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Is there a doctor in your house? Home health care of the future

Medical care at home is emerging as a "disruptive innovation" on the US health care scene. New models of home care offer the promise of better service, higher quality, and a better experience at a lower cost compared with nursing home and hospital care. A tall order, indeed! Pioneers like Dr. Bruce Leff, however, have already shown quite convincingly that "hospital at home" programs can be implemented and can deliver on these promises for patients who are eligible for hospital admission.[1,2]

See related article, page 661

In their essay "Bringing home the 'medical home' for older adults" in this issue of the *Cleveland Clinic Journal of Medicine*, Landers and colleagues discuss the opportunity of extending the medical home model to home health care as an integral part of the medical neighborhood to improve care coordination, reduce expensive hospitalizations, and improve the patient experience by caring for patients in their own homes. As a part of health care reform, the Center for Medicare and Medicaid Services intends to fund demonstration projects to determine to what extent home care can achieve these lofty goals.

A modernized, efficient, and effective home health care system would be a welcome improvement on the patchwork system we have had in the United States for the past 30 years. From my perspective as a family physician, this new legislation may provide the opportunity to get home health care right.

It did not start off on the right foot in the United States. Many home health agencies were established as independent, for-profit businesses detached from the primary care doctors who were ultimately responsible for patients' care. Signing orders once a month on long forms that conveyed little useful information about my patients never seemed like adequate care oversight on my part. Communicating well with a dozen nurses I did not know or see on a regular basis was a daunting if not impossible task.

IT TAKES TWO TO PASS THE BATON

If home health care got off on the wrong foot in the United States in the 1970s, what then is the right foot?

To me, the key is a tight linkage of home health care to hospitals, physician offices, and nursing homes. Most elderly and frail people do not live out their lives in one venue. They move from home to hospital to nursing home and back again, often several times during their lives. These care transitions are fraught with the dangers of medication errors and forgotten test results. Home health care agencies can become experts in managing these dangerous care transitions.

Home health nurses and physicians can be experts at passing the baton without dropping it. Parenthetically, all physicians must become experts at passing the baton. It takes two to pass the baton successfully, whether it is from hospitalist to primary care physician, from home care nurse to primary care physician, or from primary care physician to hospitalist.

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CHALLENGES: REIMBURSEMENT, COSTLY TECHNOLOGY, COMMUNICATION

What are the challenges Dr. Landers and his forward-thinking colleagues face in implementing modern medical care in the home?

Reimbursement is the obvious first issue. Current restrictions make it difficult to care for homebound and semi-homebound patients on more than an episodic basis. The proposed demonstration projects in home health must overcome this barrier.

Appropriate use of home health technology will be a second challenge, just as it is an opportunity. How much minute-by-minute information is really necessary for home monitoring? How expensive will the technology be? Will home health technology simply be another opportunity to make money, or will it really deliver economic value by preventing hospitalizations? Is fancy monitoring equipment more effective than low-tech daily phone calls and a scale in managing patients with congestive heart failure? How much monitoring and intervention is enough to achieve excellent outcomes? For congestive heart failure, there is good evidence from randomized clinical trials that telemonitoring reduces rates of all-cause mortality (relative risk 0.66, 95% confidence interval 0.54–0.81) and heart-failure-related hospitalizations (relative risk 0.79, 95% confidence interval 0.67–0.94).[3]

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On the cost side of the value equation, what is the right "dose" of home health care for a given patient? At what point on the cost-quality curve does cost outweigh value? Integrating home health care into accountable health care organizations may be the only way to maximize quality and efficiency.

Communication challenges will be the toughest. If home health care becomes a well-developed island of care, I suspect we will not be much better off than we are now. Key to improving quality and lowering cost is effective communication across the spectrum of care. Can teams of doctors and other health care professionals who each claim a different venue as their territory—home, hospital, office, nursing home—provide the coordinated, evidence-based, and personalized medical care to which Dr. Landers and his colleagues aspire? I believe it is possible, but the jury is still out.

A seamless, shared electronic medical record is essential for communication, but current platforms are not designed to integrate home care, hospital, and office records. Several innovative home care companies are attempting to do so, however. Recently, Cleveland Clinic made home visit notes from its home care arm available to other providers on its electronic medical record platform.

Locating visiting nurses and home care physicians in proximity to primary care physician offices would greatly improve the chances of good communication. In a randomized trial of outpatient care of frail elderly patients living at home, having nurse care coordinators located in primary care physician offices resulted in fewer hospitalizations and nursing home placements and greater patient, family, and physician satisfaction compared with traditional outpatient care.[4,5]

NO MORE 'BUSINESS AS USUAL'

In this time of economic uncertainty, at least one thing is certain: "business as usual" does not apply to US health care delivery. I am hopeful that innovative models of home care will find their proper niche as we seek to provide the right care for the right patient at the right time in the right venue and at the right price. ■

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