specifically promote and coordinate HCBS support and services for older Americans (for more information, see USAging, n.d.). Although AAAs have existed for almost 50 years, and despite the breadth of services and supports they provide to older adults and adults of all ages with disabilities, these organizations tend to be underrecognized and underutilized (Brossoie et al., 2010). AAAs routinely address the complex social and health needs of older adults (who are responsible for a substantial share of overall health care spending) by providing and coordinating a range of HCBS. Improving health—and achieving health equity for adults with significant SDoH needs—will require broader approaches that target social, economic, and environmental factors that influence health (Fraze et al., 2016; Marmot et al., 2008; Williams et al., 2008), and AAAs are community-based organizations that can help to fulfill this need.

Evidence-based recommendations are limited regarding the collaborative role of non–health care organizations and in linking cross-sectoral collaborations to health outcomes (Towe et al., 2016). There is recent evidence, however, that communities in which local AAAs maintain partnerships with health care organizations experience significant reductions in hospital readmission rates, lower health care use, and lower spending compared with counties without these programs and partnerships (Brewster et al., 2018, 2020). These findings indicate that investment in health and aging services partnerships via AAAs may reduce health care use and spending for older adults. Specifically, AAAs are well equipped to improve SDoH (Kunkel et al., 2018). Less is known, however, about how partnerships between AAAs and health care organizations are formed or structured. In an effort to provide insight in this vein, we describe a pilot intervention conducted by an acute care hospital and an AAA that aimed to identify and address SDoH needs with the ultimate goal of reducing hospital readmissions for a population of dually Medicare- and Medicaid-eligible patients (i.e., individuals who are both low-income and primarily older). This cross-sector partnership emphasized SDoH screening, active referral, and connection to community support for vulnerable adults who were at the highest risk of hospital readmission.
Study Purpose

Our goal is to describe the planning and implementation efforts of the Caring Beyond Health Care pilot project. The idea behind this observational pilot feasibility study first arose as part of a health care quality improvement process. Our goal was to reduce vulnerable adults’ hospital readmissions through a multidisciplinary partnership between clinical-based (i.e., hospital) and community-based (i.e., AAA) organizations. Specifically, we aimed (a) to contribute to the evidence base on the feasibility of building and sustaining this unique type of cross-sector partnership (Bowen et al., 2009), and (b) to determine whether the partnership could more efficiently and fully screen high-risk patients for their SDoH needs and to connect them to community services and support. Given the challenges and complexities of establishing this type of cross-sector project to improve health equity among vulnerable populations, an exploratory pilot study is a valuable first step in facilitating evidence-based decisions about the ultimate program design and implementation (Thabane et al., 2019).

Our team was guided by the motivation to reduce hospital readmissions among high-need patients which is associated with high-cost care. We conclude with lessons learned and discuss implications for adapting, replicating, and scaling up the project to improve transitional care from hospital to community by addressing SDoH needs.

Partnering Organizations and Setting

Two organizations actively collaborated to manage their shared patients/clients: a local medical center and a regional AAA. Together, they discussed a plan that allowed patients with identified SDoH needs to be referred directly to the AAA immediately following inpatient hospitalization. Because both organizations serve a growing high-acuity, high-cost population, the target patients/clients for this project were dual-eligible for both Medicare and Medicaid (i.e., individuals who are both low-income and older adults or adults with disabilities). It is difficult to manage care for and effectively treat this dual-eligible population (Allen et al., 2014; Figueroa et al., 2018), which constitutes about 13% of the total Medicare and Medicaid enrollee population but a disproportionate amount (34%) of the two programs’ overall spending (Congressional Budget Office, 2013). Dual-eligible individuals experience more chronic conditions, have more hospital visits/readmissions, and take more medications than do Medicare-only beneficiaries (Inovalon, 2015). Consequently, the dual-eligible population is often difficult for both the medical center and the AAA to reach and treat.

The medical center, a 220-bed hospital with 15,000 annual admissions and 78,000 annual emergency department visits, was motivated to participate in this project because dual-eligible patients account for over 35% of their readmissions and represent a disproportionate share of their 30-day readmission population. Consequently, the medical center’s leadership board—the chief administrative officer, the chief nursing officer, and the director of patient services—approved the pilot project to see whether participation would reduce readmissions at their site.

The AAA is a community-based social service referral organization that serves older adults and people with disabilities (e.g., individuals eligible for Medicaid and/or Medicare). The AAA serves a five-county area with a total population of more than 600,000 people, approximately 20% of whom are aged 60 and older. This AAA has been recognized for innovative leadership in the region, especially for meeting the social needs of vulnerable adults, supporting aging in place, and seeking collaborative opportunities with other community-based organizations serving mutual patients/clients.

Funding for this project came through a health care quality improvement consulting firm that received an innovation grant from the CMS. The consulting firm facilitated initial planning meetings between the hospital and the AAA. University researchers served as consultants to the project and facilitated data analysis and dissemination of project findings.

Methods

The pilot had two key development and implementation phases: (a) preparation and planning (e.g., leadership engagement, developing design and protocols) and (b) implementation of a quality improvement process (e.g., Plan-Do-Check-Act cycles to refine the screening and active referral protocol until it became a stable part of routine care).

Phase 1 Procedures: Preparation and Planning

While SDoH screening is sometimes administered in community settings following hospital discharge (Alley et al., 2016; Billioux et al., 2017), this intervention had the goal of
implementing SDoH screening in the hospital setting before discharge to avoid lost follow-ups with hard-to-reach, high-need individuals. Professionals from the consulting firm led a process-mapping session, which is a quality improvement tool used to visually demonstrate steps and decisions in processes; it is frequently used to understand the complexity of health care processes (Marriott, 2018). In the original step-by-step decisional process for discharge planning and active referral, five actors were involved: physicians, case managers, social workers, nursing staff, and AAA staff. During the process-mapping session, a new, simpler process emerged from the facilitated group discussion between case managers and AAA staff involving only two actors: a hospital case manager (discharge planner or social worker) and a community-based AAA case manager (see Appendix A).

The quality improvement professionals then developed a standardized SDoH screening process based on the empirical literature (e.g., Adler et al., 2016), and they assigned responsibility to the hospital's care management team/discharge planners for screening all patients eligible for AAA services (e.g., older adults and adults with disabilities). Staff were trained on how to use the screening tool. The standardized checklist ensured that the care management team/discharge planners used consistent, structured questions to identify multiple SDoH needs, with the goal of reducing variation in the identification of patients with SDoH needs for timely referral directly to AAA services and supports. Based on the results of the process-mapping session and the development of the systematic, comprehensive SDoH screening tool (see Appendix B), partners agreed to implement the new protocol with eligible patients prior to discharge for a 5-month trial period.

Phase 2 Procedures: Implementation of Quality Improvement Process

First, hospital staff flagged patients eligible for the pilot project. Hospitalized individuals with demonstrated financial need (i.e., eligible for Medicaid services) and who were either aged 65 or older or living with qualifying disabilities (i.e., eligible for Medicare services) composed the target population (i.e., “dual-eligibles”). As noted previously, this population was specifically selected because of its disproportionate risk for acute care utilization (Bennett & Probst, 2016).

The hospital’s care management team/discharge planners conducted the SDoH screening process with patients at some point during their hospitalization (precise timing was dependent on staff availability). They asked patients about their SDoH needs using the scripted yes-no questions provided on the screening form. Patients with at least one indicated need met the threshold for an active referral to AAA for HCBS upon discharge. AAA contacted every patient who consented to referral and acted as a resource and referral hub to secure ongoing HCBS support for the patients. If patients agreed to the recommended services, then AAA staff connected them to HCBS that addressed their individual health and social needs. For example, AAA provided case management and in-home support, referred patients demonstrating food insecurity to assistance programs like the Supplemental Nutrition Assistance Program or Meals on Wheels, and referred patients lacking transportation to medical or nonmedical appointments to senior transportation programs funded through the Older Americans Act.

Study Population

Any dual-eligible patient admitted to the hospital during the 5-month pilot trial was eligible for screening of SDoH needs prior to hospital discharge. Those with an indicated SDoH need were referred to AAA for additional HCBS and tracked as to whether they engaged in any services or not. It was beyond the scope of the project to screen patients seen only in the emergency department or on observation status.

Data Collection and Analysis

The hospital utilized a paper-based version of the SDoH screening tool. Patients were asked whether they needed help with transportation, housing, financial concerns (e.g., paying for utilities or medication), food, safety concerns, basic or instrumental activities of daily living, resources for Alzheimer's disease and related dementias, or health promotion/chronic disease management. The hospital's care management team/discharge planners checked boxes on the form to indicate need(s); SDoH needs did not generate a sum score, but rather patients with at least one need met the eligibility threshold for referral to AAA.

The hospital pulled outcomes data in the form of patient readmissions to the hospital and obtained hospitalization data over a 1-year period for all patients who agreed to AAA referral (i.e., the number of hospital admissions 6 months prior to and 6 months after their SDoH screening). Then,
we observed the frequency of hospital admissions pre- and postintervention among patients who engaged in AAA services/supports (intervention group) and those who were referred to AAA but did not engage with AAA services (comparison group). Due to the small scale of this pilot study, we conducted nonparametric, or distribution free, tests in order to explore whether there was a significant difference between the two groups in the median number of hospital readmissions observed pre- and postintervention. This project received an exemption from the university’s institutional review board.

Results

Pilot Effectiveness

During the 5-month pilot, 99 eligible patients were screened for SDoH needs. The average age of patients was 61.8 years. The majority of patients were women (75%), identified as White (78%), and indicated English as their primary language (94%). See Table 1 for more information. Nearly half of the screened patients (n = 43) had at least one identified SDoH need and were referred to AAA for supports/services; almost all of these patients (n = 38) accepted the referral (five patients declined). This outcome reflected patients’ willingness to engage in services, which in itself helped to answer one of the questions the pilot project sought to explore. Among those who accepted the referral, 22 patients were connected to AAA services (intervention group) and 16 patients were not connected because they could not be contacted or later refused (comparison group). In the Discussion section, we further explore lessons learned from the pilot implementation process.

In terms of the main outcome, we explored the frequency of hospital admissions among the intervention and comparison groups before and after the screening intervention. Overall, we found a more pronounced reduction in hospital readmissions among the referral population who used the AAA services (n = 22). Among these 22 adults, there was a 67% decrease in 30-day readmissions (a decline in admissions from 12 to four) and a 64% decrease in 6-month readmissions (a decline in admissions from 47 to 17). In contrast, among the adults who were referred but did not use the AAA services, there was an increase in both 30-day and 6-month readmissions (increases from three to six and from 18 to 24, respectively). Due to concerns regarding the distribution of the data and because the sample size in this pilot study was too small to power sophisticated analytic techniques and modeling, we conducted a nonparametric median test to explore if the differences observed between the two groups were statistically meaningful. We found that the 6-month median hospitalization rates were significantly different between the two groups, $\chi^2 (df = 1, p = .02) = 5.275$. More specifically, these results suggest that adults who accepted referrals and used AAA services were less likely to be readmitted to the hospital in the 6 months following the intervention than those who accepted referral but did not use AAA services postdischarge.

<table>
<thead>
<tr>
<th>Age (mean)</th>
<th>Total screened (N = 99)</th>
<th>With identified need (N = 43)</th>
<th>Referred to AAA (N = 38)</th>
<th>Connected to AAA (N = 22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>65.56</td>
<td>63.68</td>
<td>61.87</td>
<td>64.77</td>
<td></td>
</tr>
<tr>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>74 (75%)</td>
<td>32 (74%)</td>
<td>28 (74%)</td>
<td>17 (77%)</td>
</tr>
<tr>
<td>White</td>
<td>77 (78%)</td>
<td>34 (79%)</td>
<td>29 (76%)</td>
<td>15 (68%)</td>
</tr>
<tr>
<td>English speakers</td>
<td>93 (94%)</td>
<td>41 (95%)</td>
<td>36 (95%)</td>
<td>20 (91%)</td>
</tr>
</tbody>
</table>

Note. AAA = Area Agency on Aging
Discussion

Overall, we found that the process of establishing and building the clinical-community partnership was feasible, and the screening and referral process was accepted by most staff and patients. However, we identify several areas for adaptation and improvement. The partnership remains a strong work in progress, dedicated to finding innovative methods to serve vulnerable populations and to stimulating action to improve health care delivery for high-risk populations with SDoH and medical needs. Preliminary evidence supports that the ongoing, collective efforts of the partners to implement new strategies (i.e., reliance on a systematic screening tool) and to modify long-standing protocol and processes (i.e., working collaboratively prior to discharge) contributed to improving the identification of SDoH needs of patients with complex care needs. Importantly, preliminary evidence also suggests that addressing these SDoH needs by connecting patients to community services may lead to fewer hospital readmissions, as we found meaningful differences between patients using and not using community services postdischarge. These early findings are in line with prior research (Brewster et al., 2018) that describes the potential benefits of stronger collaborations between health care providers and AAAs.

In this pilot, we aimed to demonstrate the importance of and need for caring beyond the traditional health care environment and to highlight the value of AAAs as strategic and innovative community partners (even as non–health care community organizations) due to their network, resources, and capacity to support patients with high needs in their homes and communities. Furthermore, due to their nationwide reach, AAAs are widely accessible to support health care providers across the United States. While there is also growing interest in and understanding of the importance of SDoH, especially for an aging population, frequency of patient screening remains low (Fraze et al., 2019). This underscores the innovation and potential of this pilot project, in which clinical staff and AAA staff work together to meet their shared patient/client needs in the community.

Lessons Learned, Limitations, and Future Directions

Findings from the pilot reflect a valuable cross-sector partnership that has the potential to better serve vulnerable adults with complex needs in the community, but there were various challenges throughout the project. We address several limitations to this exploratory pilot study and offer recommendations based on lessons learned from the field for improving cross-sector partnerships with the mutual goal of addressing SDoH needs among vulnerable adults.

Communication and Change Champions.
We encourage collaborating partners seeking to establish future partnerships for health care change to initiate communication early across all stakeholder levels; we also suggest identifying key champions of the change process in order to establish a sufficient degree of buy-in, which is crucial for success (Shaw et al., 2012). Although we were aware of some of these potential challenges, as they have been well established in prior implementation studies, we still faced some barriers. For example, we learned that despite attempts to inform all staff and include representatives in the initial mapping-process session, hospital leadership may not have effectively communicated the potential benefits of this novel, cross-sector partnership to everyone. Because of this break in communication, some mid-level clinical management resisted full engagement with the AAA in the discharge process. For instance, we had initially aimed to colocate AAA staff in the hospital setting in order to enhance collaboration, integration, and communication between AAA and hospital personnel, but logistical barriers related to scheduling and sharing space proved difficult for this initial pilot. Nonetheless, ongoing planning to work toward this goal has the potential to improve and streamline the referral process. Identifying additional champions of the program in the early stages of this new partnership may also have facilitated a better understanding among personnel of how changes to long-standing protocol or approaches have the potential to inform evidence-based practices and transform health care delivery. With the initial promising results of our pilot, however, we are now able to better demonstrate the value of the partnership to stakeholders, which will allow us to continue to refine and improve the process.

Partnering organizations will also have to find financially sustainable support for their collaboration that will expand the organizations’ capacity to address the SDoH needs of high-risk populations. For example, Brewster and colleagues (2019) found that cosponsoring projects that integrated health care and social services yielded more positive results for vulnerable populations.
which supports the call for upstream investment (i.e., public funding) of projects that intersect with SDoH needs (Alley et al., 2016). In this pilot example, both the clinical and community organizations were working on related problems with the same targeted population (e.g., supporting the health of adults with high needs in the community and attempting to reduce potentially avoidable rehospitalizations), which created opportunities to better align efforts, reduce duplication of services, and optimize resources and finances. While building these partnerships and working through the complexities of system-level change are not easy, the end result may yield both cost savings and improved community health—a mutually beneficial goal for all stakeholders.

Data Collection. Cross-sector partners should be more intentional about data collection so that more meaningful analyses can be conducted. We acknowledge that data from this pilot were limited and that our quantitative analysis relied on a small sample size and nonparametric testing. Unfortunately, it was not practical to develop infrastructure in the medical center's information technology system for an observational pilot feasibility study due to limited funding and time constraints. Thus, we did not have access to electronic health records, which are considered a best practice for this type of research (Atasoy et al., 2019). Health outcomes data from the CMS was not available, which restricted our characterization of the patient population (e.g., in terms of sociodemographics, health diagnosis, length of hospital admission, caregiver availability) and our ability to conduct more rigorous statistical analyses. Without these types of data, and without taking the time to evaluate the implementation processes and patient outcomes of interventions, it is difficult to assess the full effectiveness of interventions like this pilot. The value of access to this information—for example, how examining individual-level CMS data would help researchers better identify potentially avoidable health care use and spending among older adults that could help inform practice and protocol—needs to be better conveyed and shared with nonresearch partners early in the process. It is also necessary to improve data collection infrastructure before replication is possible. Nonetheless, despite these challenges, because there is limited research on how to establish these types of unique partnerships and because many organizations lack the expertise, skill, and resources to address these large limitations, these findings remain useful for other communities working toward building innovative community-level partnerships.

Staffing Issues. Staffing challenges, especially on weekends, proved to be problematic in the screening process and limited the data we were able to collect. We learned that screening was completed on 39% of the eligible population during the pilot trial. While this reflects an increase from care as usual (i.e., no comprehensive SDoH screening or follow-up at all), more opportunity exists to address this screening limitation. We observed it is necessary to ensure that adequate staff are available to screen, track, and manage patients in a timely manner. The possibility of training other hospital staff, patient advocates, AAA staff, or student interns to conduct the screening, especially on weekends, would expand hospitals’ capacity to screen high-risk patients likely to have unmet SDoH needs.

Limitations and Future Directions. Several limitations need to be addressed in future iterations of this project. While most participants with SDoH needs (88%) accepted the referral to AAA and, among those who received an AAA follow-up, more than half (58%) accepted services and supports, the remaining 42% (n = 16) who received a follow-up did not engage with AAA services to support their SDoH needs. We know that both groups were similar in terms of health acuity, income level, sex, age, and race. It is possible, however, that participants who used community services were qualitatively different in some other way from those who did not make use of the services, which may have explained some of the difference between groups, but this information (e.g., detailed health diagnoses, information on social support) was not accessible in the pilot. To remedy this limitation, future researchers should be vigilant in capturing information to better understand the relationship between actual use of services and readmissions, which may be confounded by other factors. For example, it was unclear what services participants actually received through the AAA because the AAA did not have an electronic data management system for its client records, which made tracking clients across programs challenging. The aging network in general, including AAAs in particular, does not yet have the infrastructure and data management capacity of hospitals. AAAs tend to endure bureaucratic processes as both service providers and advocates at local and federal policy
levels, and concerns about bureaucratic clutter in the long-term care system have been voiced since the early 1990s by the Special Committee on Aging in the U.S. Congress (1992). In part as a result of participating in this project, AAA organizational leaders recognized these barriers and how easier access to comprehensive information would help AAA staff identify specific services that may be beneficial to adults returning to their homes after hospitalization. They have subsequently invested in resources to support data management (e.g., hiring a data and quality improvement manager).

Another approach to obtaining data would be to establish more robust engagement of community stakeholders. While the medical center benefited directly from the intervention’s reduction of hospital readmissions, this program implicitly benefited the community as well by supporting adults’ efforts to age in place. Future efforts should be made to invite community stakeholders, including patients, patient advocates, or community members at large, to participate in setting goals and priorities and to participate in the design and/or implementation of the project. Doing so would ensure community-wide buy-in for partnerships that promote awareness and use of available AAA support for aging individuals and their families. It would also help uncover why some patients refuse community services and supports despite their eligibility. Modifying the intervention based on feedback from community stakeholders, and then validating changes and replicating the project, has the potential to scale the project up and obtain a higher-yield intervention. For example, future studies should strive to replicate these innovative partnerships among further underserved and marginalized groups, as the patients in our pilot were mostly homogeneous (e.g., mostly women, White, English speakers).

Despite these limitations and challenges, we observed a noticeable and clinically meaningful reduction in hospital readmissions, even within this small, exploratory pilot study. We also learned valuable lessons about the development and sustainability of cross-sector partnerships in health care that will help guide future research on community-level processes and changes that will benefit a growing and diverse population of older adults. Program, process, and outcome evaluations can also further establish evidence-based practices and inform innovative approaches to improving health care delivery and health outcomes for vulnerable populations. In summary, future iterations of this work should focus on these challenges and lessons learned first, prioritizing robust data collection and analyses, to yield more meaningful and relevant data.

Conclusion

Policy-makers and health care providers need to consider mutually beneficial cross-sector partnerships in order to meet the needs of a rapidly growing aging population. Reducing costs, addressing health equity, and improving health care will require innovative strategies. Our findings have implications for health care professionals serving adults with complex care needs within both clinical and community settings. Specifically, in line with prior research (Brewster et al., 2018, 2020), partnerships with AAAs may be especially valuable to health care organizations. These community-based social service organizations serve an important role in health care by addressing SDoH needs among community-dwelling older adults in their homes and local communities. Community-based organizations like AAAs have strong networks and are knowledgeable about local resources available to address social and environmental obstacles affecting individuals’ overall health and well-being. The SDoH screening tool is also an important contribution to the literature and may be valuable to organizations doing case management for older adults. Organizations may benefit from adopting and adapting a tool like the one used in this study to inform pathways of care for their target population. Recalling the community gerontology framework (Greenfield et al., 2019), this pilot project exemplifies how to increase engagement among researchers, practitioners addressing health and social needs, community member advocates, and policymakers in working together to prepare for the needs of current and future aging populations. The pilot project underscored the importance of innovative partnerships in health care, and we recommend scaling out the program (Aarons et al., 2017) to help support the complex care needs of vulnerable adults.

Finally, this type of work is also particularly important in light of the profound changes associated with the novel coronavirus (COVID-19) pandemic. Older adults and adults with underlying conditions are at higher risk for severe complications and death from COVID-19 (CDC COVID-19 Response Team, 2020; Sy & Munshi, 2020), so helping to support older adults...
living in their own homes can increase their safety and well-being. This is also critical for older adults who are Black, Indigenous, or people of color because racial and class inequities have resulted in differential exposure and risks that further exacerbate the effects and consequences of COVID-19 among minoritized groups (Gu et al., 2020; Muñoz-Price et al., 2020). In addition, rising unemployment due to the pandemic may have long-term impacts on individuals’ abilities to address SDoH needs in the present and for years to come. More than ever before, we need to invest in and strengthen communities, and AAAs can serve a vital community role by supporting individuals’ goals to age in place and to plan for future needs.

References


Lincoln, K.D. (2019). The role of social determinants and why community-based programming works: Social needs often are not met during healthcare visits, but HCBS can fill that gap. Generations, (Supplement 3), 13–18.


USAging. (n.d.). About us. www.usaging.org/about


**About the Authors**

Raven H. Weaver is an assistant professor of human development at Washington State University. Cory Bolkan is an associate professor of human development at Washington State University Vancouver. Susan L. Robbins is heart failure program coordinator at Legacy Salmon Creek Medical Center in Vancouver, WA. Brooke Benton is a project management professional in Seattle, WA. Eunsaem Kim is a research fellow at Ajou University in South Korea. Melissa Ensey is a program coordinator at PeaceHealth in Vancouver, WA. David Kelly is the retired executive director of Area Agency on Aging of Southwest Washington.
Appendix A
Original Referral Process

Note. CM = case manager; SW = social worker; EPIC = data management system; AAA = Area Agency on Aging
Appendix A (continued)

Revised Referral Process

Note. EPIC = data management system; AAA = Area Agency on Aging
Appendix B

Conversation Record for Referrals

Referring Provider Name ____________________________ Screening Date ________
Title ____________________________ Referral Date ________
Clinic or Site Name ____________________________ Clinic ZIP ________

If follow up is requested, check provider's preferred follow up method:
☐ Email ____________________________ ☐ Phone ____________________________

Patient Name ____________________________ DOB ________ Gender ________ ZIP ________
Ethnicity ________ Veteran ☐ Yes ☐ No Lives Alone ☐ Yes ☐ No
Preferred Contact Info (Phone or Email) ____________________________
Primary Language ____________________________ Needs Interpreter ☐ Yes ☐ No
Type of Insurance ☐ Private ☐ Medicaid ☐ Medicare ☐ Dual-Eligible ☐ None

If someone is helping the patient (friend, family, case manager/social worker), complete the following:
Support person ____________________________ Need caregiver resources ☐ Yes ☐ No
Relationship ____________________________ Phone ____________________________

Hold your conversation in private; reassure patients about the privacy of information collected and that their decision to participate in this conversation will not impact their ability to receive care.

“We want to make sure that we provide the best care possible, even after you leave our hospital. We’d like to ask you some non-medical questions to better understand you as a person so that we can meet your needs.”

☐ Transportation
“In the past year, have you had trouble getting to medical appointments or the pharmacy, or to run errands?”

☐ Housing
“What is your housing situation today?”
“Are you worried about losing your housing?”
“In the past year, have you or (your landlord) repaired everything that needed to be fixed?”

☐ Other (please explain) ____________________________

☐ Financial concerns
“In the past year, have you had difficulty paying for your utilities or medication?”
“Food
“In the past year, have you ever worried about whether your food would run out before you had the money to buy more?”

☐ Help with Activities of Daily Living (specify below)

☐ Help with Instrumental Activities of Daily Living (specify below)

☐ Health promotion and chronic disease management

☐ Alzheimer’s Disease and Dementia support
☐ Home safety concerns/fall risk
☐ Form preparation (specify below)

Other comments ____________________________

Please indicate any other support services patient or caregiver is receiving or has been referred to:

☐ Unmet needs identified; AAA follow-up requested ☐ No needs identified

☐ Unmet needs identified; AAA follow-up declined ☐ Unable to perform screening (please explain)