Utilizing Community Health Workers to Support Adults at Home: A Care Management Model

The United States is experiencing a significant increase in its elderly population. In 2011, people 65 and older represented 13.3 percent of the population; this age group is predicted to grow to 21 percent by 2040. The 85 and older population is projected to triple in the same time period, from 5.7 million in 2011 to 14.1 million in 2040.1

Concurrently, older adults are displaying an increasingly strong preference to “age in place,” which refers to a person’s ability to live in his or her own home and community safely, independently, and comfortably, regardless of age, income, or ability level.2 A recent AARP survey indicated that 85 percent of baby boomers plan on aging in their current homes.3 The desire for aging at home has also led to an increase in the number of people dedicating time and energy to caring for this population. According to the Institute of Medicine (IOM), 80 percent of care partners are family members in home settings; caregivers report spending on average 4.6 years caring for their family members.4 In the case of dementia, caregiving may span four to 20 years.4 The growth of the older adult population and caregiver needs highlights the urgent need for communities to develop and institute policies that create environments conducive to this demographic shift.

Supporting the adult population as it ages in place has little to do with primary care providers and more to do with building up the community health worker (CHW) workforce. Physicians have great value in making diagnoses but lack the time to provide the care and disease management needed to fully address the triple aim of improving the experience of care, improving the health of populations, and reducing per capita costs of healthcare. Efforts to better integrate CHWs with primary- and acute-care settings will go a long way toward ensuring that people get the care management they need. The Support and Services at Home (SASH) program is an innovative model that supports Medicare beneficiaries and dual eligibles by utilizing CHWs and wellness nurses to streamline access to medical and nonmedical services necessary for this population to remain living safely at home.5

Background
Cathedral Square Corporation (CSC) is a nonprofit organization in Vermont that owns and manages affordable housing communities for seniors and individuals with special needs. CSC offers various levels of assistance from independent senior housing and shared housing, to assisted living. Seniors move into CSC’s housing for many reasons including to seek greater affordability, to downsize, to avoid isolation after losing a spouse, and to be closer to family. CSC’s goal is to provide supports so that residents in their housing can remain there as long as possible. The housing CSC provides is “home” to their residents. Similarly, CSC converted a portion of one of their properties to assisted living for the very purpose of making sure residents who had called that community “home” for 30 years, were able to remain with their friends and neighbors and avoid a move to a nursing home.

In the early 2000s, CSC recognized the increasing challenges brought on by an aging population. As an affordable housing provider in Vermont for more than 30 years, CSC recognized that residents had difficulties navigating the healthcare system and that the lack of a structure to support seniors who
What is SASH?
SASH provides personalized coordinated care to help Vermont’s most vulnerable citizens, seniors and individuals with special needs, access the care and support they need to stay healthy while living comfortably and safely at home. SASH is available in many communities throughout Vermont and serves primarily persons 65 and older and persons with disabilities. Participation is voluntary and free of charge. SASH communities include a care coordinator and wellness nurse who work in partnership with a team of community providers to assist SASH participants. For more information visit [http://www.sashvt.org/](http://www.sashvt.org/) or view the Explanation of SASH Benefits Form.

**SASH Coordinator** - builds trusting relationships with participants in SASH in order to develop a thorough knowledge of each SASH participant’s strengths and challenges as they pertain to remaining safely in his or her home. View SASH Coordinator Job Description.

**SASH Wellness Nurse** - provides and/or oversees wellness care and coaching for SASH participants and is responsible for coordinating health services with other members of the SASH team and other community providers. View Wellness Nurse Job Description.

Expansion of SASH beyond the pilot began in 2011. CSC approached the state’s Blueprint for Health about including SASH in an application to the Centers for Medicare and Medicaid Services (CMS) to participate in a Medicare initiative called the Multi-Payer Advanced Primary Care Practice (MAPCP) demonstration. CSC argued that SASH would be a useful partner to primary care practices by extending physician practices into the home.

Utilizing a grant through the Housing Assistance Council, a division of the U.S. Department of Housing and Urban Development, CSC brought all of the nonprofit housing organizations in Vermont together for an in-person meeting to give an overview of SASH and make the case for adopting the program (view the SASH Brochure). CSC identified select housing organizations, coined by CSC as Designated Regional Housing Organizations (DRHOs), that were early adopters of SASH and had a keen interest in the housing and services model. The Housing Assistance Council grant then paid for individual peer-to-peer exchanges in which a DRHO would accompany CSC to meet with potential housing organizations, share with them SASH templates and job descriptions, and help them get started.

While originally piloted only in subsidized housing communities, a CMS condition of MAPCP funding was that SASH would serve all Medicare beneficiaries regardless of their residential setting, income, or age. As of January 2014, SASH has expanded to every county in Vermont, in more than
90 affordable housing properties, serving over 3,100 individuals; 647 of these participants live in single-family homes or apartments outside of the subsidized housing communities.

What Is SASH?
SASH creates an entirely new role for housing providers, by transforming them from property managers into advocates that monitor the health and well-being of their residents and provide or coordinate services that allow residents to remain in their own homes. ⁶ In SASH, participants enroll permanently regardless of health needs, and services are targeted based on individual needs and goals. Panels of 100 participants are supported by a five-member team connected to the medical home. Two key members of this team are the SASH coordinator (or community health worker) and the wellness nurse. The SASH coordinator and wellness nurse focus their efforts on transition support after a hospital or rehabilitation facility stay, self-management education and coaching, and care coordination. ⁷

The SASH coordinators are full-time employees of the local housing organizations implementing SASH and must possess a bachelor’s degree in social work or an equivalent combination of background and experience. (Click here for a more detailed job description.) Wellness nurses are quarter-time employees either employed by the housing organization or contracted by the housing organization through a home health agency or hospital. Wellness nurses must be currently licensed as a registered nurse in the state of Vermont and possess at least two years of experience in a clinical setting. (Click here for a more detailed job description.)

CSC works to certify and train SASH coordinators in evidence-based programming. SASH coordinators around the state are trained to lead chronic disease self-management programs, chronic pain management, diabetes, tai chi for arthritis, and tobacco cessation. To date, 25 SASH coordinators have been trained to lead chronic disease self-management programs.

In addition to the SASH coordinator and wellness nurse, additional SASH team members include a homecare or skilled nurse from the local visiting nurse association, a designated case manager from the area agency on aging, and a representative from the community mental health agency. ⁸ SASH teams meet on a regular basis (minimally once a month) to create action plans and coordinate care for their panel of SASH participants. An Individual Healthy Living Plan is developed with each participant, in addition to a Community Healthy Living Plan. The latter plan is a population-level program plan driven by the panel’s assessment data. The Community Healthy Living Plan focuses on panel members’ collective needs and bringing in evidence-based programs to address falls, medication management, control of chronic conditions, lifestyle barriers, and cognitive and mental health issues. ⁹ Before the development of SASH, collaboration between agencies and restrictions on the sharing of data were inconsistent. The SASH teams are a formal partnership; all organizations sign an MOU, agree to form a collaborative, and send designated staff members to attend the SASH team meetings of these panels. When individuals agree to participate in SASH, they sign a consent form allowing their information to be shared with members of the SASH team.

The housing organizations are required to cover basic start-up and ongoing expenses for SASH, including private office space, phone service, and internet service for the SASH coordinator and wellness nurse. However, property managers reported that the value that SASH brings to their housing organizations’
residents and properties exceeds the initial and ongoing investment. Property managers are better able to perform their primary function because the SASH coordinator and wellness nurse are able to focus on the health and wellness of participants.\textsuperscript{13} Another potential value is the decreased financial risk from physical property damages and property legal liabilities often associated with aging residents with unmet needs.\textsuperscript{13} Furthermore, SASH activities help create a better community within the property and better address resident conflicts and complaints which can be disruptive to the community.\textsuperscript{13}

**Utilizing Vermont’s Integrated System**

DocSite is Vermont’s statewide clinical registry used by Blueprint for Health community health teams, physicians, and hospitals. SASH coordinators and wellness nurses are the state’s largest users of DocSite for primary entry. They use DocSite to monitor SASH program activities and individual progress towards customized healthy living plans. The SASH staff have created a large dataset that is being used by the health department, community health teams, and providers for data analytics on a population-wide level. At the state level, CSC runs reports through DocSite that track progress made by panels and highlight problem areas at the community level to help the SASH core staff identify possible group wellness activities.\textsuperscript{13} SASH staff are some of the first and most robust users of DocSite’s integrated health records functionality. It is expected that, eventually, all Blueprint for Health patient-centered medical home electronic medical records (EMRs) will be connected with DocSite, allowing for a seamless exchange of information between health providers and SASH staff.\textsuperscript{13}

**How Is SASH funded?**

CSC obtained an appropriation from the Vermont legislature and matched it with a grant from the Vermont Health Foundation, along with other small grants and CSC contributions, to fund the original SASH pilot. However, this was not a sustainable funding source to expand SASH state-wide. In 2010, when the Vermont Blueprint for Health applied for MAPCP funding from CMS, CSC’s executive director successfully demonstrated the similarity between SASH goals and those of the Blueprint (prevention, chronic disease management of panels of patients, and overall health improvement), and the Blueprint included SASH in its application.

Vermont was awarded MAPCP funding in 2011, and SASH began expanding later that year. CMS funding provides $700 per person, per year in support of SASH. SASH also receives annual grants from the Vermont Department of Disabilities, Aging, and Independent Living, the Department of Vermont Health Access (Health Information Technology Grant), the Vermont Health Foundation/Fletcher Allen Health Care, and contributions from CSC and other foundations in Vermont.\textsuperscript{10}

Throughout the initial pilot and demonstration, several organizations have been extremely supportive with funding and technical assistance, including LeadingAge, a national association of nonprofit aging services providers. Enterprise Community Partners has also provided several grants to CSC at critical points in SASH’s development and expansion. The Vermont Housing and Conservation Board, as well as the MacArthur Foundation, provided capacity funding to CSC for SASH.

**Role of the Partners**

CSC
CSC pioneered the SASH concept, bringing the right partners to the table and piloting the SASH model in one of their locations. Currently, CSC is responsible for operating the program statewide through an MOU with the state, including training of SASH coordinators and wellness nurses, and coordinating quarterly rollouts of new panels. Trainings last eight weeks and are conducted quarterly via in-person meetings, webinars, and videoconferencing. An operations support coordinator employed by CSC travels around the state to provide technical assistance and monitoring as well.

CSC’s other roles include:
- Responsibility for ensuring that staff implement the SASH model with fidelity to the original model and providing technical assistance needed to ensure that happens.
- Serving as the DRHO in the four northwestern counties.
- Serving as a point of contact for legal issues and questions regarding SASH implementation.

**DRHO**
There are six DRHOs in Vermont: RuralEdge, Central Vermont Community Land Trust, Brattleboro Housing Authority, Shires Housing, Rutland Housing Authority, and CSC. DRHOs receive a modest amount of funding (currently $20,000/year) from the Vermont Department of Disabilities, Aging, and Independent Living grant for their regional leadership role of cultivating relationships with partner agencies essential to foster collaboration and team support of participants. DRHOs share their expertise on SASH with the 16 other housing organizations just getting started with the program, offering the perspective of an organizational peer that is also implementing SASH. DRHOs help peer organizations navigate the local table (advisory group of the community) and provide technical assistance as needed. DRHOs generally assist other housing organizations in close proximity and can provide additional support when CSC (located in Burlington) is not available.

**State Health Department**
The Vermont Department of Health (VDH) became interested in SASH when VDH received a Vermont Community Transformation Grant (CTG) in 2012. CDC funds the CTG grants nationally through selected state departments of health. Using CTG funds, VDH awarded several smaller grants to programs in Vermont and selected the SASH program to focus specifically on work in rural areas to develop systems to track and monitor blood pressure and cholesterol and create smoke-free environments for low-socioeconomic-status Vermonters. CSC received $257,500 in CTG funds over three years to distribute among three rural DRHO areas to add the CTG goals and populations to SASH. As part of the CTG, VDH is currently evaluating the outcomes of its work with SASH to measure the effectiveness of community-based prevention services. This evaluation will determine the effectiveness of SASH services in helping participants lower their blood pressure and improving other health measures. Staff and participant satisfaction with the program will also be evaluated, as will the strength of the connection between SASH and local primary care practices.

VDH also plays a role as a provider of resources for SASH. VDH has many resources and coalitions on smoke-free housing that inform and educate SASH coordinators—ideal vehicles to disseminate that information to the population.

**Results**
While more in-depth, extensive evaluations are in progress, short-term results show that SASH is having a positive impact on costs and health outcomes. Data from the SASH pilot demonstrate that SASH:

- Resulted in a 19 percent reduction in hospitalizations.\(^{11}\)
- Reduced the number of participants reporting three or more falls in the past year from 39 to 29 percent statewide.\(^{12}\)
- Reduced the number of participants at high nutritional risk from 35 to 24 percent statewide.\(^{14}\)

More recently, RTI International, and its subcontractor, the LeadingAge Center for Applied Research (CAR), were selected by ASPE/HUD/AoA to evaluate the SASH program. Using both qualitative and quantitative methods, and building on the CMS-funded MAPCP Demonstration evaluation, RTI conducted a comprehensive evaluation of the first phase of the SASH program to assess whether the SASH model of coordinated health and supportive services in affordable properties improves health and functional status of participants and lowers medical expenditures and acute care utilization for seniors.\(^{13}\)

Preliminary results reveal that the SASH program reduced the rate of growth in total Medicare expenditures and expenditures for post-acute care among SASH participants residing in SASH properties that implemented their program within the first 9 months after the launch of the MAPCP Demonstration.\(^{12}\) The SASH program also reduced the rate of growth in acute care payments among participants residing in the early SASH panels.\(^{13}\) Medicare expenditures for hospital outpatient department services increased among SASH participants, and may reflect identification of previously unmet need by both the SASH program and MAPCP Demonstration providers.\(^{13}\) Lastly, when combining the beneficiaries from the early and late SASH panels, the rate of growth among the SASH program participants’ Medicare expenditures trended lower in seven of the ten payment categories; however, none reach statistical significance at this point in the demonstration.\(^{13}\)

**Lessons Learned**

*Know the Critical Partners:* It is important to form relationships with and include critical partners from the beginning. CSC had a history of partnership with Visiting Nurses Association, and was also a part of a long term care coalition in Vermont with the local area agencies on aging. CSC not only knew who critical partners were and invited them to serve on the design team for SASH, but they built upon historical relationships to involve key players.

*Maintenance of Effort Around Partnerships* – CSC’s goal is for all organizations involved in SASH to operate as one entity and focus on the shared goal of serving panels of people. Maintaining this goal and the partnerships involved requires a great deal of maintenance, including focused check-in times to ask for partners’ input and orientation for new staff (personnel changes within partnership organizations require periodic trainings to review the SASH model). It is important to set aside staff time to maintain these partnerships, as they are crucial to the success of SASH.

*Regional Leadership is Key:* As the SASH program expanded to other organizations throughout the state of Vermont (approximately 67), it was important to have regional leadership to help maintain efforts with partners and facilitate SASH implementation. CSC is dedicated to making sure that the integrity of the model is preserved, and the regional leadership groups led by DRHOs are the ears to the ground that
help make sure the model is understood by the partners. CSC relies on DRHOs around the state to maintain efforts with local partners and hold regular check-ins.

Conclusion
With its growing elderly and disabled populations, the United States needs a system of care built on the reality that people want to remain in their own homes and communities. A community-based system is well suited to address the major determinants of health: social circumstances and behaviors. Long-term rather than episodic strategies are needed to address the social determinants of health and the behaviors that are the root causes of most chronic conditions. In SASH, participants enroll permanently regardless of health needs, and services are targeted based on individual needs and goals. A population-based approach makes sense financially and operationally given the volume of need and the fact that care has moved from centralized institutional settings to the community.

SASH has demonstrated its scalability as it has expanded from one pilot site to more than 90 affordable housing sites in every county in Vermont. The SASH system is replicable in any state that has federally funded affordable housing, Older Americans Act funding of agencies on aging, Medicare and Medicaid funded home health and mental health agencies, and a state commitment to healthcare reform that integrates primary care, acute care, long-term services and supports, and health promotion. States, traditional providers, and affordable housing providers can easily see the value in a program like SASH that supports its residents and leads to a healthier population while reducing costs.

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11 Fletcher Allen Health Care data.

12 DocSite clinical registry data.