Can Home-Based Primary Care Drive Integration of Medical and Social Care for Complex Older Adults?

This editorial comments on the article by Valluru et al.

Caring for community-dwelling, frail, medically complex older adults is a topic of intense interest among payers (government and private), health systems, and healthcare providers, not to mention such older adults themselves and their caregivers. Many are homebound with multiple chronic conditions, functional impairments, and limited social capital.[1] They constitute a high-need, high-cost, often invisible population. Their needs are rarely addressed in an adequate fashion by a medical system and culture that continues to focus on facility and disease-based care.[2]

Attending to the social and functional needs of frail older adults by integrating their medical care and social care is advantageous for multiple stakeholders. Medicare beneficiaries with impaired function experience twice the costs of care when compared to similar beneficiaries with intact function.[3] Data examining healthcare and social spending in Organization for Economic Cooperation and Development countries, where social and medical care expenditures are more balanced, demonstrate better healthcare outcomes than in the United States, where medical expenditures far exceed social expenditures.[4]

In the United States, medical care usually occurs in parallel with long-term services and supports (LTSS), often in the form of Medicaid home- and community-based services (HCBS) 1915c waiver programs that typically do not integrate with traditional medical care. LTSS services encompass paid and unpaid medical and personal care assistance that people need when they experience difficulty completing self-care tasks as a result of aging, chronic illness, or disability.[5] Services may include caregiver support (eg, respite care), mental health and behavioral services, health services (eg, medication assessment or management), skilled therapies, financial management, nutrition support (eg, Meals on Wheels), transportation, and others.[6] Care models that integrate LTSS with traditional medical care produce better outcomes. Managed Medicaid that integrates social and medical care experiences better care quality.[7] People participating in the Program of All-Inclusive Care for the Elderly for dually eligible Medicare-Medicaid beneficiaries have lower rates of conversion to long-term institutional (LTI) care compared to traditional HCBS enrollees.[8]

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In this context, we consider the work in this issue of the *Journal of the American Geriatrics Society* by Valluru and colleagues,[9] in stitching together various data sources to evaluate outcomes associated with integrating medical and social care for enrollees in the Center for Medicare and Medicaid Innovation (CMMI) Independence at Home (IAH) demonstration.

IAH, developed by leaders of the American Academy of Home Care Medicine, tests effectiveness of delivering comprehensive primary care services at home with home-based primary care (HBPC). Using a shared savings model, it seeks to improve care quality while simultaneously reducing healthcare costs and utilization. HBPC delivers medical care to people who find it difficult to get to a physician's office.[10-12] IAH specifically targets high-need, high-cost Medicare fee-for-service beneficiaries with multiple chronic conditions, functional impairment, and high-cost utilization.

IAH has been one of CMMI's most successful demonstration projects; high-quality care has been delivered to a complex population, with first-year savings 10 times as great as those of pioneer accountable care organizations (ACOs), with projections for billions in savings were the program to be scaled nationally.[13] The magnitude of cost savings associated with IAH is not surprising given the target population and the nature of the IAH care delivery intervention. While much has been written on the concentration of healthcare costs among a small proportion of the population, it is critical to remember that high costs are not the same as preventable costs—one can only save money on people who cost money *and* have preventable healthcare costs. A recent analysis found that while frail older adults comprise only 4% of the Medicare population, they account for nearly half the preventable costs in all of Medicare; most preventable costs in this group are from preventable hospitalizations.[14] In a real-world example of this principle, the only HBPC-only ACO in the United States was the fourth most successful ACO in terms of cost savings in 2016.[15]

The observational study by Valluru et al[9] evaluated whether HBPC, provided in the context of IAH and *integrated* with home and community-based LTSS, would lower LTI care and costs of LTSS compared to local LTI care and HCBS benchmarks. The study compared LTI rates for patients receiving HBPC via an IAH practice integrated with LTSS to: (*a*) IAH-qualified beneficiaries not receiving HBPC

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and (*b*) IAH-qualified beneficiaries receiving HBPC outside the IAH demonstration. As expected, persons in all three groups were frail and medically complex with high prevalence of multiple chronic conditions, including dementia, functional impairment, frailty, and high risk of mortality.[16] While a more robust description of the LTSS services provided and what specifically integrated care entailed would have been useful, those receiving integrated care had LTI rates that were approximately half the control group's rates, with an average delay in LTI care of 12.8 months, and similar LTSS costs between groups. Mortality across groups was similar, but community days, an emerging quality construct in frail older people,[17] was increased in the integrated group.

HBPC integrated with LTSS is an effective *innovation*[18] because it addresses the needs of this population at risk of LTI care. Disease management underperforms in this cohort because of the presence of multiple chronic conditions. Case management is insufficient for complex patients due to their propensity for acute exacerbations of chronic conditions and difficulty accessing traditional primary care. HBPC is effective at preventing hospitalization and reducing costs. Exemplar HBPC practices, such as those studied by Valluru et al,[9] attend to the medical *and* social needs of their patients, but in the absence of more robust and integrated supports in the home, they may be challenged to prevent LTI care. HBPC integrated with LTSS reduces hospitalization, healthcare costs, and LTI care and improves overall quality of life for frail homebound older adults and their caregivers.

The integration of medical and social care in this population optimizes results by bringing the appropriate mix of services to the right target population to achieve desired outcomes. Key drivers of those outcomes likely include 24/7 access to healthcare providers who provide concrete medical interventions and "peace of mind" at critical junctures in care trajectories.[19] In addition, HBPC and other home-based care delivery models, including home-based palliative care, can interrupt the powerful glidepath of patient flow through the fragmented maze of our healthcare delivery system that shuffles patients through the paths of least resistance and relates more to the business of medicine and institutional convenience, rather than the truest needs of older adults. HBPC can more readily identify the realistic and achievable goals of at-risk patients and work to secure the outcomes associated with these goals.

We hypothesize that another key driver of the outcomes in the study was the active orchestration of care by skilled HBPC providers and an interdisciplinary care team supported by an IAH shared savings mechanism. HBPC can leverage all services smartly and judiciously, bringing in additional medical or social expertise when and where it is most warranted. HBPC providers can secure goal-concordant care, high patient and family satisfaction, and lower total cost of care in spite of providing services far in excess of the current standard of medical care. HBPC is a logical integrator and quarterback of medical and social services. Through their presence at a patient's bedside in their homes, HBPC providers are immersed in the tides of social determinants that conspire to affect the full range of health and social outcomes. Who better to serve in this function?

The average delay of LTI care of 12.8 months is notable and policy relevant. If a clinical drug trial demonstrated such a profound outcome, it would garner headlines and tweets, generate billions of dollars in revenue, and command a high price justified by its sparing the national economy the costs of unnecessary and unwanted nursing home care. Unfortunately, the path to scaling health service delivery, such as HBPC, is not comparable to that of a drug; additional barriers exist to scaling HBPC.

IAH is still a CMMI demonstration and has not been converted to a Medicare benefit. A Medicare payment model to support the highly impactful work of HBPC is long overdue. Such a payment model could attract and spur development of a needed HBPC workforce. The country needs more HBPC providers as currently only 11.9% of completely homebound individuals receive HBPC.[1] Large HBPC programs exist and may serve to spur growth and consolidation in the field, but currently, most HBPC practices are small and subscale.[20] Home-based medical care is not commonly taught in medical schools or postgraduate training programs; however, technical assistance capacity, provided by the American Academy of Home Care Medicine and the Home-Centered Care Institute, is growing rapidly. Currently, most LTSS exist alongside, but are not integrated with, HBPC. Creating integration at scale will be labor intensive and may involve challenging bureaucratic issues at the state and local levels. We also need better ways to standardize LTSS services, assure their quality, and develop a better understanding of how best to target the mix of LTSS services to patients' needs and desired outcomes.

The study by Valluru and colleagues[9] was relatively small and warrants further study, but it signals a path forward in how to organize and deliver longitudinal care in the community to medically complex, home-limited adults. Such care would serve several key stakeholders in US healthcare. Payers, caregivers, patients, and providers could all glean benefit from such a care model. As such, HBPC should lead the charge in developing, organizing, and implementing the community-based medical, social, and long-term care of our country's frailest older people.

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