

## The Return of the House Call

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For the first half of the 20th century, the house call was a dominant means of providing medical care, accounting for 40% of patient-physician encounters in 1930 (1). House calls embodied “patient-centered” care by delivering care to persons in their environment on the basis of their preferences, needs, and values. However, technological advances, better transportation, and economic factors led to its virtual disappearance (2, 3). New diagnostic and therapeutic equipment moved care from the home to more expensive medical institutions. Transportation became less expensive and more widely available, and reimbursement for home care fell (1). By the 1950s, house calls dropped to 10% of encounters (1), and by the 1990s, house calls reached fewer than 1% of older persons (1, 2).

Fueled by new technological advances, the 21st-century house call is emerging chiefly to increase access to care (4). Point-of-care diagnostics, remote monitoring, and increasingly ubiquitous broadband technology are enabling care to return to the home. At the same time, other forces, including aging populations, growing burden of chronic conditions, consumer empowerment, and the need for cost-effective care, are driving adoption (5).

These virtual house calls meet the aims of providing health care that is safe, effective, patient-centered, timely, efficient, and equitable (6). By providing care in the home, nosocomial infection and driving risks are minimized. Virtual visits may be effective for an increasingly wide range of episodic (such as conjunctivitis) and chronic (such as Parkinson disease) conditions (7). Some conditions, from Alzheimer disease to autism, may be best treated in the home. Virtual visits are increasingly available 24 hours a day, 7 days a week, with often minimal wait times. Although a “digital divide” persists, virtual visits can reduce geographic disparities in care.

Simply put, virtual visits increasingly provide patients the care that they need, the convenience that they desire, and the comfort that they want.

Because of their potential, virtual visits are now offered by many organizations (Table). As would be expected with a disruptive care model, many virtual providers are new entrants or come from outside of the health care establishment. In addition, 2 large integrated delivery networks, Kaiser Permanente (8) and the U.S. Department of Veterans Affairs, are widely adopting virtual visits.

Despite the promise of this next generation of the house call, considerable barriers hinder its adoption. Chief among them are reimbursement and licensure. Medicare, for example, reimburses a follow-up visit for a chronic condition at approximately \$160 for a visit in a hospital-based clinic, \$80 for a visit in a community-based clinic, and \$0 for a virtual visit at home. In essence, Medicare subsidizes care provided in high-

cost environments and disincentivizes care in patient-centered environments.

These disparate reimbursement policies are beginning to change. In late 2014, the Centers for Medicare & Medicaid Services expanded reimbursement for telehealth services to include remote care management. More ambitious efforts, such as the Medicare Telehealth Parity Act of 2014 (H.R. 5380), would gradually expand Medicare's geographic coverage of telemedicine; include services provided by therapists; and of note, introduce coverage for virtual visits at home. Although such legislation remains to be enacted, it does provide a roadmap for future Congressional efforts in which strong, bipartisan support exists for expanding telehealth services.

Two concerns with expanding reimbursement are limited evidence showing cost-savings and potential for overuse. Although telemedicine has the potential to reduce Medicare's costs (9), the evidence is still developing. However, the status quo is known to be failing (6). At present, the health care delivery system does not provide consistent, high-quality care to all persons (6) and does so at extraordinary costs. As with any reimbursed service, the potential for overuse of virtual visits exists. However, such concerns may be penny wise and pound foolish. Clinic visits are inexpensive and perhaps underused. A retrospective review of Medicare claims for Parkinson disease found that beneficiaries with Parkinson disease who made more visits to a neurologist were less likely to have hospitalizations related to the condition and cost Medicare less than those who saw a neurologist less frequently or not at all (10). In prepaid health systems in which virtual visits are covered, such as Kaiser Permanente and the U.S. Department of Veterans Affairs, growth is expected and desired (8), which suggests that the use of virtual visits as part of bundled payments, Medicare Advantage plans, or accountable care organizations, may increase. In the fee-for-service environment, increased transparency into Medicare claims and reasonable use limits are additional safeguards.

Absent changes in federal policy, states and the private sector are expanding telemedicine coverage. More states are mandating that Medicaid cover telehealth services, including those at home, and are requiring private insurers to cover telemedicine to the extent they cover in-person care. In the absence of consistent policies, the private sector, fueled by increasing investments in digital health companies, is moving forward with self-pay-based models.

In addition to reimbursement, medical licensure restriction is another barrier. At present, states generally require that physicians be licensed in the state where the patient is located. The result is that persons in states with the fewest specialists are required to travel hours to receive care. To increase access for its beneficiaries, the U.S. Department of Veterans Affairs has developed

**Table.** Selected Providers of Virtual House Calls

Organization	Example	Services Provided	Price, \$	Comment
Academic medical centers	Massachusetts General Hospital, University of Pittsburgh Medical Center	1-time consultations for common conditions (e.g., sore throat) Heart failure Neurology Psychiatry	38 per visit	University of Pittsburgh Medical Center offers its AnywhereCare program to anyone in Pennsylvania; >50 clinicians at Massachusetts General Hospital have conducted >1000 virtual visits since 2013.
Federal entities	VA	Long-term care	Covered service	VA conducted >200 000 video consultations in 2013 and has 4500 clinical video end points for telehealth.
Health insurers	Anthem, UnitedHealth Group	1-time consultations for common conditions (e.g., sore throat) Mental health care	45-49 per visit	Anthem plans to extend its service to 32.5 million members by 2016.
Health care start-ups	American Well, Doctor on Demand, Teladoc	1-time consultations for "most common, most irritating, most inconvenient" conditions	40-49 per visit	Digital health companies raised >\$4 billion in 2014.
Prepaid health plans	Kaiser Permanente	Acne Substance abuse Urgent care	Covered service	The number of virtual visits at Kaiser Permanente Northern California is expected to surpass that of in-person visits by 2016.

VA = U.S. Department of Veterans Affairs.

a model in which a physician licensed in any state can provide care anywhere in the federal program. Similar legislation has been proposed for Medicare (TELE-MED [TELEmedicine for MEDicare] Act, H.R. 3077) but has not been successful to date. Until states develop meaningful changes that reduce the cost, burden, and discrepancies among their policies, federal solutions will probably be sought.

In 1965, Medicare was created to ensure that older Americans could receive medical care at a time when half did not. As we approach Medicare's 50th anniversary, we need to ensure that distance and disability do not prevent beneficiaries from accessing the care they need. This century has brought us technological advances that can bring death to distance and allow us to more fully realize the vision that almost anyone anywhere can receive care.

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