

Home-Based Primary Care's PERFECT STORM

By Thomas Cornwell, MD



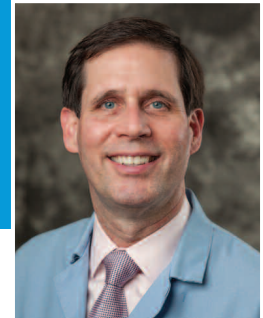
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Health Care's Perfect Storm and the Home-Based Primary Care Solution



A Word from Dr. Cornwell



Thomas Cornwell, MD

Dear Friends,

In the past, it was not uncommon for physicians to make patient house calls. In fact, it was the preferred way to provide medical care. Since then, patient care moved to physician offices, health clinics and hospitals. However, a number of industry forces are currently converging, shifting health care back to patient homes. I've seen firsthand how this model of care not only benefits homebound patients and their caregivers, but health care providers as well.

As a practicing physician with over thirty years of experience, I have dedicated my career to home-based primary care. In the past twenty years, I've made over 32,000 house calls to more than 4,000 patients. I understand how home-based primary care improves the life and health of some of the oldest and sickest patients and, at the same time, greatly reduces health care costs. This innovative model of care offers a solution to many of the challenges and opportunities we face in health care today and allows physicians to get back to doing what we do best – caring for the patient.

The following paper addresses how home-based primary care benefits both providers and patients and why the industry is perfectly poised to advance this effective care model. As chief executive officer of Home Centered Care Institute (HCCI) – a not-for-profit organization dedicated to expanding house call practices throughout the nation – I'm passionate about these findings because I've experienced the difference home-based primary care can make.

HCCI is invested in helping you learn more about home-based primary care. Thank you for your interest.

A handwritten signature in black ink that reads "T. Cornwell MD". The signature is stylized and cursive.

Thomas Cornwell, MD
CEO, Home Centered Care Institute (HCCI)

Executive Summary

The practice of health care today is in a state of tremendous transition. Rising costs, a strain on resources, and ever-changing policies and fee structures have left health care providers struggling to provide cost-effective, quality care for patients. The aging population, especially, is at risk for being underserved. However, research studies and real-world trials confirm that innovative, home-based primary care (HBPC) effectively addresses both patient and provider needs in the current health care environment. This paper will examine the unique needs of our health care system and how home-based primary care offers a viable solution.

Background: Health Care's Perfect Storm

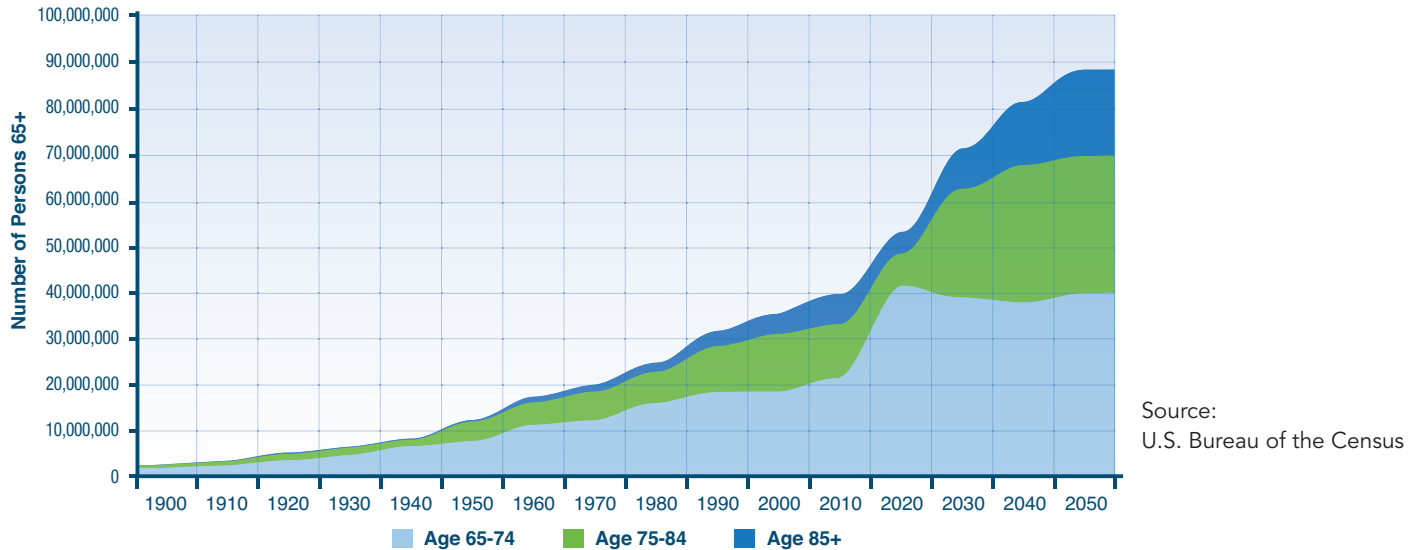
A number of independent factors have recently converged in the United States, creating a “perfect storm” of need in health care. These factors strain the time and resources of providers and threaten the quality of patient care. They include:

- Changing demographics of the United States
- The fiscal crisis of Medicare and Medicaid programs
- Health Care Reform and potential new legislation

1. Changing Demographics: The Aging of Society

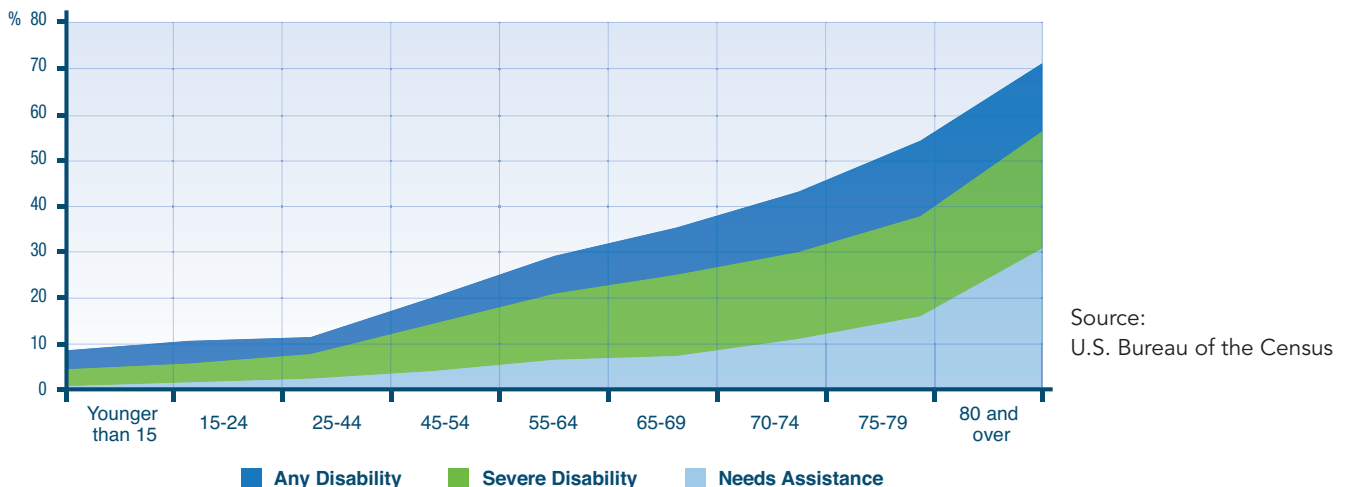
The chart below demonstrates the acceleration of our country's aging population. According to the U.S. Census Bureau, the number of people age 65 and older will more than double between 2010 and 2050. By the year 2050, approximately 50,000,000 individuals age 75 or older will be living in the United States – a group that represents some of the highest medical needs.

Population 65+ by Age: 1900-2050



Disability is a major concern of our aging population. As the chart below shows, those with severe disabilities as well as those who need assistance with basic activities of daily living (feeding, walking, bathing, transfers) increases dramatically with advanced age. For example, over 30% of all individuals age 80 and older require assistance. This rapidly-increasing population is the highest user of costly hospital and nursing home services and would benefit from home-based primary care.

Disability Prevalence and the Need for Assistance by Age: 2010 (in percent)



2. The Medicare and Medicaid Fiscal Crisis

U.S. spending on health care has reached heightened levels. In 2014 alone, the United States spent \$3 trillion on health care, representing 17.5% of our country's gross domestic product. According to the 2016 Medicare Trustees Report, Medicare is facing insolvency by 2028. Medicaid, too, is in crisis.

According to the MACPAC (Medicaid and CHIP Payment and Access Commission), Medicaid was the largest component of state budgets in 2015, consuming over 28% of total spending. A significant portion is devoted to Long-Term Services and Supports (LTSS) – medical and personal care assistance provided to people who have difficulty with self-care tasks due to aging, illness or disability.

Medicaid is the largest payer of LTSS, which includes both home and community-based services as well as nursing home care. In 2014, Medicaid spent \$152 billion on LTSS, representing 32% of total Medicaid expenditures. It also paid for over half of the nation's total spending on nursing home care. Without alternative action, increasing costs will overtax these programs.

Medicaid Consumed
28%
of State Spending
in 2015



3. Health Care Reform

Health Care Reform has highlighted some of the most costly health care-related expenses today and challenged organizations to take steps to reduce them. These include hospital readmissions and effective management of patients with expensive chronic conditions. Even if health care legislation changes, these high expense areas remain a burden to our system, prompting providers to search for new and better approaches to effectively reduce costs.

Readmission Reduction

Frequent hospital readmission after discharge has taken a spotlight in our health care system for good reason – ER visits and hospital care carries tremendous cost. And ongoing readmissions have become a national problem. In 2009, data showed that 20% of Medicare hospital discharges were readmitted within 30 days and 34% were readmitted within 90 days. Half of the 30-day readmitted patients had not seen a physician since hospital discharge.

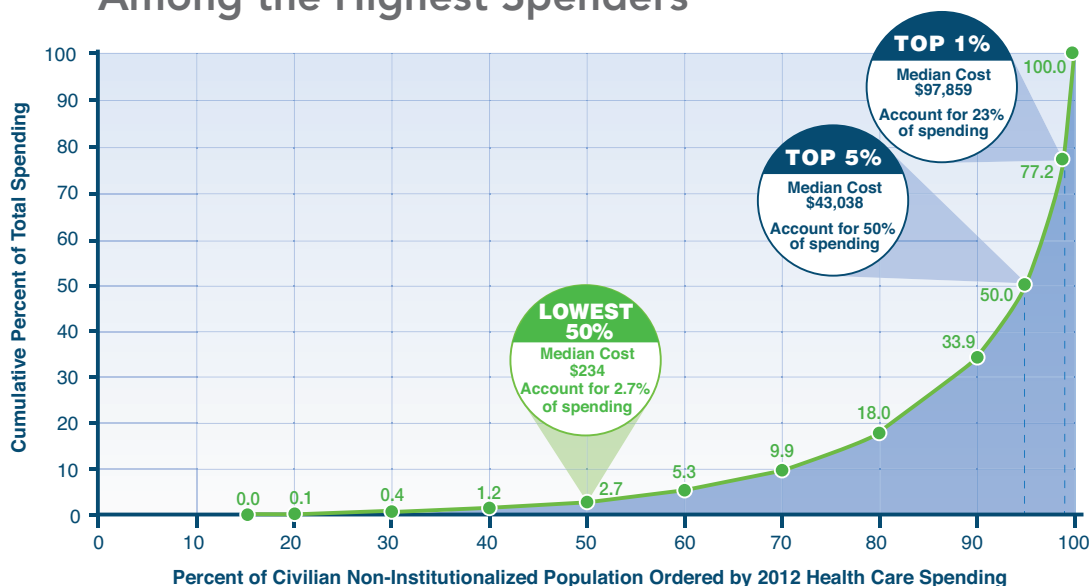
Attempts to reduce hospital readmissions with Medicare home health services (nurses, therapists, social workers and aides) have generally not been successful, with readmissions remaining high at around 28 percent. However, reducing readmission rates with home-based care is possible and has been proven effective with nurse practitioner, in-home physician and physician assistant visits.

Programs that Target High Spenders

Programs under the Affordable Care Act, including the Medicare Shared Savings Program and Bundled Payments for Care Improvement, have been put into place to improve coordination and quality of patient care which, in turn, is expected to reduce costs. Hospitals and health care providers participate in these programs by creating Accountable Care Organizations (ACO). The greatest savings achieved by ACOs are generated from the highest cost patients – those with five or more chronic conditions and multiple functional deficits.

The chart below shows that the costliest 1% of patients consumes 23% total health care costs at a median cost of \$97,859 per patient. The top 5% of costliest patients consume 50% of total costs. Finding a way to effectively target these top tier spending groups has the greatest potential for cost savings.

Health Spending Is Very Highly Concentrated Among the Highest Spenders



Source: NIHCM Foundation

Solution: Home-Based Primary Care (HBPC)

**Improve
patient &
caregiver
satisfaction**

Home-Based Primary Care is a model of care that brings the expertise of nurse practitioners, physicians and physician assistants directly to the patient in the comfort of their own home. HBPC providers offer consistent, ongoing primary care for some of the oldest and most medically complex patients, helping prevent avoidable hospitalizations and other complications. Providers are able to accomplish in-home diagnosis and treatment with cutting-edge, in-home technology such as lab tests, EKGs, X-rays, ultrasounds, IVs and more.

HBPC offers a solution to today's perfect storm of health care needs and has been proven to:

- Substantially reduce health care costs while improving quality of patient care
- Ease the financial burden on Medicare and Medicaid by offering an alternative to higher-cost services
- Meet demand for home-based care resulting from current health care legislation
- Improve patient and caregiver satisfaction



1. HBPC Reduces Health Care Costs, Improves Quality of Care

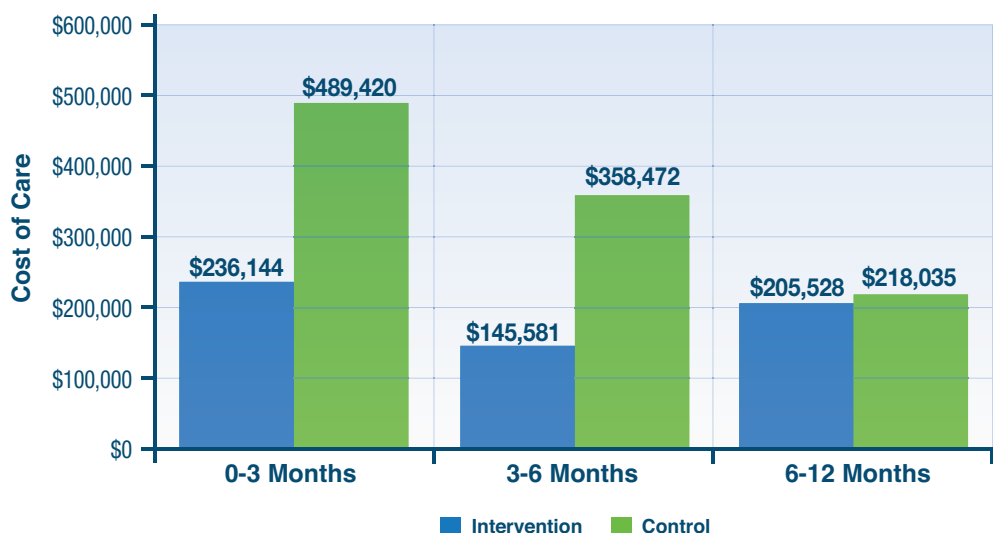
As this paper demonstrates, the financial burden of health care in the United States is staggering. As our population continues to age, financial and medical resources are further and further stressed. As a result, the health care industry needs a new approach to care. Research shows that HBPC can help reduce health care expenses in a number of ways, including: decreasing hospital readmissions, easing the burden on Medicare and Medicaid, improving the effectiveness of ACOs, and replacing the need for other, costlier services.

Decreasing Hospital Readmissions

Despite current efforts to reduce hospital readmissions, readmission rates remain high. However, studies show that HBPC provided by nurse practitioners, doctors and physician assistants can have a profound effect on reducing readmissions and, in turn, health care costs.

A 2004 study published in the *Journal of the American Geriatrics Society* showed that house calls made by nurse practitioners for three months post-hospitalization cut hospital readmissions for elderly congestive heart failure patients by more than half. The chart below shows the benefits of HBPC in this population. Note that the benefits of HBPC continue beyond three months but return to baseline around six months after intervention. This demonstrates the need for ongoing, in-home care.

Resource Use Among Elderly Congestive Heart Failure: Patients Who Received a Transitional Care Intervention or Usual Care, Six Philadelphia Hospitals, 1997-2001



Source:
Journal of the American Geriatrics Society

The Program
Realized a Remarkable
\$25 million
Overall Savings
in 2015

Easing the Burden on Medicare and Medicaid

The Independence at Home (IAH) Act also demonstrates HBPC's ability to decrease hospital readmissions, improve patient care and reduce overall costs. The 3-year IAH Demonstration Project, which encouraged home-based health care for the most frail and costly Medicare beneficiaries, was designed to test the ability of this model of care to reduce Medicare costs and help complex patients age in place. Data collected during the test reveals the clear benefits of HBPC.

First year data, released in 2015, showed that the program realized a remarkable \$25 million overall savings – an average of \$3,070 per beneficiary. Second year data, released in 2016, showed an additional \$7.8 million in overall savings – an average of \$746 per beneficiary.

In both years, IAH beneficiaries had fewer 30-day readmissions, hospitalizations and emergency department visits. In addition, quality of care increased in all measured areas such as follow-up within 48 hours of hospitalization, medication reconciliation and documented advanced care preferences. This further illustrates HBPC's impact on improving care while dramatically reducing costs.

Making ACOs More Effective

Current legislation encourages hospitals and health care providers to create ACOs to improve coordination and quality of patient care as a strategy for cost savings. As discussed, these organizations save the most money from the costliest patients – those with multiple chronic conditions and functional deficits. This group of expensive patients is the same population that most benefits from HBPC. As a result, when HBPC organizations are part of an ACO, they can help achieve additional cost savings.

For example, U.S. Medical Management runs the Visiting Physicians of America (VPA), the largest house call program in the country. VPA generated over \$3.6 million in savings for their Pioneer ACO program in Performance Year 2, representing 3.75 % of the total cost savings achieved under the entire national ACO program. This statistic is significant considering VPA was only caring for a small fraction of total ACO patients.

Replacing Hospital and Nursing Home Services

A number of peer-reviewed journal articles have proven the value of home care medicine, showing that HBPC reduces the need for expensive nursing home and hospital services.

An October 2014 article in the *Journal of the American Geriatrics Society* analyzed the Veteran Health Administration's HBPC Program, which began more than two decades ago and currently provides in-home health care to over 30,000 veterans with chronic conditions.

In 2002, the program decreased total costs by 24% due to HBPC, amounting to over \$9,000 savings per veteran. (See table below). The article also analyzed the program's 2007 data and found a remarkable 59% reduction in hospital days, an 89% reduction in nursing home days and a 21% reduction in 30-day readmissions.

2002 Cost of Care Before vs. During HBPC (per patient per year)

	Before HBPC	During HBPC	Change
Total Cost of VA Care	\$38,168	\$29,136*	- \$9,032 (- 24%) P < 0.0001
Hospital	\$18,868	\$7,026	\$11,842 (- 63%)
Nursing Home	\$10,382	\$1,382	\$9,000 (- 87%)
Outpatient	\$6,490	\$7,140	\$650 (+ 10%)
All Home Care	\$2,488	\$13,588*	\$11,100 (+ 460%)

Source:
Journal of the American Geriatrics Society

N = \$11,334 (* includes HBPC cost)

The VA HBPC program differs from Medicare's home health benefit in that the home health benefit focuses on short term conditions compared to HBPC's comprehensive, ongoing care. However, the two programs can be used as complementary services.

To ensure that the cost savings of the VA's HBPC was not due to increased Medicare expenditures, the cost of care was analyzed for close to 7,000 veterans also enrolled in Medicare in 2006. The study found that HBPC increased savings to both the VA and Medicare. HBPC was associated with a 13.4% reduction in total combined costs with a 16.7% savings to the VA and an additional 10.8 % savings to Medicare. The veterans in the HBPC program received over \$9,000 of additional care in the home but still reduced costs by more than \$5,000 per veteran due to a 25.5% reduction in hospitalizations. The program also had the highest patient and caregiver satisfaction in the VA system.

Another October 2014 article in the *Journal of the American Geriatrics Society* analyzed 722 HBPC patients in the MedStar Washington Hospital Center Medical House Call Program. Compared to 2,151 matched control patients, the HBPC program reduced Medicare costs by 17% over a two-year period, resulting in \$8,477 savings per beneficiary and a remarkable overall savings of \$6.1 million. What's more, the HBPC patients had more primary care visits (house calls), home health and hospice services. They also experienced fewer hospitalizations, emergency department visits and skilled nursing home stays.

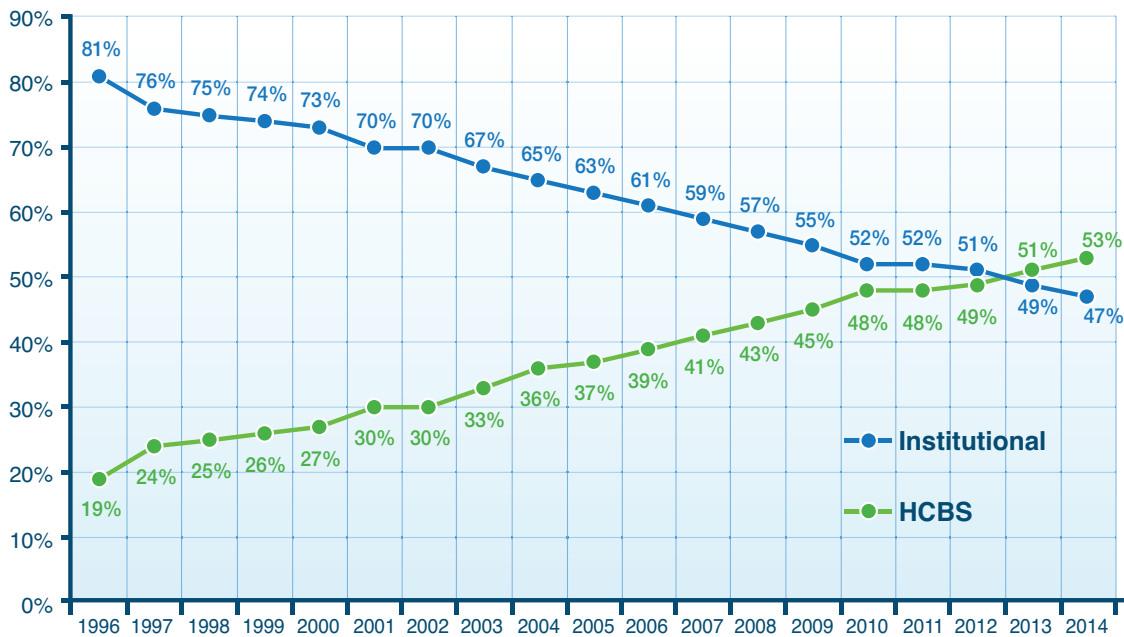
2. HBPC Supports Current Health Care Legislation

Federal rebalancing legislation provides incentives for states to increase home and community-based services with the goal of reducing nursing home placements. The two main programs of this legislation are Money Follows the Person (MFP) Rebalancing Demonstration Grant, authorized by Congress in the Deficit Reduction Act of 2005, and the Balancing Incentive Program (BIP), which was authorized by the Affordable Care Act in 2010. These programs provide financial and practical support for patients to remain in their home or transition from nursing homes back into the community.

As of mid-2015, over 52,000 Medicaid beneficiaries had enrolled in MFP; another 10,265 individuals were in the process of transitioning from nursing homes back to the community. The emphasis of these two programs on helping nursing home-eligible individuals remain in the community creates added demand for home and community-based services like HBPC practices.

The chart below shows how federal rebalancing legislation has increased spending for home and community-based services. In 2013, these services accounted for over 50% of Medicaid LTSS, resulting in an increase in funding for home-based services and spending decrease for institutional services. The numbers clearly demonstrate the demand for HBPC services if the programs are in place to support it.

Federal Rebalancing Legislation Including Money Follows the Person (MFP) and the Balancing Incentive Program (BIP)



Source: Centers for Medicare and Medicaid Services

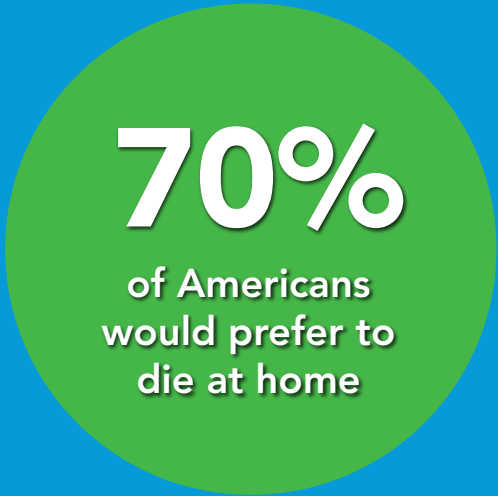
3. HBPC Increases Patient Satisfaction

Currently, most Americans receive aggressive care at end of life, regardless of their wishes. For example, 70% of Americans say they would prefer to die at home, but only 33.5% do.

End-of-life interventions are also on the rise. A study comparing end-of-life care in 2000 vs. 2009 found that intensive care unit (ICU) stays in the last month of life increased (24.3% to 29.2%), hospitalizations in the last three months of life increased (62.8% to 69.3%) and short hospice stays of less than three days also increased (22.2% to 28.4%), with 40.3 % of those short hospice stays preceded by an ICU stay. This aggressive care at the end of life is not only incongruent with patients' wishes, it is also very costly. In 2010, 25.1% of the \$556 billion Medicare dollars were spent on care in the last year of life.

End-of-life care under a HBPC model is very different. For example, at HBPC practice HomeCare Physicians in Wheaton, IL, end-of-life wishes are discussed early and often to best meet patient desires. In 2015, the practice had 230 deaths. Of these patients, 80% died at home and 76% were on hospice care. The majority did not spend any time in the hospital during their last three months of life.

In addition to increased patient satisfaction and decreased health care costs, quality end-of-life care at home also decreases hospital mortality rates. Hospital mortality is part of the Medicare Quality Incentive Program that impacts hospital payments. Supporting at-home deaths not only fulfills patient wishes, but improves hospitals' bottom lines.



70%
of Americans
would prefer to
die at home



The Time is Now



HBPC's time has come. We can no longer ignore the perfect storm that has developed in our health care system, creating both economic need and patient demand for HBPC. Currently only about 15% of the nation's 2 million home-limited patients receive home care medicine – leaving a vast void of needed HBPC services.

The focus of the Home Centered Care Institute (HCCI) is to advance home-based primary care within our communities by developing house call practice models, providing workforce education and creating supportive services for HBPC programs. HCCI encourages providers to act on the opportunity to impact the sickest and costliest patients in our society and be a major solution to our national healthcare crisis.

To learn more about home-based primary care or for help in establishing HBPC services, contact:

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