Home-based primary care: a path to high-quality, low-cost care
America's population is aging—quickly. More chronically ill and medically complex individuals are having difficulty accessing quality health care than ever before—and the number of at-risk patients continues to grow. Approximately 10,000 baby boomers turn 65 every day, and beneficiaries with five or more chronic conditions represent the fastest-growing segment of the Medicare population.\textsuperscript{1,2}

Many of these chronically ill patients are housebound or have mobility issues, which often result in costly and avoidable hospitalizations. In this current health care landscape, home-based primary care (HBPC) or the modern-day house call is a viable, innovative solution that can help these patients by providing quality, compassionate care at a more sustainable cost than traditional institutional care, in addition to addressing future pressures on the United States health care system.

In February 2018, Congress passed a bipartisan bill providing funding for a two-year extension of the Centers for Medicare & Medicaid Services (CMS) \textit{Independence at Home (IAH) Demonstration}. The study, which launched in 2012, was created to test a payment incentive and service delivery model that uses care teams to deliver timely, in-home primary care for those with multiple chronic illnesses and functional impairments—the most frail and costly Medicare beneficiaries.

The IAH Demonstration showed impressive savings in the first two years, in which IAH sites successfully cared for nearly 10,000 patients annually with savings totaling more than $32.8 million. In the first year, 17 participating practices serving more than 8,400 patients spent $25 million less on patient care than CMS expected would be spent without the program. In the second year, 15 participating practices serving more than 10,400 patients saved an additional $7.8
A recent *Journal of the American Geriatrics Society* article predicts the extension will serve 15,000 patients and will result in an estimated $40 million in savings for CMS over a two-year period.

Another benefit of *home-based primary care* is the personalized treatment it offers and the advantages it provides for patients, caregivers and providers alike. HBPC enables aging patients to stay at home while remaining actively involved in their own treatment. It can help alleviate the burden experienced by many caregivers, while allowing them to remain engaged and informed about the patient’s care. HBPC also allows providers to gain a better, more holistic understanding of a patient’s health and day-to-day environment.

While the extension of the IAH Demonstration is an encouraging step forward, challenges to widespread adoption of HBPC remain. Current payment models aren’t sufficient for HBPC, and additional data is needed to demonstrate cost savings – a gap the IAH extension will help address. In addition, there are not enough providers currently practicing HBPC to meet growing demand.

**PAYMENT MODEL CHALLENGES STILL NEED TO BE SOLVED**

The current lack of consensus on a reimbursement model that adequately supports the financial viability of HBPC is a major challenge to the growth of the home-based primary care model.

Current fee-for-service payment models are dominant among HBPC practitioners, but they typically do not sufficiently cover the costs necessary to treat medically complex patients or adequately reflect the overall value of HBPC.

Dr. Thomas Cornwell, a physician with 30 years of experience as a house call doctor, has seen firsthand how home-based primary care can offer tangible benefits for health outcomes and reduce the high costs associated with excessive inpatient hospitalizations.

As Chief Executive Officer of the not-for-profit *Home Centered Care Institute* (HCCI), Cornwell is dedicated to helping move home-based primary care back into the mainstream through advocacy and education.

“The full health system is currently built around the operational efficiency of the doctor,” says Cornwell, pointing out that the travel time associated with house calls means the physician will have a smaller caseload. “Right now, fee-for-service payment models are based on patient face-to-face encounter volume, which doesn’t account for the real value of primary care.”

Moving toward a fee-for-value model will be important in shifting the health care industry from prioritizing the number of patient appointments scheduled or tests prescribed toward focusing on improved patient outcomes – an area in which home-based primary care delivers.

According to Dr. Norm Ryan, Principal, Spectrum7 Healthcare Consulting and former Senior Vice President of Health Intelligence at Alere Health...
(a subsidiary of Optum Consumer Solutions, UnitedHealth Group), part of the reimbursement model challenge is that home-based primary care could appear to be an add-on – just another type of service and cost on top of the existing health care infrastructure, which includes hospitals, primary care practices, urgent care clinics and other types of health care settings.

“It’s a blind spot for managed care companies to assume that people can get to the network, rather than have the network come to them,” says Ryan, citing studies showing that patients who live closer to hospitals tend to use more hospital services in the absence of other available network resources, including effective home-based care.

But Cornwell notes that the cost of providing a home-based primary care visit shouldn’t be compared to an office visit because the targeted patient population for home-based primary care is often homebound and, without HBPC, might never see a doctor outside of hospital visits.

He maintains we should compare the cost of a home-based primary care visit to the $1,000 it could cost to transport the patient to the hospital due to an emergency because the patient isn’t receiving routine primary care.

Recent studies about the potential cost savings and patient wellness benefits of home-based primary care are encouraging, and federal payers are beginning to take note.

“Just think of how much health care you can provide for that $1,000,” says Cornwell. “It is kind of re-engineering a significant part of the health system to make it patient-centered and to make it operationally efficient for the whole.”

Active medication management as the patient’s health and body weight changes is just one example of how home-based primary care can be cost-effective and help reduce emergency and urgent care visits, according to Cornwell. When patients in declining health lose weight, medication adjustments become critical because the patient may not need the same dosages as before and, left unchecked, the patient could end up hospitalized for taking too much medication.

**INITIAL DATA SUGGESTS HBPC OFFERS A MORE COST-EFFECTIVE DELIVERY OF HEALTH SERVICES**

Recent studies about the potential cost savings and patient wellness benefits of HBPC are encouraging, and federal payers are beginning to take note. However, more data is needed to support the case for home-based primary care as a sustainable health care model for America’s aging, chronically ill patient population.

In addition to the CMS Independence at Home Demonstration, the Veterans Administration (VA) has long offered HBPC as a popular option for its medically complex population, and HBPC has demonstrated cost savings.

A study of a VA home-based primary care program with 11,334 beneficiaries found that patients spent 62 percent fewer days in the hospital and 88 percent fewer days in nursing homes when home-based primary care was offered than when it wasn’t. The overall cost of care per VA patient fell by 24 percent with HBPC, according to the study, which was delivered to the National Health Policy Forum by Dr. Thomas
Edes, Executive Director of Geriatrics and Extended Care in the U.S. Department of Veterans Affairs’ Office of Clinical Operations.⁵

The VA study further pointed out the tendency to compare the cost of home-based primary care to office-based primary care and echoed Cornwell’s assessment that the comparison doesn’t expose the true measure of the savings because these patients often have limited mobility and don’t receive office-based care.

In addition to the need for a reformed reimbursement model, health care metrics need to be updated and standardized to help better measure the true value of HBPC. Current metrics, such as the percentage of patients who have received colonoscopies, have value, but they don’t specifically convey cost-saving benefits and improved health outcomes for patients who receive home-based primary care.

In an effort to gather better data, the John A. Hartford Foundation has given a three-part, $1.5 million grant to the Johns Hopkins University School of Medicine and the University of California, San Francisco, in conjunction with HCCI and the American Academy of Home Care Medicine.⁶

“One part of the grant will support the development of a health registry with quality measures that are relevant to home-based primary care,” says Dr. Mindy Fain, Co-Director of the University of Arizona Center on Aging. “The grant will also support training curricula and educational programming to help build a much-needed home-based primary care workforce.”
MORE HBPC PRACTITIONERS ARE NEEDED TO MEET CURRENT DEMAND

Currently, an estimated 1,000 providers furnish the vast majority of home-based primary care services offered in the United States – and only 12 percent of current homebound patients have access to at-home primary care services.7

HCCI is actively addressing this gap through its educational offerings, which are designed to support nurse practitioners, physicians and management and support staff in establishing, expanding or joining a house call program.

“We often hear from patients and caregivers just what it means to know that we are one phone call away,” says Cornwell. “They are relieved that a caring doctor who knows them and understands their medical history will come out and treat them at home.”

Without regular access to primary care, he says, these patients often receive no health care treatment or guidance, and their conditions worsen without timely medical care. And, when they seek treatment in a hospital, their chronic, complex conditions are not always fully addressed.

“The hospital often becomes the de facto primary care provider for these patients, a role it’s ill-equipped to play,” says Cornwell.

THE PROMISE OF HBPC: A CASE STUDY

The Cleveland Clinic put home-based primary care into action when it realized HBPC was the best way to treat patients with chronic conditions who were unable to routinely travel to the office.

Dr. William Zafirau, Medical Director, Center for Connected Care with the Cleveland Clinic, says the clinic has more than 2,500 salaried physicians organized around an electronic medical record (EMR) system and a common mission to help transform health care and serve medically complex patients.

Nurse care managers identified the patients who were most appropriate to receive home-based primary care services, and Cleveland Clinic was empowered not only by the savings CMS saw from the Independence at Home Demonstration, but also by its belief that home-based primary care was more personal and could dramatically help improve patient quality of life.

“Getting to know patients, their families and their health care concerns in a home environment leads to better communication between patients and providers – and better medical outcomes,” says Zafirau. “It’s both rewarding and practical.”

Fain agrees, noting, “Home-based primary care is a solution that can solve a major struggle that we have as a society, the need to provide high quality health care to a very vulnerable population. It’s a solution that’s sort of invisible to the larger health care system.”

Fain adds, “Home-based primary care allows us to give the kind of doctoring that most of us envisioned when we went to medical school. Not only is it great in terms of value, but it’s also great in terms of personal satisfaction, and the impact on patients and families.”

As payers begin to better recognize the value of these visits, they are developing innovative care models based on payment concepts similar to Independence at Home and CMS’ Comprehensive Primary Care Initiative, a program that has provided additional funding for care coordination.

“A dollar spent will return several dollars saved,”
Zafirau says. “Getting patients seen by a doctor and getting a thorough evaluation and their diagnoses into the medical record helps with risk capture for value-based payment systems.”

“The Cleveland Clinic program has been very successful in increasing access to home-based primary care for those who need it and is an excellent model for other house call programs,” says Cornwell. “Without this access, vulnerable patients are more likely to miss medical appointments, be non-compliant with medication and treatment plans and become more reliant on emergency care.”

**CONCLUSION**

Home-based primary care is gaining traction as an effective, compassionate way to care for patients with mobility issues and multiple chronic conditions. However, payment model challenges need to be addressed, and more clinical and practice management data is needed to support the HBPC model. HCCI is committed to collaborating with other individuals and organizations to generate this data.

Pioneering further change will also require more health care professionals to be prepared to offer home-based primary care. HCCI’s comprehensive
HBPC curriculum includes a two-day interactive workshop followed by online learning opportunities that can be completed at the learner’s pace. Developed and taught by leading HBPC experts, the program is offered at HCCI’s nationwide network of partner institutions. Additional educational offerings are available through a two-day, field-based experience that provides on-the-job HBPC training, as well as online courses.

With education and exposure to the high-quality, cost-effective HBPC model, more health care providers may soon recognize that home-based primary care services deliver better value and outcomes for certain patient populations.

“That’s where HCCI comes in,” Cornwell says. “We need to train providers to do this wonderful service to meet future demands as we educate payers to utilize home-based primary care.”

To learn more about the future of home-based primary care, visit www.hccinstitute.org.

HCCI’S PARTNER INSTITUTIONS INCLUDE:

- Cleveland Clinic
- Icahn School of Medicine at Mount Sinai
- MedStar House Call Program
- Northwestern University, Feinberg School of Medicine
- Perelman School of Medicine at the University of Pennsylvania
- University of Arizona, Center on Aging
- University of California, San Francisco