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# Bringing home the ‘medical home’ for older adults

**M**RS. SMITH, age 82, has chronic heart failure. She also has difficulty walking because of arthritis in her knee and osteoporosis. Her son has taken the day off work to bring her in to see her primary care physician, Dr. Jones, because of increasing swelling of her legs and feeling tired.

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Even on a good day, Mrs. Smith faces challenges getting to the doctor’s office: she has difficulty getting dressed, taking the stairs, and transporting her walker and oxygen, not to mention parking the car, getting out, getting in to the doctor’s office, and then returning home.

After a careful evaluation Dr. Jones concludes that the leg swelling and fatigue are due to an exacerbation of heart failure triggered by excess dietary sodium and uncontrolled hypertension. She decides to increase the dosages of Mrs. Smith’s diuretic and angiotensin-converting enzyme inhibitor and advises her and her son about dietary sodium restriction. She reviews with them the symptoms that should trigger a call to the office, and she says she wants to see Mrs. Smith again in 3 days.

Mrs. Smith and her son do not seem to understand the instructions, and they explain how difficult it will be to make the follow-up visit, so Dr. Jones recommends hospital admission. Mrs. Smith protests, as she has had multiple hospitalizations during the past year

and she dreads the idea of returning. And her son explains, “Mom always seems worse after going to the hospital. Last winter when she was there her days and nights got mixed up, and when she called out at night they gave her some drug that knocked her out for 2 days. Doctor, isn’t there any safe way to keep her at home?”

## ■ CHRONIC ILLNESS: A CHALLENGE, AND AN OPPORTUNITY

The growing number of older adults with chronic illnesses poses a serious challenge to the US health care system, placing unprecedented pressures on the financial sustainability and overall effectiveness of the Medicare program.<sup>1,2</sup> Of particular concern is the plight of Medicare beneficiaries like Mrs. Smith who have multiple chronic conditions and whose activity and mobility are limited. These patients account for a disproportionate share of Medicare expenses and, despite all the money spent, often struggle without optimal care that is accessible, individualized, and coordinated.

But this challenge is also an opportunity. We may be able to improve the care of these vulnerable patients—and control costs—by taking their primary care to their own homes. To these ends, the Patient Protection and Affordable Care Act (ie, the “health care reform law”) has several provisions for pilot and demonstration projects.<sup>3–5</sup> In light of the new policies and as part of a grassroots effort to change the delivery of care for patients with chronic conditions, primary care physicians like Dr. Jones are redesigning their practices to provide a patient-centered medical home.<sup>6</sup>

**Making these vulnerable patients’ homes the center of primary health care may be a way to improve care and control costs**

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TABLE 1

## Practical considerations for successful physician-home health collaboration in chronic care management

### Identifying patients eligible for coverage of home health care

Is the patient "homebound" (needs help of person or device to leave home and leaves infrequently; trips require significant effort)?

Does the patient need skilled nursing or therapy, such as disease-related teaching and training or observation and assessments?

### Determining which agencies to work with

Does the patient have a preference for a particular provider?

What are the agency's publicly reported outcomes? ([www.medicare.gov/hhcompare](http://www.medicare.gov/hhcompare))

Does the agency make its records available electronically, providing opportunities for electronic signing of orders and certifications?

Does the agency offer specialized programs, personnel, and technologies for the management of chronic illness and the coordination of chronic care?

### Developing and monitoring care plans

Consider developing standard order sets for common diseases and scenarios; request and review agency-developed care plans.

Which disciplines are needed (nursing, physical therapy, social work, medical nutrition, home health aide)?

When and how should the physician be notified and updated?

### Getting reimbursed for the work

Use code G0180 (\$51.96) for developing and certifying initial care plan, and code G0179 (\$38.97) for recertifications.

Use code G0181 (\$101.76) if 30 or more minutes in a calendar month are dedicated to overseeing the care plan.

Use codes 99341–99350 (\$53.77–\$204.96) for physician home visits.

### Additional considerations

Consider becoming a home health agency medical director if you have a strong interest or practice focus in care of community-dwelling patients with serious chronic illness.

Physicians who emphasize home care in their practice may consider joining the American Academy of Home Care Physicians and consider if they're eligible to participate in the independence-at-home Medicare demonstration project.

A large practice or "medical home" may consider having a home health nurse with chronic care expertise embedded in the medical practice. Having a physician or mid-level practitioner dedicated to home visits may also be feasible.

As envisioned, the primary care physician's office will be the patient's "medical home." The primary care physician will lead, coordinate, and oversee the efforts of a multidisciplinary team, referring patients when necessary to specialists and community resources. Primary care practices that become medical homes would potentially be paid care management fees in addition to fees for visits, but with new expectations for care coordination and integration.

The health care reform law also includes the Independence at Home Act, funding a demonstration project in which primary medical care teams will visit patients at home. Beyond the medical home and independence-at-home concepts, the health reform law also promotes "accountable care organizations," and changes the funding to Medicare Advantage private insurance plans. Both of these initiatives will likely require primary care physicians to redesign how they deliver chronic care to older patients with limited mobility and multiple comorbid illnesses.

The emergence of the medical home, independence-at-home, and related concepts makes it a good time for physicians to explore how they can collaborate with home health providers to better meet the needs of older patients with chronic illness (TABLE 1).

## ■ UNDER MEDICARE, WHO IS ELIGIBLE FOR HOME HEALTH SERVICES?

Primary care physicians who are transforming their offices into a medical home must consider how to deliver the care (it must be accessible, team-based, and aimed at the "whole person"), coordinate the care, and measure its quality.<sup>7</sup> Many Medicare beneficiaries with serious chronic illness have limited mobility that makes it difficult to regularly travel to medical offices, and thus they need home visits or regular contact by telephone or computer.

Many home health agencies are using new conceptual models, programs, technologies, and services so they can play a supportive role.<sup>8</sup> These agencies employ nurses, therapists, social workers, personal caregivers, and nutritionists. In many instances these people can become the physician-directed team re-

sponsible for key aspects of caring for patients with chronic illness in their homes, coordinating and integrating the care, and measuring its quality. Additionally, in-home assessment provides a holistic view of patients that potentially promotes patient- and family-centered care options.

To be eligible for home health services, a beneficiary must be “homebound,” must need intermittent skilled nursing care or skilled therapy, and must be under the care of a physician. The health reform law has also mandated that patients have a face-to-face visit with their physician or with certain nonphysician practitioners in order to certify the home health care plan.

Even though the homebound requirement limits the number of people eligible, many older adults like Mrs. Smith who have chronic illness meet this criterion. Others may only be homebound during an exacerbation of a chronic illness that temporarily limits their mobility. However, patients can still be considered homebound for the Medicare benefit even if they leave their home (infrequently) for medical care, religious services, family events, adult day programs, and other reasons.<sup>9</sup>

The Medicare Home Health benefit covers several services that are especially important for patients with chronic illness. These include nursing visits for observation and assessment, evaluation and management of a care plan, and teaching and training.

### How this applies to Mrs. Smith

In the case of Mrs. Smith, Dr. Jones could order home nursing care to make sure she is taking her medications as directed, to teach her about self-management and nutrition, and to assess the impact of medication changes—both the intended effects and adverse effects such as hypotension.

Other team members bring other skills. For example, home health social workers may be able to address complex psychosocial needs that can affect adherence.

The time Dr. Jones spends developing this care plan and reviewing the patient’s condition with home health field staff by telephone or other communication methods is reimbursable under Medicare as “care plan oversight”<sup>10</sup>

and can substitute for the revenue lost due to less-frequent office visits.<sup>10</sup> In the new practice models, a medical home or independence-at-home care-management fee or anticipated revenues from “gain-sharing” could cover nonvisit supervision of in-home services.

### Oversight in the computer age

Dr. Jones may be reluctant to rely on a home health agency because she cannot directly oversee what they are doing and may in fact be uncertain as to *what* they are doing. Home care may seem like a “black box” to physicians, but it shouldn’t in this era of electronic health records and advanced electronic information systems. Seamless communication is possible without playing “telephone tag” and sending multiple faxes. Physicians may prefer to work only with home care providers who use electronic information systems and who can interface their systems with the physician’s electronic systems, or at least offer shared viewing through Web access. Of course, such arrangements must be initiated with respect for the patient’s preference for a home care agency.

Home health providers are also well positioned to help measure and monitor the quality of care. Medicare requires that home health providers track a comprehensive set of quality outcomes, adjusted for risk, and ranging from improvement in function to acute hospitalization rates.<sup>11,12</sup> Given that most home care providers are swimming in data about their patients, it would be reasonable for home care agencies to provide physician partners with more nuanced reports for specific subpopulations, such as those from a particular physician practice, or for patients with a particular disease.

### ■ NEW CONCEPTS, PROCESSES, AND TECHNOLOGIES

To care for a patient like Mrs. Smith, the home health team must embrace new, chronic-care-oriented concepts, processes, and technologies. Many agencies now have nurses and therapists skilled in chronic illness care, self-management support, and health coaching. Ancillary staff collaborate with the physician by assuming time-consuming but necessary

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**Now is a good time to explore how to collaborate with home health providers to better meet the needs of older patients with chronic illness**

tasks such as patient education, care coordination and integration, and quality measurement and improvement initiatives.

Several groups and authors have proposed a “home-based chronic care model,” built upon the well-studied “chronic care model,”<sup>13-16</sup> as a framework to help home care providers change their approach to patients with chronic illness. This model offers a standardized curriculum and certification program, as well as practice guidelines, which standardize best-practice care delivery from agency to agency.

A core tenet of this model is a strong focus on teaching clinicians how to teach their patients to care for themselves, since bad outcomes are often due to patients not following physicians' recommendations. Since successful chronic care management requires adherence to specific self-care behaviors, the focus on behavior change must not be neglected if positive outcomes are to be realized.

New technologies are also emerging. Some home health providers are using in-home telemetry with remote call centers to track the patient's health status on a daily basis. Physicians and patients can follow the data, allowing for quick intervention, if necessary, and reinforcement of self-management learning.<sup>17-20</sup> Some home care agencies could monitor, via telemetry, Mrs. Smith's weight, blood pressure, oxygen saturation, heart rate, and dyspnea symptoms. This information could be fed back to call-center clinicians who have predetermined parameters for titrating the diuretic dose and for notifying the physician.

Some monitoring technology allows for interactive assessment and teaching via live videoconferencing. Some home health agencies also use telephone-based health coaching.<sup>21</sup> Information system interfaces between the home health agency and the medical home coordinator could make the content of this in-home monitoring and care management visible in the physician's record.

### ■ TOWARD ONGOING CARE MANAGEMENT

In spite of these opportunities, the Medicare home health benefit rarely permits uninterrupted ongoing home care. Thus, the home health collaboration developed around Mrs.

Smith's heart failure exacerbation is likely to be temporary, and when her condition stabilizes she may no longer meet the criteria for home health services.

This episodic-payment model contrasts with the ongoing needs of the typical high-risk older patient with chronic illness. Changing the home health benefit to allow for ongoing home health care for beneficiaries like Mrs. Smith may be an opportunity for patient-centered reform. Although ongoing home health care for a given patient may not be possible, the medical home model offers the opportunity for ongoing physician-home health collaboration because at any time a physician's practice is likely to have patients requiring these services. The independence-at-home model does provide for uninterrupted ongoing in-home physician and mid-level care for some patients, but it may require changing primary care physicians, and this may be undesirable to some patients. If a viable financing model is established for medical homes and independence-at-home practices, they may choose to contract with home health agencies to provide ongoing telephone or telemetric care management between (or outside of) episodes of eligibility for traditional home health care. All of these potential arrangements would need legal review and would need to be structured to avoid violation of the letter and spirit of laws prohibiting self-referrals and kickbacks.

### ■ PHYSICIAN HOME VISITS

In the case of Mrs. Smith, Dr. Jones has the option of making a follow-up home visit, or even ongoing home visits.

Granted, home visits may be impractical due to the time involved and the impact of that downtime on the physician's medical practice and responsibilities to other patients. However, larger practices may employ a specific physician, nurse practitioner, or physician's assistant to provide in-home care to patients in need.

Some communities have house-call practices to which Dr. Jones could refer Mrs. Smith for in-home physician care, and, where available, this may be a preferred care model—somewhat analogous to how a primary care physician might collaborate with a hospitalist for inpa-

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tient care of a specific patient.<sup>22</sup> These home-care physician practices will likely become more prevalent if the independence-at-home Medicare demonstration project is successful.

In the future, even if Mrs. Smith needed more intensive inpatient care, an emerging concept called “hospital at home” may be able to provide this acute care in her home.<sup>23,24</sup> These in-home physician services are increasingly supported by new mobile diagnostic technologies.<sup>25</sup>

However, adding or changing physicians may not be possible or desirable for Mrs. Smith and could lead to further fragmentation of care. In the future, teleconferencing may provide options for “virtual visits” that would partially solve this problem.

Whether the physician care is provided in

the office, in the home, or as a virtual visit, much of the care Mrs. Smith needs can and should be done by nonphysician home health care providers in partnership with informal caregivers.

### ■ MRS. SMITH GETS BETTER AT HOME

Dr. Jones decided to refer Mrs. Smith for home health nursing and maintained close telephone contact with her and the home health nurse during the first 2 weeks. Mrs. Smith responded well to the changes in medication and diet, her leg swelling decreased, and she was feeling more like her usual self. At a follow-up office visit 3 months later, Mrs. Smith hugged Dr. Jones and thanked her profusely for helping her get better at home. ■

### ■ REFERENCES

1. **Hackbarth GM.** Medicare Payment Advisory Commission. June 2008 Report to the Congress: Reforming the Delivery System. [http://www.medpac.gov/documents/Jun08\\_Entirereport.pdf](http://www.medpac.gov/documents/Jun08_Entirereport.pdf). Accessed September 9, 2010.
2. **Congressional Budget Office.** Accounting for Sources of Projected Growth in Federal Spending on Medicare and Medicaid. <http://www.cbo.gov/ftpdocs/93xx/doc9316/HealthCostGrowth.shtml>. Accessed September 9, 2010.
3. **Landers SH.** The other Medical Home. *JAMA* 2009; 301:97–99.
4. **The Library of Congress: Thomas.** The RE-Aligning Care Act. [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111\\_cong\\_bills&docid=f:h2560ih.txt.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h2560ih.txt.pdf). Accessed September 9, 2010.
5. **The Library of Congress: Thomas.** Independence at Home Act of 2009. [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111\\_cong\\_bills&docid=f:h2560ih.txt.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h2560ih.txt.pdf). Accessed August 12, 2010.
6. **TransformMED.** <http://www.transformed.com>. Accessed September 9, 2010.
7. **Kellerman R, Kirk L.** Principles of the patient-centered medical home. *Am Fam Physician* 2007; 76:774–775.
8. **Fisher ES.** Building a medical neighborhood for the medical home. *N Engl J Med* 2008; 359:1202–1205.
9. **Medicare Benefit Policy Manual: Chapter 7 - Home Health Services.** <http://www.cms.hhs.gov/manuals/Downloads/bp102c07.pdf>. Accessed September 9, 2010.
10. **Blustein HM.** Care plan oversight and home care/hospice revenue for telephone management. *Compr Ther* 2006; 32:226–229.
11. **Madigan EA, Fortinsky RH.** Interrater reliability of the outcomes and assessment information set: results from the field. *Gerontologist* 2004; 44:689–692.
12. **Madigan EA, Tullai-McGuinness S, Fortinsky RH.** Accuracy in the Outcomes and Assessment Information Set (OASIS): results of a video simulation. *Res Nurs Health* 2003; 26:273–283.
13. **Bodenheimer T, Wagner EH, Grumbach K.** Improving primary care for patients with chronic illness: the chronic care model, Part 2. *JAMA* 2002; 288:1909–1914.
14. **Martin JC, Avant RF, Bowman MA, et al; Future of Family Medicine Project Leadership Committee.** The Future of Family Medicine: a collaborative project of the family medicine community. *Ann Fam Med* 2004; 2(suppl 1):S3–S32.
15. **Hennessey B, Suter P.** The home-based chronic care model. *Caring* 2009; 28:12–16.
16. **Suter P, Hennessey B, Harrison G, Fagan M, Norman B, Suter WN.** Home-based chronic care. An expanded integrative model for home health professionals. *Home Healthc Nurse* 2008; 26:222–229.
17. **Browning SV, Tullai-McGuinness S, Madigan E, Struk C.** Telehealth: is your staff ready to implement? A descriptive exploratory study of readiness for this technology in home health care. *Home Healthc Nurse* 2009; 27:242–248.
18. **Fazzi R, Ashe T, Doak L.** Telehealth, disease management, home care and the future—part 2. *Caring* 2008; 27:36–8, 40–1, 3.
19. **Kelly K, Christians J.** Best practices in implementing a telehealth program. *Caring* 2008; 27:44–47.
20. **Whitten P, Bergman A, Meese MA, Bridwell K, Jule K.** St. Vincent's Home telehealth for congestive heart failure patients. *Telemed J E Health* 2009; 15:148–153.
21. **Amedisys Home Health Services.** Comprehensive, continuous chronic care management in the home. [http://www.amedisys.com/pdf/Whitepaper\\_C4M.pdf](http://www.amedisys.com/pdf/Whitepaper_C4M.pdf). Accessed September 9, 2010.
22. **Okie S.** Home delivery—bringing primary care to the housebound elderly. *N Engl J Med* 2008; 359:2409–2412.
23. **Leff B, Burton JR.** Acute medical care in the home. *J Am Geriatr Soc* 1996; 44:603–605.
24. **Leff B, Burton L, Mader SL, et al.** Hospital at home: feasibility and outcomes of a program to provide hospital-level care at home for acutely ill older patients. *Ann Intern Med* 2005; 143:798–808.
25. **Bayne CG, Boling PA.** New diagnostic and information technology for mobile medical care. *Clin Geriatr Med* 2009; 25:93–107.

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One option is to make one or more follow-up visits to the patient's home