



Enhancing continuity of care and reducing unnecessary utilization in high-risk and homebound patients: the emerging role of the residentialist in the health care delivery system

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As much as 6% of the aging population is severely disabled. A significant portion of Medicare spending is attributable to this population, who frequently use acute services and are prone to acute hospitalizations, hospital readmissions, and futile care. For this high-risk, frail, elderly population, data suggest that many of these episodes of care are compounded by suboptimal postdischarge continuity, and by ongoing gaps in access and continuity. An old model of care is emerging as a reinvention of the traditional house call, using the services of clinicians providing care in the home. This paper discusses the evolution of this practice model into a set of competencies and skills defined as *residentialist care*. Residentialists offer significant potential to create a disruptive innovation in care delivery, close gaps in care, and improve efficiency and continuity of health care to the high-risk, homebound, frail elderly. © 2010 Published by Elsevier Inc.

The population of the United States is aging. Current health care costs are nearing 17% of the gross national product (GNP).¹ These costs are projected to increase significantly over the next decade. A significant component of overall health care costs is attributable to the Medicare population. Current Medicare enrollment is >44 million and is projected to increase to 55 million by 2016.^{1,2} Medicare spending alone accounts for 3.2% of the gross domestic product.^{1,2} According to a recent article in *The Los Angeles Times*, only 10% of the Medicare population—most of whom have multiple chronic conditions—account for two-thirds of Medicare spending.³ In addition, one quarter of Medicare spending, on average, occurs in the last year of life.⁴

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In addition, there is significant discontinuity of care within the Medicare population. Although high-profile debate continues about access to care for the uninsured, there is a “hidden underserved” population within our midst that suffers from a lack of primary access to clinicians. This population is both costly *and* well-insured. This hidden underserved population is the high-risk, homebound, frail, elderly patient. In addition to suffering from multiple, complex comorbidities, many frail elderly individuals have physical mobility issues that limit ambulatory access to physicians. In addition, many of those frail elderly have other functional compromises. According to testimony before the Joint Economic Committee, as many as 6% of older adults living in the community (2 million people) are severely disabled.⁵ These individuals report challenges with three or more activities of daily living (ADLs). This group of older adults is far from independent, and require increased caregiver services.⁵ Many have limitations in their

ability to perform self-care, and they lack control of bowel and bladder functions. Many have safety and/or nutritional issues. Others have difficulty with cognition that may affect compliance with daily medications. Many have psychosocial issues including isolation, depression, and financial issues, which hinder availability to caregiver resources.

Among this underserved population, physical frailty, combined with a lack of access to and continuity of care, leads to a progressive decline in health status, culminating in an acute clinical crisis. Once in crisis, 911 is called and the patient is transported to a local hospital's emergency department (ED). Per data cited in the Institute of Medicine (IOM) report *Retooling for an Aging America*, once treated in the ED, older adults are more likely to have an overnight hospital stay and are also more likely to have multiple overnight hospitalizations.^{6,7} As many as 27% of those admitted will be transferred to a skilled nursing facility (SNF).⁵

To further complicate matters, many patients and their families have a poor understanding of the natural history of disease, of likely prognosis, and of the pros and cons in options for aggressive vs. palliative care. Many patients have no concept of homeostasis or "balanced" health, whereby the body is able to achieve a sustainable health status through combined internal and interventional resources. Many do not understand that a gastric enteral nutrition tube (g-tube) is a method of administering nutrition without the valued component of oral gratification. They do not understand the pattern of downhill sequelae, when treatment of one problem leads to a daisy chain of new problems and homeostasis cannot be restored. Because of a lack of education and awareness, many patients and their families have unrealistic expectations about care options and continue to pursue a well-intentioned but ineffective course of aggressive, futile care.

Many of these patients move through a revolving door of acute care. They have multiple hospital admissions and re-admissions. One-fifth of patients hospitalized are rehospitalized within 30 days of discharge.⁸ The combination of these aforementioned factors results in an excessive rate of ED visits, primary hospitalizations, and rehospitalization within 30 days of discharge.⁸ Furthermore, close to 50% of patients readmitted to the hospital within 30 days of discharge have not had an interim visit with a physician.⁶ That rate, combined with the lack of postdischarge visits, would suggest that many of those readmissions are avoidable. In summary, reactive emergency interventions are often "too little too late," are often not cost-effective, and are of limited value in achieving sustainable improvements in health status.

Existing resources and persistent gaps in continuity

The hospitalist model is a medical care system that focuses on expertise and efficiency of care within a hospital setting.

This model has proven over time to be widely accepted for its value in maintaining focus of outpatient physicians on ambulatory medicine while sustaining efficiency of inpatient care and cost-effective use of hospital resources.⁹ However, efficiency of inpatient care creates pressure to expedite the course of care and to discharge patients whose health status remains quite fragile. This expedited course of care affects care transitions and postdischarge continuity.

When postdischarge continuity is compromised, the rate of hospital readmission remains excessive. The IOM cites Parry et al.: "Older adults are especially vulnerable as they transition between types of care. A lack of coordination among providers in different settings can lead to fragmentation of care, placing older adults at risk for absence or duplication of needed services, conflicting treatments and increased stress."⁹ Furthermore, in the IOM's *Crossing the Quality Chasm*, the authors conclude: "This type of fragmented care . . . (is) exemplifying the failure of the health care system to meet the standards of quality (most notably safety, efficiency, and patient-centeredness)."⁸

There are several correctable reasons for postdischarge gaps in care. One is an incomplete understanding on the part of inpatient and ED discharge planners about the potential gaps in care that occur with frail or cognitively impaired postdischarge patients. Discharge planners typically are charged with creating and delivering (in collaboration with the inpatient or ED physician) an appropriate, written, postdischarge plan of care. The objectives of this plan are multifold. First, the plan provides written documentation that a discharge plan was drawn up and given to the patient. Second, the plan should educate the patient and family about the discharge plan and enhance continuity. Third, the plan should help to identify and pre-empt potential gaps in continuity and compliance.

Discharge planning instruments and forms often consist of a preprinted instruction form, a list of medications to be taken postdischarge, and additional instructions that include recommendations for the patient to see an outpatient physician within a specified number of days after discharge. Often, there is no specific differentiation between "routine" discharge planning vs. special planning for the patient who is at high risk for re-admission (a HRRRA patient). Finally, there may be a limited understanding or use of evolving resources to improve postdischarge compliance and continuity.

One of those emerging resources is the growing cadre of home care clinicians (physicians and midlevel practitioners) who specialize in going to the patient rather than waiting for the patient to come to them. In fairness to both inpatient and ED discharge planners, there are real and implied barriers that potentially limit their ability to embrace and access this resource. Those barriers include managed care authorization protocols, hospital "privileging" questions concerning referrals to outpatient physicians who may not be on staff, and historical customs regarding continuity of care protocols between inpatient and outpatient services. In the latter case, there is an implied obligation to refer the patient back to the

“primary care physician,” even when that may not be the most appropriate or timely course of action to ensure post-discharge medical care continuity.

The patient (and family) is another potential barrier to effective discharge planning, compliance, and continuity. Poor postdischarge compliance on the part of the patient can occur on multiple levels, for a variety of reasons. One crucial area of compliance is a timely follow-up visit with an outpatient physician. For a HRRRA patient, the interval typically would be 2 to 7 days.

This follow-up visit may not occur for several reasons. One reason may be a lack of understanding on the part of the patient and/or family. Although the discharge planning documents may specify the need for a follow-up visit at a defined interval, it may not be a priority for the patient. For the elderly with remote family members and limited resources, lack of transportation may be a crucial issue. Delays may also occur because of a lack of available ambulatory physician appointments within the recommended time frame. Delays may be compounded by an incomplete understanding by the outpatient physician's office staff about the importance of recognizing and accommodating the HRRRA patient and ensuring that the appointment is made and kept.

Physical mobility and access issues may also limit the patients' ability to seek postdischarge care in an ambulatory setting. Despite clear (albeit sometimes naïve) instructions given during discharge planning, physical access to an outpatient physician's office may not be practical. This limitation should be clearly identified at the time of discharge, with an alternate plan put in place to ensure outpatient continuity.

Discharge prescriptions represent another area of potential discontinuity. There may be delays in timely filling of prescriptions. Also, patients may be confused and/or concerned about preadmission versus postdischarge medication regimens. Patients often are prone to go back on preadmission medications, even when the regimen clearly needs to be adjusted. For this reason, they may neither fill nor take new medications after discharge. If the patient is open to taking the new medications but has unanswered questions, the patient may be noncompliant. Although the home health nurse can be of assistance with mediating issues and concerns between the patient and the ambulatory physician, there is often little or no conversation between the home health nurse and the hospitalist who ordered the new medications. Furthermore, the home health nurse rarely has access to a discharge summary documenting findings and conditions at discharge, and rationalizing the plan of care and medication regimen that the patient was given.

Postdischarge discontinuity is further exacerbated by common delays in timely movement of appropriate clinical information as patients move between sites of care. Availability of key discharge information (history and physical, study results, consultations, and discharge summary) at a postdischarge visit has been reported to be as low as 12% to 34%.¹² Direct communication between hospital physicians

and primary care physicians is even lower, occurring only 3 to 17% of the time.¹²

One of the great opportunities emerging with electronic health records is the ability to expedite transfer of critical information. Information should be mobile between sites of care. Although all stakeholders would agree in principle with this axiom, movement of information between sites of care is typically slow or nonexistent. Outpatient primary care physicians infrequently get full or timely records on patients who have been to the ED. Pertinent inpatient records such as the history and physical examination, laboratory studies, and discharge summary may not be delivered to the outpatient primary care physician in a timely fashion. Because of HIPAA restrictions, records may not be sent to the postdischarge health care provider with the greatest “need to know.”

Finally, there is often a limited patient/family understanding of the natural history of disease. This lack of understanding may lead to unrealistic expectations. With the fast pace and course of hospital care, there may be little time to assemble the patient and key family members and discuss prognosis, treatment options, and the pros and cons of choosing an aggressive vs. palliative course of care.

After hospital discharge, patients and/or families may call the primary care physician with concerns and questions. If we are to believe the statistics, 50% of the time the physician has not seen the patient since discharge.⁸ Even more often, the ambulatory physician has no key discharge information. In addition, if the patient calls after working hours, the physician responding to the call may be a member of an extended “call panel” with no knowledge of the patient and limited or no access to the patient's record. In all of these circumstances, a defensive medicine posture is understandable. The safest course of action becomes referral back to the ED, where there is a high likelihood of readmission.

Discussion

Over the past 12 years, the hospitalist model of care has become common practice in most hospitals. What was once an innovative challenge to traditional models of care has now become a standard of care in the community. However, the time has come for next innovation in the care continuum. The hospitalists do their jobs well and need to focus on their core competency within the walls of the hospital. Discharge planners are dedicated individuals who work hard to follow traditional procedures and be sensitive to medical politics. However, it is clear that post-discharge care has significant gaps and could be improved. The essential—and now well-defined—role of the hospitalist in inpatient care suggests that parallel skills and practices are needed to effectively manage the postdischarge patient who is homebound and/or at high risk for readmission.

The Key Question: *How do we improve continuity and access among frail, homebound, and HRRRA patients; im-*

prove symptom management; improve compliance and quality of life; improve patient family expectations; decrease unnecessary morbidity; and reduce unnecessary use of limited health care resources?

The Answer: Effective integration of the home care clinician into the continuum of care. We propose a new nomenclature to describe this clinician. We propose that this clinician be referred to as a *residentialist*.

Evolution of the home care model: defining residentialist care

First, it is crucial to understand—and accept—that there are not three, but *four*, essential stops on the continuum of care: office, hospital, skilled nursing facility, and home. The *residentialist* is the home-based counterpart to the hospitalist. The *hospitalist* exercises special expertise within the walls of the hospital. The *residentialist* provides special competency within the walls of the patient's home. Although home health nursing is a crucial component of home-based care, the home health nurse is not—and was never meant to be—a surrogate for physician services in complex patients with multiple comorbidities and a high risk for readmission.

It helps to acknowledge that sometimes, something very old becomes something very new. The oldest form of medical care delivery is the house call. However, as health care has evolved to its current state, access to clinical care services has been fulfilled primarily in three sites of care: the office, the hospital, and the skilled nursing environment.

For historical perspective on this evolution, one must note that until the late 18th century, office practice did not exist. However, with increasing medical specialization, advancing diagnostic and treatment resources, defensive medicine, and methodologies of third-party reimbursement, the house call, once the outpatient care standard, drifted to near extinction by the late 1980s. House calls were viewed as a quaint curiosity by the medical community, and as a virtual nonoption by patients and families. In the late 1990s, owing to the dedicated efforts of a small, passionate group of physicians, Medicare began to recognize both the value and the unique work effort for care rendered in the home environment. In 1998, Medicare established a set of unique reimbursement codes for physician home care. Further evolution occurred in the new millennium with near-equivalent reimbursement of “domiciliary” codes for care rendered in an assisted living facility or licensed residential board and care home. As a result, a new generation of mission-driven house call physicians and midlevel practitioners has emerged in various urban and rural regions of the United States. Although the practice styles and models of care have varied widely, the target patient population (the homebound, frail elderly), as well as the widespread passion for home care practice, has been remarkably homogenous.

With regard to current care models in the home, the spectrum is wide, ranging from solo practitioners, to both

small and large groups, to academically-oriented, university-based programs. Some models have emphasized collaboration with clinicians and clinical service providers at other sites in the care continuum. However, despite the common transition of homebound patients back and forth to other sites of care, much of care in the home has remained fragmented. This built-in discontinuity has typically not been the preference of the home care clinicians, but rather has persisted because home care is a disruptive innovation.¹² In disruptive innovation theory, new innovations and changes typically come from the margins, and are often resisted by mainstream stakeholders who view change as threatening to the status quo.

Although most home care clinicians have been open to collaboration with other clinicians, the practice of home care medicine has remained, for the most part, a poorly understood and marginally accepted practice model. Office clinicians, hospitalists, skilled nursing clinicians, hospital discharge planners, and non-Medicare third-party payers have been slow to recognize—and value—effective continuity at all four stops on the continuum of care. For a multitude of reasons, they have not fully grasped that home care clinicians are a value-driven resource for the hands-on care of high-risk, homebound patients who cannot or will not access other sites of care after discharge from the hospital or skilled nursing facility. Although care issues among ambulatory patients have typically been addressed by a mandatory office visit, the needs of frail, high-risk, homebound patients ironically have been entrusted to home health nurses without the benefit of hands-on physician care. Too often, the outcome is a frantic transfer to the ED when the patient *has* declined to a crisis point. As previously referenced, this pattern has occurred repeatedly with multiple hospital readmissions and, often, futile care.

In fairness to other stakeholders, low use of home care clinicians rests more with ignorance of the availability and role of home care clinician resources rather than outright bias. “Out of sight, out of mind” might be a fitting description. The home-based clinician is often left out of the equation at the point of discharge planning from an inpatient environment. Both hospital physicians and discharge planners are not accustomed to the luxury of having new access and continuity options for the homebound patients and patients at high risk for readmission. Out of clinical habit, these individuals opt for what they do understand: home health nursing care plus hopes and expectations for a timely follow-up visit to an ambulatory care clinician. In fact, the latter option has proven to be problematic. As previously cited, 50% of patients had no evidence of a physician visit between the original admission and the subsequent hospital readmission. Other studies cited in the IOM report support the premise that discharge planning is often less than fully effective.^{8,10,12,14}

Both the problem and the opportunity are likely to be magnified. Under proposed health care legislation, the penalty to hospitals for patients readmitted within 30 days is likely to increase substantially. Despite aggressive dis-

charges of inpatients to limit length of stay and maximize performance under Diagnosis Related Groups, information transfer is typically slow or absent during the crucial post-discharge period, and outpatient follow-up visits often do not occur. Although the problems with care transitions are not limited to home care clinicians, the poor outpatient follow-up among HRRRA patients may be partially resolved with effective, timely visits by a home care physician.

The key objective of home-based clinician care should be to maximize the effectiveness of care in the high-risk, homebound, frail, elderly patient. The time has come to define an effective, consistent, and relatively predictable model of home care. This model emphasizes the core competency of the home care clinician and defines the role played by the home care clinician at the fourth stop on the continuum of care. It must be well-understood, highly valued, and extensively used in the care management of the target population. Like the hospitalist model, the residentialist model must be positioned as well-entrenched in the care continuum. It must be truly continuous, readily available, and effective in providing preemptive, compassionate care that improves both outcomes and quality of life for the target population at all sites of care. In short, care must be available not only at the traditional three sites of care (hospital, SNF, office), it must be available, and fully used in the home environment.

In an effective diffusion pattern, the residentialist model will morph from disruptive innovation to mainstream. According to theories of diffusion¹¹ and disruptive innovation,¹³ a new model of care must be understood and embraced by mainstream stakeholders. Innovators must be displaced by early adopters and finally be embraced by early and then late majorities. The hospitalist model represents an important precedent for this template of diffusion. In 1996, the term *hospitalist* was a remote concept. In a landmark 1996 article in the *New England Journal of Medicine*, Robert Wachter challenged traditional models of continuity and inpatient care.¹⁶ He coined the term *hospitalist* to describe a clinician who specialized in efficient and effective care of inpatients. He predicted that because of concerns of efficiency and value, the hospitalist model would evolve and achieve widespread adoption.

Despite much debate and discussion, the hospitalist model has evolved over the past 13 years into a relatively consistent and widely accepted model of clinical practice. What started as a disruptive innovation for inpatient care has become a mainstream practice model. A similar diffusion and acceptance must occur with the home care model. Although the mission-driven practices of home care clinicians are admirable, and in many ways highly effective, the practice of home care medicine, like that of the inpatient physician, begs for a clearly defined model of care that is relatively consistent and well-integrated into the continuum of care. We propose the *residentialist* moniker as representing a set of competencies and common practices that parallel the concept of the hospitalist and that promote door-

to-door excellence in the care of high-risk, homebound patients.

For effective diffusion into the care continuum, the residentialist must be widely recognized as a clinician who understands and addresses the whole patient, and who understands that psychosocial, cognitive, and compliance issues often overshadow medical treatment considerations. Besides demonstrating excellence in making diagnostic and treatment decisions, the residentialist clinician must be an effective leader of an interdisciplinary clinical team. The residentialist must also be an *aggregator* of resources who understands how to blend the appropriate mix of services and equipment that will optimize both clinical care and quality of life. In a case management approach to the care of the patient, the residentialist assembles and leads a "virtual" care team that may include:

- a blend of physicians, midlevel providers, and other specialty clinicians (podiatry, dentistry, clinical, geropsychiatric specialists);
- in-home diagnostic services (x-ray, phlebotomy, diagnostic ultrasound);
- clinical ancillary care support (home health, hospice, home infusion, durable medical equipment, pharmacy delivery, etc.); and
- additional services and resources that address nutritional, psychosocial, safety, and caregiving needs.

In some cases, the overlying financial and caregiving issues may involve referral to a personal care manager, a social worker, a reverse mortgage company, a residential placement service, or Adult Protective Services.

Given the persisting inefficiencies involving care transitions, the residentialist model must emphasize effective communication and collaboration with clinicians at other sites of care. As such, the model must use both currently available technologies (phone, fax, email) and other, evolving information-sharing methodologies that facilitate timely, *multi-directional* access to key clinical information (guest portals in Electronic Health Records; hospital record systems; patient-specific, encrypted access to specific patients by both families and other clinicians and care team personnel). Furthermore, considering the ongoing pressure for cost-effective use of limited resources, the residentialist must emphasize a "compassionate education" approach with patients and families that promotes appropriate care decisions, and that aligns preferences and expectations with prognosis. The residentialist assists the patient and their families in understanding the natural history of disease, aggressive vs. palliative care options, and the pros and cons of various treatments.

Finally, to become mainstream, the residentialist model must be well-understood, valued, and frequently used by other clinical stakeholders and payers.

We are in the midst of historic discussions to significantly reform the US health care system. The debate centers on how best to allocate limited resources to produce more widely accessible and cost-effective care. We do not yet

know the final outcome of this historic debate. One component of the proposed legislation addresses the issue of hospital readmissions, with enhanced penalties likely for patients readmitted within 30 days. Furthermore, previous reform discussions have largely avoided the issue of long-term care. However, current legislation, The Independence at Home Act, includes a provision to enhance long-term care in the home. This legislation encourages home care and rewards home care providers for cost-effective use of services, including reduced readmissions to hospitals.³

These discussions highlight both challenges and opportunities to improve use among the most costly Medicare population, and reduce costs at the most expensive site of care—the hospital. Clearly, a crucial player in this initiative is the clinician who provides care in the home.

The residentialist model of care

Residentialists are clinicians who are specialists in onsite care of the homebound, frail, elderly, and high-risk patient. Residentialists are comfortable with multiple complex comorbidities. These clinicians focus on the whole patient and understand that the psychosocial, nutritional, safety, and/or cognitive issues may have a greater impact on the patient's course of care than the dosage of medications for such underlying conditions as congestive heart failure or diabetes. Residentialists view themselves as advanced case managers who aggregate *resources* and oversee a comprehensive plan of care for the patient. Residentialists advocate for coordinated home care resources—clinical, nutritional, psychosocial, and environmental—to maximize quality of life and health status in the home environment. They are high-tech, high-touch clinicians who welcome the opportunity to have a compassionate, sensitive, but candid discussion with patients and families about the natural history of disease prognosis, alternative treatment options, and patient preferences for Advance Directives. Residentialists are accessible both in person and by phone to discuss new symptoms and recommendations. By nature, they are not oriented toward defensive medicine but are willing to carefully listen to a patient's symptoms and preferences before recommending ED transport and aggressive care.

Disruptive innovations will continue in health care. Residentialist care is a disruptive innovation and currently sits where the hospitalist model sat in 1996. Among the growing population of home care physicians in the United States, most are highly mission-driven and dedicated to care of the frail elderly and the hidden underserved. Although united by the common bonds of passion for this model of care, they are still in evolution as a defined and well-understood player in the health care continuum. A number of innovative programs have explored the potential of clinician and team-based care in the home, including the GRACE Program, the PACE program, the Virginia Commonwealth University Medical Center program in Richmond, VA,^{3,17,18} as well as

a number of innovative homebound programs in Southern California. All of these programs have delivered encouraging results and include home care clinicians practicing, in effect, what we describe as residentialist care. As the residentialist competency progresses to mainstream acceptance as the preferred resource for continuity and care in the home, other multisite collaborative care models will continue to evolve. The next frontier will be development of improved and standardized models of care that enhance seamless care transitions among hospitalists, residentialists, SNF clinicians, and ambulatory care clinicians.

Conclusions and recommendations

For high-risk, homebound, frail, elderly patients, we must ensure access and continuity at all four points on the continuum of care—ambulatory clinic, hospital, skilled nursing facility, home. We also must continue evolution of the residentialist model as a new, powerful care mechanism. This new and unique model of practice should include required training, expected skills, and a case management approach that defines clinical objectives of care, assessment and management methodologies, and standards of documentation, communication, and movement of information during care transitions. For optimal care of populations, the model should be consistent and should be available over a broad geographic service area.

We must continue to encourage the development and integration of collaborative models of care that span all sites on the continuum of care. Furthermore, we must improve awareness among all stakeholders—physicians, discharge planners, payers, patient, families—about evolving models of cost-effective care for homebound, frail elderly and HRRRA patients.

Discharge planning must also evolve. Discharge planning should be a collaborative, realistic, customized process, not merely a “one size fits all” set of proscribed procedures and standard forms. Although many discharge procedures and instruments are accreditation-driven, it is ironic that in a world focused on continuous process improvement, accreditation compliance may hinder an innovative evolution of customized discharge planning procedures. Those procedures should identify HRRRA patients and be tailored to reduce the risk of hospital readmissions. Discharge planners must understand that Home Health Nursing, Durable Medical Equipment, a medication list, and instructions to see the primary care physicians do not constitute a plan of care for homebound and HRRRA patients. In collaboration with inpatient physicians, they must identify patients at high risk for readmission; crystallize outpatient follow-up; aggregate necessary resources; and address issues of safety, nutrition, medication compliance, and psychosocial support. Where appropriate, they should work with families to ensure access to in-home care providers.

Discharge mandates should include confirmation of crucial conversations between inpatient and outpatient physi-

cians. Procedures should include confirmation that clinical inpatient documents have been transmitted and received by key stakeholders. When HRRAs patients are discharged, planners should be responsible to confirm that the follow-up appointment—with either ambulatory clinicians or residentialists—are made, confirmed, and fulfilled. If timely follow-up appears unlikely, alternate arrangements for continuity must be documented and confirmed. In this circumstance, the residentialist is an ideal resource.

As patients move between sites of care, all clinicians and support personnel must prioritize and facilitate timely, multidirectional transfer of critical health care information. At all points of care, clinicians must increase emphasis on patient and family education regarding the natural history of disease, loss of homeostasis, and futile care vs. palliative care options. As an outcome of that dialogue, we must encourage discussions about realistic expectations, patient preferences, and Advance Directives. As we continue evolution of models of management for the care of high-risk/homebound patients, we must encourage research and adoption of residentialist models of care in both community-based and university-based patient care programs.

Finally, key stakeholders, including government, private payers, and hospital systems, must align incentives and appropriately reward those who achieve improved outcomes in high-quality, cost-effective care.

The IOM report offers both hope and sobering warnings on the opportunities and challenges surrounding evolving models of care. As quoted: “Clearly the system of continuity and case management for the frail elderly needs to change. However, change is difficult and typically, slow.” According to Donald Berwick, as referenced in the IOM report *Crossing the Quality Chasm*: “Identifying successful models of care is just the first challenge in improving the delivery of services to older adults. Successful models need to be replicated and incorporated widely into practice in order to reach a large patient population . . .”¹⁵

We hope that this treatise will increase awareness of the emerging role of the residentialist in the American health care system. We also hope that it will spark both discussion and debate, as well as further innovation, adoption, and research as the model of care continues to evolve.

References

1. Institute of Medicine: Intermediate Projections for the Medicare Program 2007, 2016, and 2030. Federal HI, and SMI Trust Funds Board of Trustees, 2007. 2007 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds. Available at: <http://www.cms.hhs.gov/ReportsTrustFunds/downloads/tr2007.pdf>
2. Moon M, Storeygard M: *Solvency or Affordability? Ways to Measure Medicare's Financial Health*. Washington, DC: Henry J. Kaiser Family Foundation, 2002
3. Levy NN: Getting cheaper, better healthcare at home? Los Angeles Times, Tuesday August 25, 2009, p A10
4. Hogan C, Lunney J, Gabel J, Lynn J: Medicare beneficiaries' cost of care in the last year of life. *Health Aff* 20:188-195, 2001
5. Johnson RW: The burden of caring for frail parents. Paper presented at testimony before the Joint Economic Committee, Washington, DC, May 16, 2007
6. Merrill CT, Elixhauser A: *Hospitalization in the United States, 2002; HCUP Fact Book No. 6*. Rockville, MD: AHRQ, 2005
7. Institute of Medicine; Committee on the Future Healthcare Workforce for Older Americans: *Retooling for an Aging America: Building the Healthcare Workforce*. Washington, DC: The National Academies Press, 2008, p 24
8. Jencks SF, Williams MV, Coleman EA: Rehospitalizations among patients in the Medicare fee-for-service program. *N Engl J Med* 360: 1418-1428, 2009
9. Institute of Medicine: *Crossing the Quality Chasm: A New Health System for the Twenty-first Century*. Washington, DC: National Academy Press, 2001
10. Lindenauer, et al: Outcomes of care between hospitalists, general internists and family physicians. *N Engl J Med* 357:2586-2600, 2007
11. Rogers EM: *Diffusion of Innovations*, 5th ed. New York: Free Press, 2003
12. Kripalani S, LeFevre F, Phillips CO, Williams MV, Basaviah P, Baker DW: Deficits in communication and information transfer between hospital-based and primary care physicians implications for patient safety and continuity of care. *JAMA* 297:831-841, 2007
13. Christensen C: *The Innovator's Dilemma*, New York: HarperBusiness, 2000
14. Kripalani B, Jackson AT, Schniper JL, Collemen EA: Promoting effective transitions of care at hospital discharge: a review of key issues for hospitalists. *J Hosp Med* 2:314-323, 2007
15. Berwick DM: Disseminating innovations in healthcare. *JAMA* 289: 1969-1975, 2003
16. Wachter R: The emerging role of hospitalists in the American health-care system. *N Engl J Med* 335:514-517, 1996
17. Counsell SR, Callahan CM, Clark DO, Tu W, Buttar AB, Stump TE, et al: Geriatric care management for low-income seniors: a randomized controlled trial. *JAMA* 298:2623-2633, 2007
18. National PACE Association: What is PACE? 2007. Available at: <http://www.npaonline.org.website/article.asp?ID=12>. Accessed May 6, 2009