

# Research & Policy Issue Spotlight: Home Health care Quality and Outcomes

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#### **VNS Health Overview**

For 130 years, VNS Health has served as one of the largest not-for-profit home and community-based health care organizations in the U.S. VNS Health provides highquality, culturally competent, integrated care that meets the complex clinical and social needs of vulnerable individuals, helping them to remain safely and independently in their homes and communities.

VNS Health programs and services include skilled home health care, home health aide services, hospice and palliative care, population health management, community mental health, and several community support programs. VNS Health's health plan specializes in Medicaid managed long-term care, integrated plans for dually eligible individuals who require long-term services and supports, and special needs plans for Medicaid enrollees living with or at risk of HIV/AIDS.

VNS Health is also home to the independent Center for Home Care Policy & Research (CHCPR), which advances the national knowledge base underpinning home health care (HHC) and home- and community-based services (HCBS) by conducting objective and scientifically rigorous research and supporting informed decision-making by providers, policymakers, and consumers. CHCPR focuses on improving HCBS quality, cost-effectiveness, equity, and outcomes and analyzes public policies that affect home-based care.[1]

# Importance of Home Health Care and the Efforts to Meet Increasing Demands

Home health care (HHC) has become an increasingly popular choice for patients to heal and age in place and a strategy to bridge the gap in health disparities and access to care in underserved communities. HHC is a vital tool for improving hospitalto-home care transitions and a critical asset to the healthcare industry. HHC services are a driver of improved health outcomes and continuity of care while lowering overall healthcare costs by reducing the burden on other health system sectors. This keeps them viable and financially sustainable, especially in times of need, as seen with the COVID-19 pandemic. However, the demand for all HHC services has exponentially grown and is quickly outgrowing the supply of providers, creating a home health access crisis that may significantly impact the quality of care and patient outcomes.

# VNS Health's Commitment and Efforts to Providing Quality Home Health Care

VNS Health is committed to providing quality HHC that improves health outcomes by prioritizing patient preferences to recover in place. In addition, VNS Health has continued to address the HHC access crisis and health disparities by increasing our reach in underserved communities, or "home health deserts." By investing in the healthcare workforce, we can best meet the demand for home health and provide culturally responsive care for the communities we serve, which are members that have been historically socially and economically disadvantaged.

## **Research Findings**

HHC can help improve health conditions and lower overall healthcare costs by reducing hospitalizations. However, findings have also indicated that systemic barriers impact the full effectiveness of HHC, like inadequate information management, low care continuity, and difficult care transitions. To improve quality and outcomes, the CHCPR conducts extensive research and analysis to inform program development and policymaking within the home healthcare sector. Recent findings include:

# Home health care improves chronic conditions outcomes and recovery from infectious diseases.

In conjunction with additional support and specialized care, HHC has been shown to improve outcomes of complex, chronic conditions like heart failure and hypertension. Consistent care and provider interactions following enrollment in HHC were central components of reducing systolic blood pressure, stroke prevention, and managing distressing symptoms of heart failure patients.[2,3] COVID-19 patients saw statistically significant reductions in symptom burden and functional dependence, with improvements in pain, cognition, dyspnea, anxiety, and gains with functional deficits from an average of 6 deficiencies at baseline to 1 at discharge.[4] Additionally, 79.2% of sepsis survivors discharged to HHC experienced no adverse events, such as hospitalization/readmission, in-patient admission, or death, with early home health nursing and physician follow-up protocols.[5]

#### Home health care reduces the risk of hospital readmission.

Medically complex conditions, which are often hard to manage independently, respond well to interventions delivered within home and community-based settings. When executed correctly, HHC can prevent unnecessary hospitalizations, reduce patient costs, and open hospital beds.[2,4] Early home health nursing for sepsis survivors during the first week after discharge significantly reduced hospital readmissions by 7 percent.[5] Similarly, HHC patients with systolic blood pressure showed a significant decrease in hospitalizations at the 3- and 12-month follow-up compared to baseline.[3] These findings demonstrate the potential of HHC to contain costs by avoiding the utilization of higher-cost services while maintaining the quality of patient outcomes.

### Limitations that Impact the Full Effectiveness of Home Health Care

# Inadequate information management processes increase the risk of complications in care delivery.

Information management process failures during the transition to HHC included:

- Suboptimal information management from sources outside of the homecare agency.
- Variation regarding who served as the HHC information manager during the preadmission process.
- Absence of physicians during the transition.
- Inadequate organizational and technological infrastructure[6]

The lack of standardization and interoperability of data exchanges across healthcare settings limits the amount of information transferred from acute care to HHC and the ability to share information before HHC admission.[7] For instance, only 4% of sepsis survivors that transitioned to HHC from acute care had a diagnosis of sepsis

recorded in OASIS.[8] Among patients with a prior diagnosis of Alzheimer's Disease and Related Dementias (ADRD), 63% had no history of ADRD documented in OASIS. [9] The missing information creates knowledge gaps in essential, longitudinal research data and quality clinical data, such as condition severity, length of stay, days in intensive care, etc. This increases the risk for diminished quality of care, disease-specific post-acute care, medication errors, which can result in preventable hospitalizations.[4,7] Sepsis, ADRD, and COVID-19 severity place patients at higher risk of adverse outcomes, so communicating this information to HHC providers is vital to providing appropriate care.

#### Gaps in continuity of care increase the risk of complications in care delivery.

Continuity of care, defined as the same clinician or set of clinicians providing care throughout a care episode, is a strategy that aims to improve the quality of HHC and reduce the risk of additional complications. Continuity of care involves the continuity of patient and provider relationships, patient information, and care delivery.[9] Inconsistent and fragmented continuity of care leaves patients and caregivers unprepared for the transition to homecare services.[10] The effects of inconsistent care can be seen in persons with dementia (PWD), with one in four hospitalized during their post-acute HHC admission.[10] Only 26% of PWD patients received each nursing visit from the same nurse (full continuity), and eight % received each visit from a different nurse (no continuity). Patients receiving low or moderate continuity of nursing care had 33% and 30% higher odds of being hospitalized, respectively.[9]

#### Compromised quality of care due to the home environment

While institutional healthcare settings have strict sanitation guidelines to prevent and control infections, those guidelines do not currently cover the home care environment, putting HHC patients at increased risk for infection.[11] When left unaddressed, other elements of the home environment, such as stairs, the height of chairs and beds, clutter, and social isolation, pose barriers to basic task completion and quality of life for patients with functional difficulty. Service providers reported that home assessments helped identify potential obstacles at the start of care so that proper interventions could be implemented to avoid complications.[12]

### **Policy Implications**

Given these research findings, policymakers should continue to invest in HHC and support meaningful interventions to maximize home health care access, quality, and outcomes.

### Strengthen Recruitment, Retainment, and Training in the Home Health Workforce

Ensuring an adequate workforce has been a long-standing challenge, and the COVID-19 pandemic made it more difficult. The healthcare workforce shortage has become its own crisis that further adds to the barriers to home health access, negatively impacting the quality and outcomes of care as the demand for home health has outgrown the number of available providers. The primary drivers of the workforce shortage stem from the growing aging population, a need for more trained professionals and paraprofessionals that want to join the industry, and inefficient training and credentialing system, along with individuals leaving the field. The shortage of workers weakens HHC, leading to a severe home health access crisis as hospitals face overcrowding and discharge sicker patients to HHC. More incentives and targe training programs should be developed and implemented in home health

deserts to bring new workers into the field. High areas of need often face the most health disparities, so home health agencies should ensure an adequate workforce that is representative of the population being served and directly address areas with barriers to care. The Workforce Caregiver Support Spotlight provides additional information on the importance of policies to build a home health sector with a sustainable workforce that can fully recruit, retain, and deploy to provide appropriate and culturally responsive patient care.[14]

#### **Increase Home Care Payments**

Additional financial investment is needed to keep home health sustainable and affordable. The final CMS CY 2023 Home Health Payment Rule will reduce Medicare payments by 4% and implement a new payment system.[15] The disinvestment of the home health sector puts the industry at risk for increased staffing shortages and exacerbation of health inequities, which negatively impact the delivery of high-quality HHC services and may worsen health outcomes for high-need patients who are often the most vulnerable to complications. Continued advocacy and stakeholder engagement surrounding home health financing policy is needed, like the previous support of the Preserving Access to Home Health Act proposed in 2022 in response to the CY 2023 home health payment rule. Such legislation is necessary to reverse or delay home health payment cuts to ensure that home health agencies can continue to accept patient referrals and that home health services are accessible and affordable.

#### Improve Information Sharing and Optimization of Clinical Workflow

*IMPACT Act.* Work to improve care coordination and interoperability under the Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014. The IMPACT Act helps providers refer patients to HHC and sets a standard mechanism for transferring diagnostic information to HHC providers and the HHC care plan.[8] In 2019, CMS expanded the IMPACT Act to require that after discharge from post-acute care, patients' EHR will continue to follow them as a strategy to improve interoperability and data flow across multiple settings, including non-medical stakeholders. However, additional clinical workflow optimization and health information technology are needed to mitigate information management (IM) related process failures and facilitate safer hospital-to-home transitions for patients who are particularly at risk for data loss and inaccuracies during information transfers.[7]

*IDC-10 Codes.* Creating a new sepsis-specific ICD-10 code would significantly improve sepsis aftercare so that HHC and other post-acute providers can identify sepsis patients and deliver adequate care to this critically ill population. Sepsis survivors suffer higher readmission rates due to infection and high functional and cognitive impairment.[9] Early nursing care and outpatient follow-up are associated with 7% lower readmission rates.[6] A new code can increase sepsis awareness and support the transformation of the practice paradigm by establishing early, best-practice visit interventions to optimize the transition of care practice.[13]

*EHR access.* Providing EHR access for HHC clinicians and other PAC providers is a promising solution to improve the quality of communication between hospitals, HHC, and patients. It will help address problems related to lack of information and enhance patient preparation for post-acute care admission.[9]

#### Improving Quality Measures

Implementing nationally standardized sanitation guidelines specific to the HHC environment and requiring home assessment/environmental scans conducted by HHC providers at the first visit could greatly improve quality by reducing the risk of infection and other injuries. The use of prediction models for risk of infection and readmissions and ED visits can act as an infection control intervention for high-risk patients, provide home health providers with more context of why a patient would be considered high risk, and give guidance for action.[16, 17]

#### Sources

[[1] Center for Home Care Policy & Research. Visiting Nurse Service of New York. (2021, September 23). Retrieved October 8, 2021, from https://www.vnsny.org/for-healthcare-professionals/vnsny-researchcenter/.

[2] Jordan, L., Russell, D., Baik, D., Dooley, F., Masterson-Creber, R. (2020). The development and implementation of a cardiac home Hospice program: Results of a RE-AIM analysis. American Journal of Hospice and Palliative Medicine. 37(11):925-935.

[3] Osakwe, Z., Barrón, Y., McDonald, M.V., Feldman, P. (2021). Effect of Nurse Practitioner Interventions on Hospitalizations in the Community Transitions Intervention Trial. Nursing Research. 70(4):266-272.

[4] Bowles, K., McDonald, M., Barrón, Y., Kennedy, R., O'Connor, M., Mikkelsen, M. (2021). Surviving COVID-19 after hospital discharge: Symptom, functional, and adverse outcomes of home health recipients. Annals of Internal Medicine. 174(3):316-325.

[5] Deb, P., Murtaugh, C., Bowles, K., Mikkelsen, M., Khajavi, H., Moore, S., Barrón, Y., Feldman, P. (2019) Does early follow-up improve the outcomes of sepsis survivors discharged to Home Health Care? Medical Care. 57(8):633-640.

[6] Arbaje, A.I., Hughes, A., Werner, N., Carl, K., Hohl, D., Jones, K., Bowles, K.H., Chan, K., Leff, B., Gurses, AP. (2019). Information management goals and process failures during home visits for middle-aged and older adults receiving skilled home healthcare services after hospital discharge: a multisite, qualitative study. BMJ Quality and Safety. 28(2):111-120.

[7] Ryvicker, M., Barron, Y., Shah, S., Moore, S., Feldman, P., Noble, J., Bowles, K., Merrill, J. (2021: epublished ahead of print) Clinical and demographic profiles of home care patients with Alzheimer's disease and related dementias: Implications for information transfer across care settings. Journal of Applied Gerontology.

[8] Bowles, K. H., Murtaugh, C. M., Jordan, L., Barrón, Y., Mikkelsen, M. E., Whitehouse, C. R., ... Feldman, P. H. (2020). Sepsis Survivors Transitioned to Home Health Care: Characteristics and Early Readmission Risk Factors. Journal of the American Medical Directors Association, 21(1), 84– 90.e2. PMID: 31837933. DOI: 10.1016/j.jamda.2019.11.001

[9] Ma, C., McDonald, M., Feldman, P., Miner, S., Jones, S., Squires, A. (2021: in-press) Continuity of Nursing Care in Home Health: Impact on Rehospitalization among Older Adults with Dementia. Medical Care.

[10] Jones, C., Jones, J., Bowles, K., Flynn, L., Masoudi, F., Coleman, E., Levy, C., Boxer, R.S. (2019). Quality of Hospital Communication and Patient Preparation for Home Health Care: Results from a Statewide Survey of Home Healthcare Nurses and Staff. Journal of the American Medical Directors Association (JAMDA). 20(4):487-491.

[11] Dowding, D., Russell, D., Trifilio, M, McDonald, M., Shang, J. (2020). Home care nurses' identification of patients at risk of infection and their risk mitigation strategies: A qualitative interview study. International Journal of Nursing Studies. 107:103617

[12] Russell, D., Oberlink, M., Onorato, N., Feinberg, J., Bowles, K., Szanton, S. (2019) Identifying Barriers in the Home Environment among Urban Community-dwelling older adults with functional difficulty: A Multi-Method Pilot Study. Activities Adaptation & Aging. 43(4):315-333.
[13] O'Connor, M., Kennedy, E.E., Hirschman, K.B., et al. Improving transitions and outcomes of sepsis survivors (I-TRANSFER): a type 1 hybrid protocol. BMC Palliat Care 21, 98 (2022). https://doi.org/10.1186/s12904-022-00973

14] VNS Health. (2022). Homecare Workforce and Caregiver Support.

[15] Centers for Medicare & Medicaid Services. (2022). Fact sheet CY 2023 home health prospective payment system rate update and home infusion therapy services requirements – final rule (CMS-1766-F) Available at: https://www.cms.gov/newsroom/fact-sheets/cy-2023-home-health-prospective-payment-system-rate-update-and-home-infusion-therapy-services-0 (Accessed: April 10, 2023).

[16] Shang, J., Russell, D., Dowding, D., McDonald, M., Murtaugh, C., Liu, J., Larson, E. Brickner, C. (2020). A predictive risk model for infection-related hospitalization among home healthcare patients. Journal for Healthcare Quality.43(3):136-47.

[17] Dowding, D. Russell, D, McDonald, M., Trifilio, M., Shang, J., Song, J., Brickner, C. (2021). "A catalyst for action": Factors for implementing clinical risk prediction models of infection in home care settings. Journal of the American Medical Informatics Association. 28(2):334-341.