The Physician's Role in Patients' Nursing Home Care

"She's a Very Courageous and Lovely Woman. I Enjoy Caring for Her"

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More than 1.5 million adults live in US nursing homes, and approximately 30% of individuals in the United States will die with a nursing home as their last place of residence. Physicians play a pivotal role in the rehabilitation, complex medical care, and end-of-life care of this frail and vulnerable population. The reasons for admission are multifactorial and a comprehensive care plan based on the Minimum Data Set guides the multidisciplinary nursing home team in the care of the patient and provides assessments of the quality of care provided. Using the cases of 2 patients with different experiences, we describe the physician's role in planning for admission, participating as a team member in the ongoing assessment and care in the nursing home, and guiding care at the end of life. The increasing population of older adults has also promoted community-based and residential alternatives to traditional nursing homes. The future of long-term care will include additional challenges and rich innovations in services and options for older adults.

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TWO PATIENT STORIES

Mrs R and Her Physician

Mrs R is a 75-year-old woman with end-stage renal disease due to hypertension, requiring hemodialysis 3 times per week. As she became increasingly frail, her disabled son was no longer able to care for her in his home. After a brief episode in the hospital for pneumonia, she was sent to a Medicare-funded skilled nursing facility and subsequently admitted to a community nursing facility, where her stay has been funded by Medicaid. Mrs R and her physician, who also serves as medical director of the facility, met when she was admitted to the nursing home.

Mrs R's past medical history includes Parkinson disease, vascular dementia, recurrent aspiration pneumonia, severe peripheral vascular disease, chronic obstructive pulmonary disease, chronic atrial fibrillation, diabetes, depression, immobility with occasional falls, and a healed presacral pressure ulcer.

On physical examination, she appeared frail, did not report pain, and had normal vital signs. Findings included a scar over the presacral area (at the site of a prior pressure ulcer), an arteriovenous fistula in the left arm, decreased pulse rates throughout, and generalized muscle weakness. Mrs R required assistance with activities of daily living (ADLs), including minimal assistance with eating and maximal assistance with dressing, bathing, transferring, and toileting. She could not walk and required 1 to 2 individuals to help with transfers. She was dependent in the instrumental activities of daily living (IADLs) of preparing meals and managing finances, but she was able to use the telephone with assistance. Mrs R had limited social interactions in the nursing home. Her son visited rarely and was only remotely in-

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volved in her care. She had an advance directive calling for full aggressive measures if needed, including attempted cardiopulmonary resuscitation and transfer to an acute care hospital. Mrs R's physician considers her a long-stay patient at this nursing home; she has neither the financial nor social support to live in the community.

Mr M and His Physician

Mr M is an 88-year-old service-connected World War II veteran with Parkinson disease, hypertension, congestive heart failure, chronic obstructive pulmonary disease, gastroesophageal reflux, and macular degeneration, who lived at home with his wife. After talking with Mrs M, a Veterans Health Administration (VHA) social worker enrolled him in home-based primary care and an intermittent inpatient respite program to help his wife care for him at home. His previous physician saw him every 3 months for the last 5 years. After the patient was hospitalized twice for myocardial infarction, his wife could no longer care for him at home and Mr M was admitted to the VHA Community Living Center (CLC), which provides a range of skilled nursing, rehabilitative, and custodial services. Upon admission, a new physician assumed responsibility for his care.

On physical examination, he had normal vital signs and was legally blind due to macular degeneration. He required maximal assistance in the ADLs of transferring and bathing, moderate assistance with toileting and dressing, minimal assistance with eating, was continent of bowel and bladder, and used an electric wheelchair for mobility. Regarding IADLs, he needed help with managing finances, managed his own medications, and used the telephone with visual aids.

Mr M spends his days reading the newspaper, writing, watching television, and monitoring the stock market. He sings in a chorus, listens to the radio, enjoys animal therapy visits, and navigates the nursing home in his electric wheelchair. His wife remains very involved, taking him out daily for coffee. He and his wife attend the CLC holiday parties. Last year, Mr M wrote a play that was performed at the CLC.

PERSPECTIVES

Mrs R: *Doctor, I want to go home. What is the reason that you are keeping me here?*

Mrs R's Physician: *There are so many factors that go into where the patient is placed: what [her] wishes are, the payer source, how much family involvement there is, how motivated the patient is to . . . care for herself.*

Mr M: *I'm fortunate because she [my wife] comes to visit almost every day. Most people don't have anybody . . . all the nurses know her. She's found a new life here too so she's integrated with the whole thing.*

Mr M's Physician: *The decision . . . was made in the framework that we were approaching a stage of his care [in which] the focus of his care would move to symptoms and quality of life.*

The nursing home is an important health care system and the last home for many of our patients. We discuss factors contributing to nursing home admission, how physicians can help aging patients plan for the transition from home, how care is delivered in the nursing home, the role of the attending physician, the importance of end-of-life care, and innovative alternatives to traditional nursing home care.

Methods

Two medical librarians conducted systematic searches on concepts surrounding the transition to and care of elderly patients residing in nursing homes or other types of long-term care facilities. The searches covered September 2010 through March 2011 with topic-specific updates through July 2011 and were run in MEDLINE, CINAHL, AgeLine, PsycINFO, Cochrane Database of Systematic Reviews, ACP Journal Club, Database of Abstracts of Review of Effects, Cochrane Central Register of Controlled Trials, Health Technology Assessment, NHS Economic Evaluation Database, and National Guideline Clearinghouse. Additional searches were done manually and via the Internet to identify relevant content and Web sites. Cited reference searches were conducted in Scopus, Web of Science, and OVID MEDLINE. Retrieval was limited to English language, "all aged (65 and over)" or geriatric terms, and US studies. Complete details regarding the search strategy are available in the eAppendix (available at http://www.jama.com).

Epidemiology and Risk Factors for Nursing Home Admission

Mr M's Physician: *You almost uniformly see stress in family members before nursing home placement.*

Mrs R's Physician: *. . . it was clear that she was not going to go home because there was no one to care for her.*

The nursing home is the last site of care for many disabled adults, yet it may be invisible to many who live in the community as well as to office- and hospital-based health care professionals. Mrs R and Mr M join more than 3.2 million individuals who spend some time in a nursing home each year in the United States. Fifty percent of current nursing home residents have 4 or more impairments in ADLs, an increase from 35% in 1999.[1] Nursing home residents are one of the most vulnerable populations and an opportunity for physicians to meet their professional mission. Almost all nursing home residents are disabled and seriously ill, many are cognitively impaired and socially isolated, and have difficulty finding a personal physician who will care for them over time through the course of their illness. Approximately half are like Mr M and Mrs R in that they are permanent nursing home residents and will never return to their home in the community. This population, as reflected by these 2 cases, is the focus of this article.

There is a significant body of evidence identifying the risk factors that predict nursing home admission. Since 1990, 1 meta-analysis of 77 studies and 3 systematic

reviews of 125 studies have evaluated the evidence.[2-5] Although measures of effect have differed, age, ADL or IADL limitations, cognitive impairment, Alzheimer disease or dementia diagnosis, a prior stay in a nursing home, low income, white race, and living alone are consistently strong predictors of nursing home admission. Additional factors found in some of these reviews also include female sex, low education status, hypertension, incontinence, living situation, depression, prior hospital stays, and caregiver stress (eTable 1).

Factors that have been associated with delay in nursing home admission in some studies include comprehensive geriatric assessment, home visits to identify modifiable risk factors, a process for risk factor modification, and remaining vigilant for new threats to independence.[6] State investments in home and community-based services (HCBS) such as personal care, nursing care, and assistance with meal preparation were found to reduce the risk of nursing home admission in older adults without children.[7] While living in the community, Mrs R was not using home-based services, instead relying solely on her disabled son to provide care. In contrast, Mr M received comprehensive community-based care from the VHA system and had a willing and able caregiver.

Despite different paths to nursing home residence, Mrs R and Mr M shared several risk factors for admission: advanced age, multiple chronic diseases, ADL and IADL impairments, and caregivers who were no longer able to manage their needs at home. Often a combination of factors leads to permanent admission to the nursing home including the family's or health care clinicians' concerns for safety,[8] increasing care needs, personal neglect by the elderly individual,[9] or loss of a caregiver, especially a wife.[10] Nursing home admission may be precipitated when the older adult's system of social support is overwhelmed by behaviors associated with cognitive impairment (eg, wandering, striking out, agitation, and disordered sleep) or by physical disabilities requiring a high level of functional capacity of the caregiver (eg, help to toilet, pick-up from falls, or even feeding).[11]

Planning Before Nursing Home Placement

Mr M's Physician: *Over time, I had talked to Mr M about what's offered in long-term care . . . and I talked to him about our CLC and [told him] that a lot of people have very good quality of life in nursing homes. . . . With the daughter, it was more of a conversation about how we were really trying to balance what her father wanted and what was also realistic for her mother. Also, we were sensitive to what his quality of life was becoming at home, which everyone recognized was really not very good anymore.*

Recognizing risk factors for nursing home admission enables older adults and their physicians to better plan for future care needs. In the case of Mrs R, her functional disabilities and paucity of family and community resources made moving to the nursing home inevitable. The move to the nursing home came unplanned after an acute hospitalization, which is often the event that precipitates a nursing home admission. She also expressed a desire for aggressive disease-oriented treatment, including hemodialysis and CPR, if needed. It is not clear if her new nursing home revisited her goals of care regularly. In direct contrast with Mrs R, Mr M benefited from the early care planning and the support of his VHA team. Prior to his move to long-term care, Mr M had discussions with his family and physician to prepare him for the possibility of having to move to the CLC. After moving to the CLC, ongoing discussions occurred about his goals of care and a treatment plan was developed with his new nursing home team.

Traditional advance-care plans may be narrow in scope, focusing on naming proxy decision makers and listing wishes about medical care, including resuscitation. A study by Black[12] advocates the use of expanded life planning, which promotes ongoing discussions over a simple document-based approach.[13,14] Rather than a legal activity, expanded life planning is a covenant between family members[15,16] and an opportunity to clarify values and identify principles that may guide future decisions. This expanded definition focuses on more than medical issues.[17,18] A 3-step process to assist physicians in discussing these challenging subjects is outlined in TABLE 1. This process includes introducing issues before there is a crisis, engaging in discussions about goals of care over time while documenting preferences, and implementing these preferences in practice if required. Although one might think that this process is only the responsibility of the primary care physician, often cardiologists, pulmonologists, oncologists, neurologists, or other physicians caring for patients with advanced life-limiting diseases have the opportunity and responsibility to discuss life planning with their patients.

Admission, Assessment, and Care Planning in the Nursing Home

Mr M's Physician: *In some ways, the most important part about assuring a smooth transition was making sure nursing home personnel really understood Mr M's goals of care and what the key issues are. Also, [physicians] can translate for the family, because they are often not clear on what's going on or why things are being done . . . being there to be a source of communication and a source of transition is helpful.*

Mrs R's Physician: *I absolutely need, as the long-term care physician, to know the patients' code status . . . I want to know their comorbidities . . . I want to know their active medical problems, their medications. I really, really want to know what were the spiritual and ethical issues surrounding advance directives. Were they discussed?*

Although Kane[22] described acute transfers from the hospital to nursing home in this series, we focus here on planned admissions from home to nursing home for long-term care. Choices may be limited by proximity (fewer options in rural communities) or finances (residents with cash or long-

term care insurance may have more options than Medicaid recipients). Since 2002, the Medicare Nursing Home Compare Web site has enabled comparisons of nursing homes using a 5-star system that includes ratings for inspections, staffing, and quality indicators such as rates of pressure ulcers, weight loss, falls, infections, and restraint use (eBox 1).[23] Although a facility might refuse admission of high-risk elders to inflate their quality score, there is a growing body of evidence demonstrating that publicly reported quality information motivates nursing homes to improve quality of care.[24,25]

Physicians should advise prospective residents, family members, or both to visit nursing homes and speak to staff and residents, ideally more than once, and on different days of the week and times. Guidelines and checklists for onsite visits are available.[26,27] Families should expect a clean environment that is odor free. Residents should be neat, clean, and well groomed. Residents and staff should be communicating in an easy manner without conflict. One should expect a busy but not chaotic nursing home setting.[28] The patient's and family's choice for a nursing home may also be influenced by the patient's physician seeing residents at a specific facility. In all instances, physicians have a responsibility to assist patients and families in making the transition from home to nursing home as smooth as possible.

Table 1. Physician Steps for Life and Care Planning

Steps[a]	Domain of Care Physician-to-Patient Communication
Introduce the topic	Values
	"As my patients get older, I need to better understand their values and goals for health care should they get too sick to make decisions or choices on their own. Can we talk for a minute about what you consider important goals for me to know should you become critically ill?"
	Living will
	"Have you thought about the type of medical care you would like to have if you ever become too sick to speak for yourself?"[19]
	Health care proxy
	"If you were not able to speak for yourself, who would be best able to represent your views and values?"[19]
Engage in structured discussions about goals of care and future planning and document patient preferences[b]	Values and goals
	"Given the severity of your illness, what is most important for you to achieve? How do you think about balancing quality of life with length of life in terms of your treatment? What are your most important hopes? What are your biggest fears?"[19]
	Medical decisions
	"Imagine you were to have an accident or illness which caused you to be unable to communicate, like a coma, and we are unsure if you will regain consciousness, your family and I need to know how you would want us to care for you. Some people choose to withdraw treatment and let them die, others want us to do everything we can to maintain life, do you have any thoughts about how you would want us to proceed?"
	"What if at the time you also had a diagnosis of dementia or Alzheimer's and were in this situation?"
	Social support
	"Have you thought about who might be able to care for you should you become unable to care for yourself? For instance, if you were unable to do your own bathing, or become confined to bed, or are unable to cook for yourself, do you have someone who can care for you at home?"
	"Have you and your friends/family discussed where you might choose to live as you get older and less able to manage your activities such as bathing, preparing your meals, managing your money?"
	Financial
	"Is there someone among your family/friends who understands your financial situation, such as your insurance or ability to pay for extra help at home in case you are too ill or unable to understand these things?"
	Prioritizing goals
	"Can you help me understand what is most important to you now that you have a life limiting illness that you will not get better from? How would you rank the following in importance? Is it more important to you that we extend your life as long as possible, maintain your consciousness and physical function as long as we can, or keep you as comfortable as possible?"[20]
	"Thanks for helping me understand what matters to you. I would like to write these things down in your medical record and then review them with you in the future. In addition, it would be wise for you to document them formally in something called an advance directive. If you like, I can also refer you to someone who can assist you with that process."
Apply the directives or discussions to circumstances	Social support
	"When we talked several years ago you said that if the day came that I felt you were not safe in your own home you would be willing to make some changes, I think we need to discuss that now."
	Medical decisions
	"If you were to die suddenly, that is, you stopped breathing or your heart stopped, we could try to revive you by using cardiopulmonary resuscitation. Are you familiar with CPR? Have you given thought as to whether you would want it?"[21]
	"As you know, your mother has previously asked that you serve as her proxy if she could not make decisions for herself. I would just like you to know that in our discussions over the years, she was clear that she did not want extreme measures to prolong her life, rather she valued comfort above all else. Is this consistent with your understanding?"
	"Given the severity of your mother's illness, CPR would likely be ineffective. I would recommend that we choose to not attempt it, but that we continue all potentially effective treatments. What do you think?"[21]

[a] Data are adapted from Emanuel et al.[21]
[b] Indicated steps should take place over the next few visits, if possible.

Table 2. Minimum Data Set 3.0 Assessment

Area of Assessment	Instruments Used or Changes Made to MDS Element	Team Members Involved in Assessment and Care Plan Development	Additional Elements Assessed in Care Area Assessments
Psychological assessment			
Cognitive patterns	BIMS; MMSE[33]	Patient and family members; nurses (CNA, staff RN and LPN, and RN MDS coordinator); physician; social work designee; and pharmacist	Reversible causes of cognitive loss; neurological factors; change in new or worsening observable factors; mood and behavior; medical problems; medications; pain; functional status; and other changes (eg, use of restraints and sensory changes)
Delirium	CAM[34]	Patient and family members; CNA, staff RN and LPN, and RN MDS coordinator; physician; and pharmacist	Acute condition (vital signs, abnormal laboratory values, infection, dehydration, untreated or undertreated pain, function); diseases and conditions; medications; sleep disturbance, hypoactivity or hyperactivity; and psychosocial, physical, or environmental factors
Mood	Patient interview; PHQ-9 [35]	Patient and family members; CNA, staff RN and LPN, and RN MDS coordinator; physician; pharmacist; and social work designee	Psychosocial changes; clinical problems; medications; and abnormal laboratory values
Behavior	For psychosis: NPI[36] For disturbance: CMAI[37]	Patient and family members; CNA, staff RN and LPN, and RN MDS coordinator; physician; pharmacist; and social work designee	Seriousness and nature of behavioral symptoms; medications; diseases or conditions; factors that cause or exacerbate behavior; cognitive status problems; and other considerations (eg, ability to communicate discomfort, contribution of caregivers)
Social assessment			
Preferences for customary activity	Items established from the University of Minnesota's quality-of-life measure	Patient and family members; CNA and RN MDS coordinator; licensed social worker; activity director; and social work designee	Activity preferences prior to admission; current activity pursuits; health issues that may reduce ability to participate; environmental or staffing problems that limit participation; unique skills or knowledge; and nonhealth issues that limit participation (eg, behavior)
Physical assessment			
Functional status (ADLs)	ADL scale unchanged, added the "Rule of 3" (directs coding for ADL assistance)	Patient and family members; CNA, staff RN and LPN, and RN MDS coordinator; physician; physical therapist; occupational therapist; and pharmacist	Underlying problems that affect function; abnormal laboratory values; medications; limiting factors (eg, mental errors or facility conditions); and problems that functional limitations may cause
Balance	Identifies specific problems with gait and transitions	Patient and family members; staff RN, LPN, and RN MDS coordinator; physician; physical therapist; occupational therapist; and pharmacist	History of falling; physical performance limitations: balance, gait, strength, muscle endurance; medications; internal risk factors (eg, diagnoses, function, pain, infection; abnormal laboratory values); and environmental factors
Skin/pressure ulcers	PUSH tool description of deepest anatomical stage; measurement and reverse staging requirement removed[38,39]	Patient and family members; staff RN, LPN, and RN MDS coordinator; physician; and pharmacist	Existing pressure ulcers (size, location, healing); extrinsic risk factors (eg, pressure, shear, maceration); intrinsic risk factors (eg, mobility, nutrition, incontinence); medications; diagnoses; and treatments that cause complications (eg, radiation therapy)
Continence	Indwelling catheters and ostomies are no longer coded as continent	Patient and family members; staff RN, LPN, and RN MDS coordinator; physician; and pharmacist	Modifiable factors; type of incontinence (eg, stress, urge, mixed); abnormal laboratory tests; diseases and conditions medications; and use of indwelling catheter
Pain frequency	Patient interview includes the presence, frequency, effect on functioning and intensity[40]	Patient and family members; staff RN, LPN, and RN MDS coordinator; physician; pharmacist; physical therapist; and occupational therapist	Diseases or diagnoses that may cause pain; characteristics of the pain; frequency and intensity of the pain; nonverbal indicators of pain; pain effect on function; associated signs and symptoms (eg, agitation, withdrawal, delirium); and other considerations (eg, positioning, contractures, immobility)
Pain	Checklist of nonverbal pain indicators[41]	Patient and family members; staff RN, LPN, and RN MDS coordinator; physician; pharmacist; physical therapist; and occupational therapist	Diseases or diagnoses that may cause pain; characteristics of the pain; frequency and intensity of the pain; nonverbal indicators of pain; pain effect on function; associated signs and symptoms (eg, agitation, withdrawal, delirium); and other considerations (eg, positioning, contractures, immobility)
Goals of care assessment			
Goals of care	Used to identify patient goals and improve communication with patients and families	Patient and family members; CNA, staff RN, LPN, and RN MDS coordinator; physician; pharmacist; physical therapist; occupational therapist; and social work designee	All information obtained in the MDS 3.0 assessment and care area assessments are used to develop interdisciplinary resident-centered care plans
Talk with someone about return to the community	Used to identify those who want assistance to return home	Patient and family members; staff RN, LPN, and RN MDS coordinator; physician; and social work designee	Identify potential barriers to transition planning; consider factors (eg, cognitive and functional abilities); consider overall goals of care; initiate contact with state-designated local contact agency; communicate and collaborate with local contact agencies; and communicate concerns regarding the discharge from patient's community supports and physician to the local contact agency

Abbreviations: ADL, activities of daily living; BIMS, Brief Interview for Mental Status; CAM, Confusion Assessment Method; CMAI, Cohen Mansfield Agitation Inventory; CNA, certified nurse assistant; LPN, licensed practical nurse; MDS, Minimum Data Set; MMSE, modified Mini-Mental State Examination; NPI, Neuro-Psychiatriac Inventory; PHQ-9, Patient Health Questionnaire instrument; PUSH, Pressure Ulcer Scale for Healing; RN, registered nurse.
Information adapted from Saliba et al.[32]

Box 1. Responsibilities of the Attending Physician in the Nursing Home

Clinical

Approve each resident's admission to the facility and complete medical history and physical examination, including a list of medical diagnoses, cognitive and functional status, rehabilitation potential, and review of laboratory and diagnostic data

Provide admission orders until staff completes a comprehensive assessment and interdisciplinary plan of care

Supervise medical care of each nursing home resident including participating in assessment and care planning process, monitoring changes in medical status, and providing treatment

Ensure that the resident is afforded privacy and dignity, provide informed consent when appropriate, and preserve the right of the nursing home resident to select clinicians for medical and dental care

Discuss care planning with the nursing home resident or designee as appropriate

Attend to any emergency or significant change in the resident's clinical status

Obtain consultations when needed

Order laboratory and diagnostic tests when needed and act on results with documentation

Prescribe and monitor all medications and respond in writing to consultant pharmacist review

Provide orders for transfer and discharge

Administrative

Be familiar with federal and state regulations and facility policies

Serve on process improvement committees when asked by the medical director

Provide nursing home residents, caregivers, and facility staff contact information for calls regarding resident care and provide on-call and emergency coverage when unavailable

Physician visit intervals

- Admission visit: no later than 72 hours after admission (except when examination was performed and documented within previous 5 days of admission)
- Scheduled visit: at least once every 30 days for the first 90 days and at least once every 60 days thereafter (may delegate every other visit to supervised collaborating nurse practitioner or physician assistant)
- Interim visits: in the event of an emergency

Information was adapted from Dimant,[47] Unwin et al,[48] Centers for Medicare & Medicaid Services,[49] and Title 42 Requirements for Long-Term Care Facilities.[50]

Admission to a nursing facility requires orders much the same as those required for a hospital. If the patient's physician does not intend to be the attending physician of record in the nursing home, then he or she should ensure an effective hand-off to an accepting physician including the provision of medical records as well as descriptions of social history, functional status, key family members and friends, and goals of care. The knowledge that their physician will continue to be involved in the patient's care or that the patient's background and capacities will be communicated to the new care providers will provide supportive reassurance to the patient and family during this transition.

Both community-based and VHA facilities must complete a comprehensive assessment of potential residents upon admission and at least every 3 months thereafter using the Resident Assessment Instrument.[29-31] The complete instrument includes the Minimum Data Set (MDS), the Care Area Assessments that target areas for more in-depth resident assessment, and the resident care plan. The MDS is used for (1) assessing the resident's physical, psychological, and social well-being, while identifying resident strengths and needs, as well as goals of care; and (2) serving as the basis for Medicare payment to the facility for eligible residents (eg, postacute nursing home care after hospitalization).[29,32]

The MDS was recently revised (MDS 3.0) for clinical relevance and accuracy and now requires interviews of the nursing home resident.[32] A summary of the MDS showing the major elements of assessment, the instruments used, and the nursing home team members involved is shown in TABLE 2. Assessment data are used to identify potential problems, called care area triggers, which demand a more in-depth assessment of the clinical problem using the care area assessments. This method of identifying problems is analogous to the way a physician would perform a more focused physical examination once a particular problem is identified. Results are used by the interdisciplinary health care team, including the nursing home resident and family, to develop a comprehensive care plan.[29] Although physicians rarely complete any part of the MDS assessment, data from the patient's medical history, physical examinations, medical tests and procedures, and other health care data are used to complete the MDS and guide care area assessments. Physicians are also invited to participate in the required quarterly resident care plan meetings. In addition, MDS data are compiled to describe the population of residents in each facility, are transmitted to a shared national database, form the basis for publicly reported quality measures reported on the CMS Nursing Home Compare Web site,[25] and guide state survey teams in their periodic evaluation of nursing homes.[42] A partial care plan shows how these tools are applied to help guide care for Mrs R and Mr M (eTable 3).

Box 2. Physician's Checklist for Periodic Nursing Home Visits

Obtain interval history from the nursing home resident, staff, and family members and perform relevant physical examination (pay particular attention to functional status, cognitive and behavioral disorders, nutrition and weight loss, pressure ulcers, incontinence, gait disorders and falls, sensory loss, pain, and other symptom management)

Review resident's total program of care including medications and treatments

Review all laboratory and diagnostic tests, consultations, and evaluations by other members of the interdisciplinary team since the last visit (eg, physical, occupational, and speech therapy)

Sign verbal orders and document interval communications into summary progress note

Review medications to determine efficacy, potential adverse effects, and continued need

Consider changes in patient status, prognosis, preferences, and goals of care

Review patient status with family members as appropriate

Update medical plan of care (including changes in medications or diet, nursing interventions, assessments by other disciplines, laboratory studies, discharge planning, and redirecting management plan consistent with patient's goals of care (eg, do not attempt resuscitation, do not hospitalize except as needed for comfort, initiate hospice consultation)

Prepare, date, and sign all orders and physician notes with each order having an explanation in the medical record

Information was adapted from Dimant[51] and Ouslander et al.[52]

The Nursing Home Physician's Role

Mrs R's Physician: *I am mandated to see her monthly; that's what Medicare will pay for in a stable patient. I can see her more often if she has a "significant change in condition." When I visit, I interview her, examine her, and make sure to check the medication administration records . . . I also check with the interdisciplinary team and review their notes. . . . I review OT/PT [occupational therapy/physical therapy], look at the nurses' progress notes or speak to the nurses. . . . She's a very courageous and lovely woman. I enjoy caring for her.*

Mr M's Physician: *What's unique about the CLC is that it is in the same system of care. I know all of the care providers and I know the social work staff and the nursing staff. Also, there's an electronic medical record . . .*

The Omnibus Reconciliation Act of 1987(OBRA 87)[31] called for a more significant role for attending physicians in the nursing home. It contained new federal rules for nursing home care, largely in response to an Institute of Medicine Report,[43] which detailed grave concerns about nursing home care quality. As a result of OBRA 87, the nursing home medical director partners with attending physicians, the nursing home administrator, and director of nursing to implement policies and procedures for ensuring resident safety and improving care quality.[44-46]

Most nursing home residents are cared for by family physicians, general internists, and geriatricians who work part-time in the nursing home. Similar to other settings of care, the attending physician in the nursing home has both direct patient care and administrative responsibilities (BOX 1). Although visits may occur routinely every 1 to 2 months, comprehensive care of frail elderly patients requires effective communication and team function among members of the nursing home staff. The attending physician can demonstrate the qualities of a good team member by including staff members or soliciting their input when rounding in the nursing home, responding to phone calls or faxed communications in a timely fashion, and ensuring that a physician is available and informed when needed. Consultant pharmacists are required and can help nursing home physicians manage medications and prevent adverse drug events or interactions. Unfortunately, outside the VHA, there is rarely a comprehensive shared medical record between physicians, hospitals, and nursing homes. BOX 2 details a recommended physician checklist to be addressed at the periodic nursing home visit.

Physicians are rarely present in the nursing facility when residents become acutely ill. Although it is beyond the scope of this article to address the diagnosis and treatment of the full range of problems that can befall a nursing home resident, BOX 3 outlines a general approach to the acutely ill resident. Attending physicians or on-call colleagues often depend on the assessment skills of nursing home staff and the availability of laboratory and imaging studies. Usually basic diagnostic blood tests, pulse oximetry, and mobile radiographs can be obtained within the same or next day. However, outside of Medicare-funded posthospital acute units, parenteral intravenous fluids and antibiotics are rarely administered in community nursing homes.[54,55] Furthermore, facilities may lack sufficient staff to provide the additional care required for acutely ill residents. In deciding where to care for the acutely ill resident, the clinician must consider which treatments are consistent with the goals of care for the patient and where those treatments can be accomplished.

Hospitalization may not always benefit frail older adults who risk developing complications of delirium, falls, and deconditioning. For example, treatment of lower respiratory tract infections in nursing home residents has been the acute condition most studied. The evidence shows that in the absence of impending respiratory failure, hypotension, hypothermia, or renal failure, there is little evidence that hospitalization improves outcomes.[56,57] If the nursing home resident is sent to the emergency department or hospital, then the facility must provide the necessary clinical infor-

mation to the next set of clinicians who will be caring for the patient.[58,59]

Collaborative practice with nurse practitioners helps reduce barriers to caring for nursing home residents.[60-62] Among health maintenance organization (HMO) or Medicare Plus Choice programs, nurse practitioners and physicians' assistants working in collaboration with attending physicians can reduce emergency department visits and hospitalizations, but the number of physician visits are not decreased.[63,64] Among the benefits that these models offer are expert nursing approach to care, increased opportunities for patient-oriented communication between staff and family members, formal and informal training of nursing facility staff, and the opportunity to substitute for the physician on a scheduled or acute care visit.

Mrs R's physician: *I . . . enjoy nursing home medicine. I think it is challenging. The patients are almost always grateful and they understand that if they are long-term patients, this is going to be their home for the rest of their lives. They're happy to see a physician who cares about them. It is rewarding . . .*

Nursing home care can be a very satisfying part of physician practice. Those who do it enjoy the relationships they develop with patients, family members, and members of the nursing home staff. They gain satisfaction in their roles and the intellectual challenges of rehabilitative care, dealing with multiple advanced illnesses, and palliative care.[65,66] The American Medical Directors Association (AMDA), with more than 5300 physician members nationally, has worked to provide physician training and certification for medical directors and has developed comprehensive multidisciplinary clinical pathways for improving care in the nursing home.[67] Forty-two percent of medical directors in a recent survey were AMDA-certified medical directors.[68] AMDA is also a valuable resource for physicians who may not wish to be medical directors but who seek competence in providing nursing home care. This resource is important as a survey by Blumenthal et al[69] found that only 27% of graduating family medicine and 13% of internal medicine residents felt very prepared to care for nursing home residents.

Care Planning at the End of Life

Reuben[70] presented a framework to help clinicians use prognosis to individualize their care of older adult patients. Prognosis in nursing home residents is mostly determined by medical condition and functional status. For example, in nursing home residents receiving dialysis, like Mrs R, a recent study showed 58% of residents die within 12 months after the initiation of dialysis and functional status is maintained in only 13% of residents.[71] The majority (65%) of nursing home residents have some form of advance directive[72] and 56% have "do not resuscitate" (DNR) orders. Although family members are commonly involved in such decisions about treatment and resuscitation, particularly in residents with cognitive impairment, consistent communication with family members can be difficult, particularly during important transitions or near the end of their loved one's life.[73]

Advanced care planning is a continuous process in the care of the nursing home resident. Because both prognosis and patient preferences change, goals of care and management plans may change over time. Nursing home staff, physicians, patients, and family members (particularly for patients lacking decisional capacity) should contribute to this process. Gillick et al[20] have developed a strategy for using prioritized goals around length of life, physical and cognitive function, and comfort to develop a comprehensive care plan. Organized approaches to defining desired interventions such as intensive care, hospitalization, antibiotic use, and artificially administered nutrition can result in clearly communicated treatment preferences that can travel with the nursing home resident, if necessary, across settings of care.[74]

Given the stark reality that 30% of Americans will die in nursing homes and that more than half of nursing home residents will die within 6 months of admission,[75-77] provid-

Box 3. Physician's Checklist for Management of the Acutely Ill Nursing Home Resident

- Obtain staff assessment of resident including changes in behavior, function (including mobility and continence), eating and drinking, symptoms (including any recent falls), and vital signs
  - Review existing medications, particularly recent medication changes, and be aware of drugs with potential for important interactions with any new medication, such as anticoagulants and serotonin agonists[53]
  - Determine need for additional assessment (eg, in-person evaluation, laboratory and imaging studies)
  - Make disposition for the acutely ill nursing home resident
    - Determine whether diagnostic evaluations and treatments are feasible and safe within the facility
      - If so, provide orders and follow-up plan
      - If not, determine if transfer to an acute care facility would be consistent with goals of care for this nursing home resident
- If nursing home resident is sent to acute care facility, include
  - Physician/nurse evaluation (including recent clinician examinations)
  - Family member and other contacts
  - Medication, allergies, and problem list
  - Recent diagnostic study results
  - Advance care directives and goals of care

ing hospice or palliative care is essential. Although few patients in the nursing home are receiving hospice services at any point in time,[78] the proportion ultimately receiving hospice services prior to death is more than 30%.[79] Hospice services increase attention to pain management, improve communication with family members, and decrease hospitalization at the end of life.[80-83] On average, long-stay residents die within 5 months of initiating hospice or palliative care services.[78] Targeted interventions can increase the use of hospice services in nursing homes.[83]

Alternatives to Nursing Home Care

What are the alternatives for individuals like Mrs R who do not wish to live the rest of their lives in the nursing home? The Program of All Inclusive Care for Elderly (PACE), funded through a capitated payment from Medicare and Medicaid (or a private source), provides and coordinates all primary, acute, and long-term services to enable older adults to live in the community as long as possible.[84] Typically, a PACE site revolves around an adult day health center with a day room and congregate meal space, as well as space for primary care and rehabilitative services. Unfortunately, availability of this model of care is limited due to its up-front costs and organizational complexity; yet, PACE recipients have good long-term outcomes compared with nursing home residents[85] and are twice as likely to be able to reside at home until death, consistent with most individuals' preferences in the United States.[86]

There have been multiple attempts to create smaller and more home-like environments for older adults requiring long-term care. The Eden Alternative is a program designed to reduce loneliness, boredom, and helplessness in the nursing home through the introduction of animals, plants, and children; a more personalized approach to care; and a more level organizational structure for staff.[87] This evolved into the Green House concept which includes small community homes for 7 to 10 residents, a staffing model for professional and certified nurse assistants, and a personalized philosophy of care. One evaluation demonstrated increased family satisfaction and for the care recipients, higher quality of life, increased satisfaction, better emotional well-being, and a lower incidence of late-loss ADL functioning compared with a comparison group of traditional nursing home residents.[88,89]

Many individuals mistakenly believe that assisted living facilities will fully address housing and services for older adults. Although these facilities take on a variety of forms, they generally care for a population that is less disabled than most nursing home residents, they are private pay, and usually quite expensive.[22] Assisted living may include independent senior housing with services or continuing care retirement communities, or may even be a component of integrated health systems.[90] Despite the available choices, residents and family members commonly feel dissatisfied with the search and selection processes and the sources of information available to them.[91] As for the physician's role, the relationship of physicians to residents of assisted living facilities more often resembles that of physicians and patients living in the community, but physicians should help patients and family members understand the limits of the care assisted living facilities provide.[92]

Mr M was fortunate to be a military veteran with a dedicated caregiver in the community and to have the cognitive and social function to be a meaningful contributor to determining his long-term care environment. There are more than 800 000 patients 85 years and older in the VHA system[93] and since 2008, there have been reports of VHA-monitored trials of veterans enrolled in PACE[94] and residing in assisted living settings.[95]

CONCLUSIONS

Physicians play a vital role in the rehabilitation, complex medical care, and end-of-life care of patients in the late stages of life. Since most physicians will care for elderly patients, they have a role in helping patients plan for the future. Furthermore, since a stay in the nursing home is a common experience for older adults and nursing home residents frequently are hospitalized, all physicians should understand the complex care model that has evolved to provide care in the nursing home. Those physicians who choose to practice in the nursing home play important patient care and administrative roles and value the comprehensive team approach to care of nursing home residents. For those physicians who wish to learn more, the AMDA has been a useful resource for continuing education in nursing home care and medical direction. It is important that residency training, particularly in family medicine and internal medicine, continue to include experiences in nursing homes and other settings of long-term care. There are legitimate concerns that with the decline in student interest in primary care and geriatric medicine, there may be insufficient numbers of physicians available to care for this vulnerable population of frail elders.[96,97]

What will the future hold for the large numbers of baby boomers who will likely develop disabilities before death, requiring them to seek substantial assistance from others? Will the nursing home be "re-imagined" by disentangling the older adult's needs for personal care and housing from chronic disease management?[98] Can the goals of older patients, clinicians, and payers be aligned, while creating settings of care that fit the needs of the older individual and society? The future of long-term care must include physician participation to address both these challenges and the rich innovations in expected services and housing options for older adults.

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Online-Only Resources

NURSING HOME COMPARE

Provides detailed information about the past performance of every Medicare and Medicaid certified nursing home in the United States

http://www.medicare.gov/NHCompare/home.asp

ELDERCARE LOCATOR

Provided by the US Administration on Aging to connect individuals with services for older adults and their families

http://www.eldercare.gov/ELDERCARE.NET/Public/Index.aspx

NATIONAL CLEARINGHOUSE FOR LONG-TERM CARE INFORMATION

Supported by the US Department of Health and Human Services, this Web site describes long-term care services, costs, and planning resources

http://www.longtermcare.gov/LTC/Main_Site/index.aspx

CHOOSING A NURSING HOME

Centers for Medicaid and Medicare Guide to Choosing a Nursing Home

http://www.feddesk.com/freehandbooks/1216-4.pdf

A checklist for patients and family members for evaluating nursing homes

http://www.medicare.gov/nursing/checklist.asp

CERTIFICATION AND COMPLIANCE: NURSING HOMES

Information on the nursing home survey process, the Minimum Data Set, and other regulations regarding nursing homes

https://www.cms.gov/CertificationandComplianc/12_NHs.asp