

OBJECTIVES

Upon completion of this chapter, the reader will be able to:

- Describe the physical office characteristics that address the special needs of older patients.
- Understand how to assess a new complex older patient in the office
- Understand the importance of overall function, including activities of daily living (ADLs) and instrumental activities of daily living (IADLs).
- Outline the review of systems as it pertains to older patients, with attention to geriatric syndromes.
- Describe the characteristics of an initial office-based physical examination of the older patient, including attention to specific key physical examination findings and observations.
- Understand the principles of the comprehensive problem list and its use in office-based care.
- Describe the concept of transitional care and the concerns associated with these types of transfers.

PRETEST

1. Which one of the following is an instrumental activity of daily living rather than an activity of daily living?
 - a. Bathing
 - b. Dressing
 - c. Toileting
 - d. Shopping
 - e. Ambulation
2. When seeing older patients, concerns about which one kind of symptoms should trigger mental status testing?
 - a. Behavioral changes
 - b. Apathy
 - c. Memory difficulties
 - d. Concerns about judgment
 - e. All of the above
3. You are examining a new patient, an older male, in your office. Which of following physical examination findings are you not expecting to find and will trigger further investigations in this patient?
 - a. Presbycusis
 - b. Cataracts
 - c. S₄ on cardiac examination
 - d. Small testes
 - e. Enlarged smooth prostate

Performing an evaluation of an older patient can be a daunting but satisfying experience. These patients come with extensive life histories, prior relationships, values established in a different generation than those caring for them, and unique family situations. They often have multiple comorbidities, complex medication regimens, and a different spectrum of symptoms and medical conditions than younger patients. In addition, they require attention to specific issues, such as function and cognition, which require special assessment tools. All these issues require an integrated and logical process that results in a unique synthesis and priority setting for each patient. Not all older patients are medically complex, but many will be. Above all, adequate evaluation requires patience and an organized approach.

Millie Lipton, Part 1

Your new patient is Millie Lipton, a 79-year-old woman who will be coming to your office to establish

care. Her daughter, Michele, has scheduled the appointment and will accompany her. Mrs. Lipton has moved to your area 2 weeks ago from another state to be close to her daughter following the death of her husband a year ago. She lives in an independent apartment only blocks away from her daughter, who is an English professor at a local university.

STUDY QUESTIONS

1. How should a primary care office be organized so as to best address the needs of elderly patients such as Mrs. Lipton?
2. How should the routine history and physical examination of an elderly patient such as Mrs. Lipton differ from that of a younger adult?
3. What should be done beforehand to ensure that the initial visit goes well?

PREVISIT PREPARATION

A successful office assessment is a significant challenge and requires previsit preparation, a proper office focus, excellent medical records, attention to aspects of care that are different in older patients, and follow-up visits to finish incomplete business. Above all, flexibility in the approach to the patient as the history and physical examination unfolds is necessary to meet both patient and physician expectations. It is unreasonable to expect to do everything on the first visit. Instead, a reasonable expectation of the first visit is to establish a relationship with the patient, fully understand the priorities for care, and develop a plan for follow-up visits.

● An optimal assessment is a significant challenge and requires previsit preparation, a proper office focus, excellent medical records, attention to aspects of care that are different in older patients, and follow-up visits.

Appropriate previsit preparation can streamline the collection of essential information and reduce frustration for patient, family, and health care provider alike. Our office requires prior medical records be obtained before appointments will be made. Before this requirement, the availability of past medical records was below 50%, resulting in incomplete documentation and provision of care. Even with this requirement, records are often incomplete and require additional requests after the first visit. An alternative method would be to use an extensive questionnaire, to be completed at home before the office visit; Box 4-1 outlines the essential elements of such a questionnaire.

Use of an electronic medical record (EMR) is now considered essential to quality medical care of older

patients.¹ The frequent use of the emergency departments, hospital, specialty consultants, and nursing homes by older patients requires the timely transfer of this essential health information. EMRs have numerous advantages over the paper medical record, and the time spent in loading essential health information before and during this first visit is worthwhile. Some of this information gathering can be done by the office staff or by the physician at the time of the initial interview. An explanation of the EMR and its advantages to the patient is important. Interacting with the computer, the patient, and the family in a way that is complementary is an important skill and need not detract from the quality of the visit.

Insist that your patients or their families bring their medications with them for each visit, not just the first visit. Recent or frequent medication changes are often not remembered or recalled accurately, and medications prescribed by multiple providers are often not contained in the medical record. The use of generic and trade names of medications are often confusing to patients and can result in taking duplicates or other self-administration errors.²

PROPER OFFICE FOCUS

Ideally, a clinical setting for older patients will take their special needs into consideration. This would include office design and construction, patient flow to allow for transportation and mobility devices, and attention to specific physical and physiologic characteristics of these patients.

Preparation for caring for older patients begins outside of the examination room. There are many special

Box 4-1 Suggested Items for a Geriatric Preappointment Questionnaire

1. Patient name, address, and date of birth
2. Family members/caregivers and proximity (including whom to contact in emergencies)
3. Who lives with the patient? Does the patient live alone?
4. Nature of home
5. Name, address, and phone number of current/recent physicians and pharmacy
6. Current medical problems
7. Current medications, including over-the-counter and complementary remedies
8. Past medical problems
9. Past operations and surgeries
10. Past fractures or other accidents
11. Past hospitalizations
12. Mental health history
13. Family history
14. Recent laboratory studies and X-rays
15. A review of systems to include questions about sexuality, continence, falling, mood, and memory loss, as well as dyspnea, chest pain, other pain, mobility problems, and organ system review
16. Personal history of alcohol, smoking, and illicit drug use
17. Recent health maintenance or screening procedures
18. Specifics about cancer screening
19. Immunization history
20. Description of meals and drinks on a typical day
21. Exercise on a typical day
22. Driving history
23. Services already provided in the home
24. Special arrangements made for emergency contact such as "life line"
25. Patient identification or emergency bracelet worn

characteristics that need to be considered in approaching the facility. Among these are parking, ease of entry, wheelchair access, and interior design. Once inside your office, pleasant personnel who are familiar with working with older frail patients and their families will make a favorable impression and put the patient at ease. Examination room size will need to be adequate to accommodate a third person in addition to the patient and physician, as many older patients are accompanied by spouses, their children, or caregivers, whose input and assistance is often helpful. There are many additional environmental considerations in caring for older patients; these are summarized in Box 4-2.

Scheduling should allow for patients to be seen at the time of their appointment. It is reasonable to expect patients to arrive 15 minutes before their appointment time, but it is then incumbent that they be seen at their appointment time or shortly thereafter. Many of the conditions that afflict older patients make it difficult for them to wait long periods of time, and often their caregiver will have similar or pressing issues. If the patient cannot be seen within 20 minutes of their appointment, they should be given an explanation and estimation of when they will be seen.

Finally, adequate time should be allowed for the initial visit. Most patients will require a full 50 minutes to complete the first visit, and often this will still not be enough time. Scheduling new patient appointments early in the morning or first thing in the afternoon will

often allow uninterrupted time. In any case, protected time needs to be planned to meet the goals of the first visit: establishing a relationship with the patient, understanding the priorities for care, and developing a plan for follow-up visits.

Millie Lipton, Part 2

You have 10 pages of old medical records on Mrs. Lipton. Her previous primary care physician's records include a medication list, diagnoses, and recent health maintenance activities. You identify the following:

Past Medical History: hypertension, coronary artery disease with stent placement 10 years ago, hyperlipidemia, osteoarthritis of the cervical spine, and Alzheimer's disease

Medications: aspirin 81 mg/day, calcium 500 mg/day, pravastatin 40 mg hs (bedtime), donepezil 10 mg hs, amlodipine 5 mg/day

Past Surgical History: bilateral cataract extractions, hysterectomy, cholecystectomy

Health Maintenance: two negative pap smears and two normal mammograms in the past 3 years and an unremarkable physical examination in the preceding year

Laboratory work, done approximately 1 year ago, reveals a normal complete blood count (CBC),

Box 4-2 Characteristics of an Ideal Office for Older Patients

Exterior and access

- Well-lit parking and sidewalks
- Oversized parking spaces
- Minimize grade changes
- Easy access and proximity
- Wheelchair accessible
- Handicapped spaces for parking
- Proper sidewalk maintenance
- Covered walkway/driveway for inclement weather
- Automatic doors
- Signage with large letters and numbers

Interior

- Simple "way-finding" and patient traffic flow
- Signage with large letters and numbers
- Use of color change to mark borders (e.g., between wall and floor)
- Adequate lighting (i.e., brighter than usual)
- Sound-absorbent materials to dampen noise

- Temperature is warm and stable throughout the facility
- Waiting area large enough to accommodate wheelchairs, walkers, and family members
- Halls and ramps free of clutter
- Rails along hallway walls
- Levers instead of door knobs
- Minimal background noise (including little or no background music)
- Bathrooms that are wheelchair accessible and equipped with grab bars, raised toilet seats, and wheelchair-accessible sinks

Examination Room

- Entrance wide enough to accommodate wheelchairs, walkers, and gurneys
- Large enough to accommodate family members (i.e., one or more extra chairs)
- Electric examination tables (that can be raised and lowered)
- Computer located in a convenient place for physician use

CHEM-7, and thyroid-stimulating hormone (TSH). The lipid profile is excellent with a total cholesterol of 188, low-density lipoprotein (LDL) of 98, and high-density lipoprotein (HDL) of 45, and you assume that these were obtained while she was on her lipid-lowering medication.

Your office nurse tells you that Mrs. Lipton is accompanied by her daughter.

CASE DISCUSSION

The case of Mrs. Lipton illustrates the beginning of a typical new elderly patient visit in a busy clinic setting. An important task of the initial visit is to understand the patient's context in regard to this visit. As is often the case, a change in the patient's situation has occurred (the death of her husband). Just as important is why and how the decision was made that the patient should leave her home, friends, and social supports of 40 years to live near her daughter. Clearly there are some important issues here, and an appropriate opening comment will help in beginning to understand this decision: "Welcome to our office, how is it that you came to live in our town?"

The presence of the daughter in the room is also important. An additional person in the examination room is common in the care of older patients and often signifies some loss of independence, concern that certain topics or issues will not be addressed, or cognitive impairment in the patient. The agenda of this family member will also need to be understood and addressed.

THE INTERVIEW AND HISTORY

Taking the time to review the old medical record before stepping into the examination room is important for many reasons. It will aid in understanding the issues that are about to confront you, identify gaps in the information that will need to be obtained, and assist in the task of priority setting. It will help in establishing baseline information in the five domains of care in assessing older patients: mental health, physical health, functional abilities, social supports, and economic resources. Just as importantly, reviewing the records before starting the visit demonstrates interest, preparation, and concern.

- A complete initial assessment of older patients will require the evaluation of five domains: mental health, physical health, functional abilities, social supports, and economic resources.

The introduction and history is often a substantial portion of the first visit. Usually the vast majority of diagnoses and their associated assessment and plan are derived from this comprehensive history. Its components are listed in Box 4-3. It is recommended that the patient remain fully clothed and comfortable during the initial interview. This is encouraged because of the time required for history taking and because older patients do not tolerate environmental extremes. During the subsequent short period of time necessary to prepare the patient for the physical examination, you can update the medical record, fill out paperwork, respond to messages, or conduct other office activities.

The examination room should be conducive to a good interview, with a quiet environment and the patient and physician sitting close to one another. Many older patients have a degree of hearing impairment. Patients with hearing impairment use lip reading to facilitate their understanding of what is said. Therefore, the physician should ask which side is best for hearing and sit face-to-face to enhance eye contact.

Although family members can be extremely important in providing additional and corroborative information and in assisting in the implementation of your diagnostic and treatment plans, the presence of another person in the examination may not be what the patient prefers. Office staff will need to be attuned to this situation and an opportunity created during vital sign determination or another office routine for the patient to be briefly separated from those accompanying them to ascertain the patient's wishes in a tactful way. This brief intervention will also help in understanding the reason for the desired presence of the additional person.

Medications should be reviewed on the first and every subsequent visit.² Noting discrepancies in dose and in additional prescription and nonprescription

Box 4-3 Components of the History of the Older Patient

- History of current problems
- Past medical history
- Past surgical history
- Medication review
- Social history
- Family history
- Caregiver status
- Review of symptoms and systems, including geriatric syndromes
- Specialty physicians currently involved in care
- Functional history: activities of daily living (ADLs) and instrumental activities of daily living (IADLs)
- Current use of community resources

medications taken is common, so this review is one of the first things to be accomplished. Often a medication will indicate a missing diagnosis, and inquiry regarding the reason for its use is very helpful.

ASPECTS OF DISEASE PRESENTATION UNIQUE TO OLDER PATIENTS

Several aspects of disease presentation are characteristic of geriatric medicine and, therefore, are worthy of note here. They include the occurrence of multiple conditions, the vague and nontraditional presentation of disease, the frequent occurrence of certain syndromes as

presenting symptoms, and the presence of certain diseases that are largely unique to the older population.

Multiple Medical Conditions

The typical older patient usually has several medical conditions, such as arthritis, lung, and heart disease. Figure 4-1 displays the most common conditions that affect older patients. Study of this figure suggests that most patients will have at least two, and many will have three or more, chronic conditions. Accurately capturing and recording these conditions is a major component of the initial visit. As an example, Figure 4-2

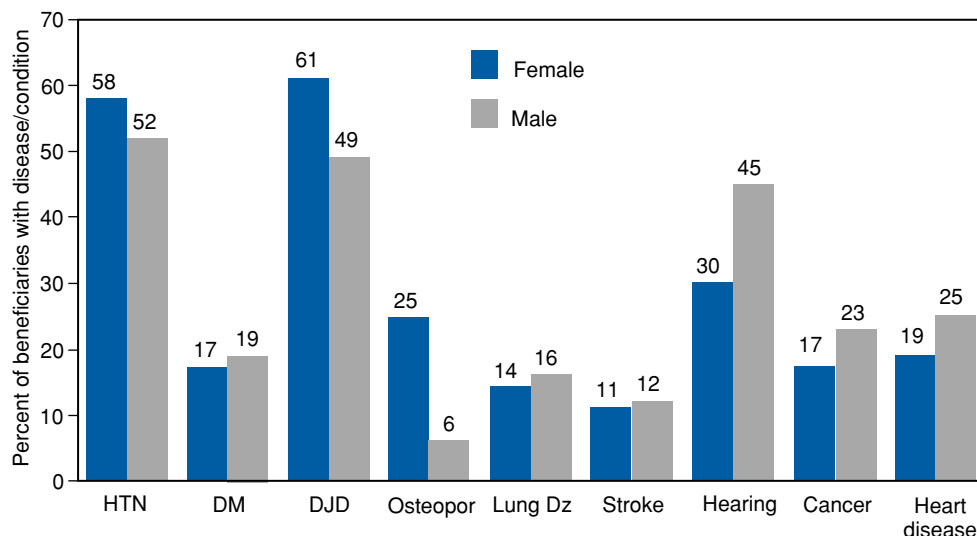


FIGURE 4-1

Medicare beneficiaries' self-reported diseases and chronic conditions, by sex, 2000. (Modified from Centers for Medicaid and Medicare Services, Office of Research, Development, and Information. Data from the Medicare Current Beneficiary Survey [MCBS] 2000. Access to Care File.)

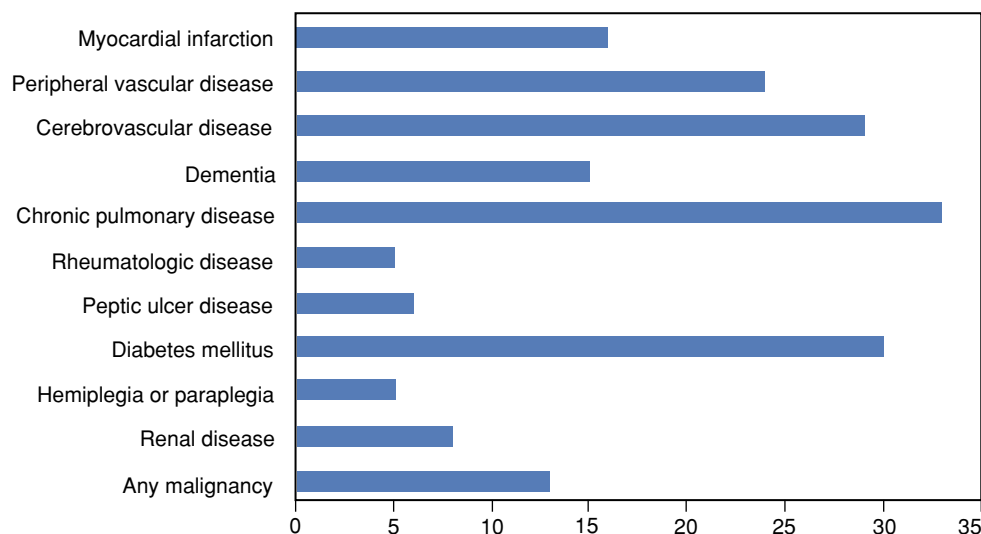


FIGURE 4-2

Percentage of heart failure patients with comorbid diseases. (Redrawn from Zhang JX, Ratbouz PJ, Chin MH. Comorbidity and the Concentration of Healthcare Expenditures in Older Patients with Heart Failure, *J Am Geriatr Soc* 51:476-482, 2003.)

provides a glimpse of the comorbid conditions that often accompany patients who have congestive heart failure. Because of this frequent presence of multiple comorbid conditions, a routine geriatric office visit is complex, requiring tracking of clinical and laboratory data for each condition.

Vague, Ill-Defined Symptoms

It is not uncommon for older persons to present with vague, often puzzling symptoms such as “weakness,” “not feeling right,” or “losing energy.” While such symptoms in older patients are nonspecific and difficult to interpret, they often represent new functional deficits that reflect a new illness or condition. These symptoms may be the only manifestation of classic conditions with more typical signs and symptoms in younger patients (e.g., pneumonia, worsening heart failure, urinary tract infection).

Collections of Symptoms Called Geriatric Syndromes

Some collections of symptoms are so common that they have been labeled *geriatric syndromes*; examples include mental status changes, urinary incontinence, falls, and dizziness (Box 4-4). Often, the development of a geriatric syndrome represents the loss of specific functional capacities caused by multiple pathologies in multiple organ systems.³ These syndromes commonly occur in older patients and now have defined evidence-based approaches to assessment and treatment. The first step in treatment is recognition that one of these syndromes exists and then initiation of the appropriate approach. Geriatric syndromes can be integrated in the review of systems, if desired, but they must often be explicitly sought for in the overall evaluation.

Exclusive Disease Entities

Certain disease entities occur almost exclusively in older patients, such as hip fracture, Parkinson’s disease, and polymyalgia rheumatica (see Box 4-4). These geriatric-specific conditions are common, and health care providers need to be comfortable in caring for them in the office setting. Many will involve the use of specialists, for example, hip fractures, but the ongoing long-term management will fall to the primary care provider. Often, involvement of consultants requires frequent written and oral communication, so office systems need to facilitate both forms of communication and to ensure that the results are part of the medical record.

Millie Lipton, Part 3

With the old medical records in hand, you start reviewing the medications she has brought with her. You sit facing the patient and note that she is articulate about her past medical history. She uses a week-long daily pill dispenser that her daughter helps to set up at the beginning of each week. As you review her medication bottles, you notice that the doses on the medication labels for donepezil (5 mg/day) and pravastatin (20 mg hs) are half of what the old medical records indicate. The other medications are correct as recorded in the old medical records.

The patient does not know the details of the change in dosage of pravastatin or the donepezil. After a glance from the patient, the daughter mentions that she thought there was some diarrhea and fecal incontinence with the higher dose of the donepezil that resolved on the lower dose. Otherwise the patient is knowledgeable about her

Box 4-4 Conditions that Commonly Occur in Older Patients

Classic Geriatric Syndromes

- Dementia
- Delirium
- Urinary incontinence
- Falls and gait abnormalities
- Behavioral changes
- Weight loss
- Dizziness
- Poor nutrition or feeding impairment
- Sleep disorders

Geriatric-Specific Disease Entities

- Osteoporosis
- Alzheimer’s disease
- Stroke
- Hip fracture
- Polymyalgia rheumatica and/or temporal arteritis
- Parkinson’s disease
- Pressure sores
- Macular degeneration
- Sexual dysfunction
- Gonadal failure in men

medications. You are impressed with her ability to give a past medical history, particularly in light of her “Alzheimer’s” history and the fact that she is on donepezil.

You note that she was evaluated by a neurologist 9 months ago for some kind of memory problem—“cognitive impairment.” You mention “mild cognitive impairment,” and she agrees with the term as does her daughter. She mentions that the examination was performed at a university hospital near her former home but cannot remember the physician’s name. She does recall having lots of laboratory work done and a brain scan. Her daughter confirms that all this occurred. After further questions, you request that the daughter help in obtaining those medical records, and make a note to complete a mini-mental status examination at the next visit.

CASE DISCUSSION

There is a clear indication to assess cognition soon. In addition, there appears to be a discrepancy in the diagnosis. The primary care medical record indicates the patient has Alzheimer’s disease, and the patient and daughter agree with the term mild cognitive impairment provided by the neurologist. Obtaining her prior neurological evaluation will be critical. In either case, Mrs. Lipton carries a diagnosis that warrants being followed carefully and may represent the beginning phase of a disease causing brain failure that will progress over time. If there are constraints to doing a cognitive assessment on today’s visit because of more pressing issues, then a follow-up appointment very shortly is certainly indicated.

ASSESSMENT OF COGNITIVE STATUS

Mental status evaluation of the older patient holds a special area of emphasis and concern in geriatrics. Cognitive deficits, mood disorders, and other behavioral disturbances are common in older patients. Even seasoned health care providers can be misled by patients who retain their social skills while memory, judgment, executive function, and orientation become severely impaired. There is ample evidence that cognitive impairment is not recognized in older patients and depression often missed (Fig. 4-3).

Therefore, health care providers should be attuned to any reference by the patient, caregiver, or family

member to memory loss, behavioral change, or reduced function, because any of these may herald the onset of early cognitive impairment, depression, or other serious mental health illness. Thus, *your first-line screening* should be any concern about cognition, behavior, or judgment. This should prompt the selection and administration of an appropriate objective screening tool.

● Any concern about cognition, behavior, or judgment should prompt mental status testing.

The prevalence of dementia and Alzheimer’s disease rises exponentially with age, doubling every 5 years after age 65.⁴ Overall prevalence is about 2% between the ages of 65 and 74, 8% from 75 to 84, and 30% for ages 85 and over.⁵ Although routine mental status screening is not recommended for the general

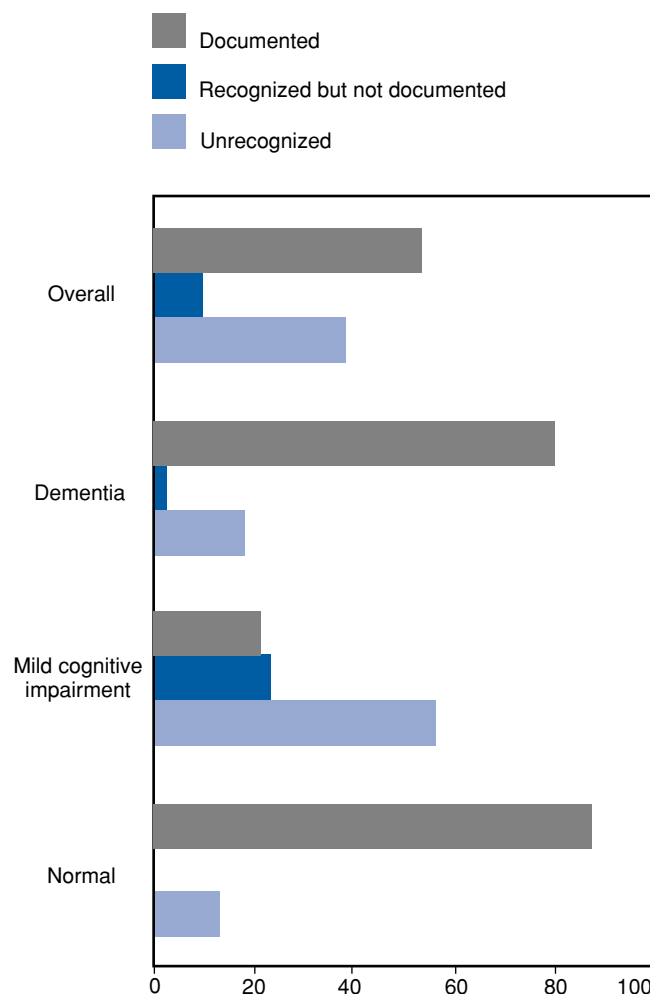


FIGURE 4-3

Detection of cognitive impairment. (Redrawn from Chodosh J, Petitti DB, Elliott M, et al. Physician Recognition of Cognitive Impairment: Evaluating the Need for Improvement. *J Am Geriatr Soc* 52:1051-1059, 2004.)

population,⁶ screening should be triggered by any suggestion of cognitive difficulty. In practice, many healthy persons in their 60s and early 70s will not require much inquiry, but as age advances a higher proportion may warrant routine informal screening to ensure nothing is overlooked.

Cognitive screening can be either informal or formal. The *clock drawing test* and the *set test* are two tests that can be used for rapid screening. To administer the clock drawing test, the patient is requested to draw a clock face with numbers on a blank piece of paper, and to place the large hand and small hand at the time indicated by the examiner.^{7,8} The time selected should involve separate number locations for each hand, such as “10 minutes after 11” or “1:45.” This is a test not only of visuospatial ability but also of motor execution, attention, language comprehension, and numerical ability. Although there are several formal scoring systems for this exercise, any significant distortion or difficulty is important. This is only a screening test, and concerning results must be confirmed by other forms of testing and history taking.

The *set test*, sometimes referred to as the *category fluency test*, is particularly helpful in assessing patients with low formal education levels that the mini-mental state examination (MMSE) can not reliably be used to test.^{9,10} To administer the set test, the older person is asked to name as many items as they can in each of four sets or categories. The four sets are fruits, animals, colors, and towns. This test examines a number of cognitive domains including language, executive function, and memory. The best score is 10 in each set, for a maximum score of 40. A score of less than 15 is abnormal. In addition, set naming “red flags” are the inability to stay on track with the correct category, naming fewer than 10 objects in a minute, and/or repeating objects early in the naming process. Both of these informal screening tools can be administered before the beginning of the office visit by office staff with proper training.

Another red flag for possible cognitive impairment is a patient’s poor performance on the instrumental activities of daily living, discussed in depth later in this chapter. These complex mental tasks are very sensitive to executive dysfunction and hence early dementing illness. New problems with finances and medication use are concerning symptoms and should automatically prompt a thorough mental status screening.

One final caveat, regarding a patient with a newly discovered abnormal mental status screening, is that these patients are often oblivious to their deficits. Often, they will indicate quite emphatically that they are independent in their activities of daily living (ADLs) and instrumental activities of daily living (IADLs) when this is not the case. If cognitive impairment is sus-

pected, a reliable observer will need to be found who can give an accurate assessment of the patient’s functional levels.

For patients with concerning signs or symptoms of cognitive impairment or whose screening test is worrisome, there are several assessment tools available for use in more formal cognitive screening. The most frequently used and validated mental status screening instrument is the MMSE.¹¹ It tests several areas of cognitive function and provides a convenient score for assessment and later comparison; furthermore, since it has been widely used for 2 decades, its meaning and limitations are well understood by professionals working with older persons. It has several drawbacks:

- It requires some experience.
- It can elicit a negative reaction among patients who object to being “tested.”
- Its cutoff (23 of 30 correct) misses many patients with mild cognitive impairment and early dementia.
- The score interpretation must be adjusted for educational level (by lowering the cutoff as much as four points for persons with less than a 12th-grade education, and six points for those with less than an 8th grade education.)
- Administration may be difficult in the face of severe visual or hearing impairment.
- Patients who do not give it their full effort (especially depressed patients) may be improperly labeled as impaired.

Many of these limitations apply to other cognitive status tests as well, so the MMSE remains a commonly used evaluation tool. Ideally, a primary care geriatrician should be familiar with several other cognitive evaluation tools and should choose which tests to use depending on the patient.

In many situations, patients will present with worrying behavioral, cognitive, or functional changes that are suggestive of early dementing illness but the screening tests mentioned earlier will not be conclusive. For these patients, referral for formal neuropsychological testing is very helpful and is indicated. The neuropsychological examination permits objective assessment of cognitive function using standardized tests of cognitive abilities, memory, attention and concentration, orientation to time, language, and sensory-motor ability. The evaluation can be used to verify the presence or absence of a cognitive dysfunction and aid in the differential diagnosis. The early symptomatic phase of Alzheimer’s disease can be indistinguishable on clinical office examination from normal aging but can be identified by detailed neuropsychological testing. Further details on cognitive assessment can be found in Chapter 16.

Contrary to prior assumptions, the incidence of major depression among older patients in the community is approximately the same as in other age groups, averaging approximately 3%. However, subsyndromal depression affects over twice that many, with estimates ranging from 8% to 15% of community-dwelling elderly.¹² In a primary care practice setting of older patients, the prevalence was 5.6%, with another 7.9% with probable or masked depression.¹³ Depression is much higher in medically ill populations in hospitals and nursing homes, reaching as high as 25%. This is a complex illness and can be a primary problem, related to medical illnesses such as Alzheimer's disease, Parkinson's disease, and stroke, or can be a reaction to medical problems. Its presence should be looked for and treated because there can be serious consequences to unrecognized depression: increased morbidity, suicide, and decreased quality of life. In addition, depression can affect performance on mental status testing, so the clinician should be astute to the subtle signs of depression and should be familiar with the diagnostic criteria and screening tests for this condition. One of the most gratifying experiences in geriatrics can be the successful treatment of a patient with depression, resulting in improvement in relationships, function, and quality of life. More in Chapter 17.

Millie Lipton, Part 4

Mrs. Lipton has done well since moving to your town. She has settled into her apartment and can operate most of the appliances well, including the microwave and oven. She does need some help with paying bills, and her daughter's phone number is written on her home phones. Mrs. Lipton no longer has a laundry routine, allowing her dirty clothes to accumulate. She requires prompting to wash her dirty clothes, something new for her. She does not drive because she admits she does not know anything about the town and its roads. Her daughter confides that her mother does have problems with executive function. Mrs. Lipton does not notice running low on food and therefore does not plan to go shopping. Likewise, if the phone or television is not working, she will not make any attempt to get them fixed. She seems puzzled about what to do, and this is of concern to her daughter. Mrs. Lipton will not initiate any shopping requests, but will gladly go with her daughter if offered the chance. She is fully functional at home regarding her ADLs (Fig. 4-4).

CASE DISCUSSION

Assessment of functional status, in particular the patient's ability to perform everyday tasks, is a critical part of the evaluation of all elderly patients. In the case of Mrs. Lipton, you will need to differentiate what she can do herself from what her daughter does for her, and to identify areas where her function is failing and additional support may be needed. In Mrs. Lipton's case, her loss of some executive function, and consequently IADLs (Fig. 4-5), means that she meets the full criteria for dementia, not just mild cognitive impairment. Her problems extend beyond just memory impairment. At a scheduled follow up visit (soon), formal MMSE and specific questions to assess for Alzheimer's Disease are vital. The diagnosis of this needs to be discussed in an appropriate and tactful manner.

ASSESSMENT OF FUNCTIONAL STATUS

Assessing and understanding functional ability is critical to caring for older patients. Functional ability is critical to maintenance of independence and quality of life. In caring for older patients, knowing the diseases that afflict an individual is only one part. Indeed, disease care is sometimes far less important than maximizing the function of individuals. As Figure 4-6 demonstrates, functional loss is common in older patients.

Here are some of the reasons why function is so important:

- Functional loss is a final common pathway for many clinical problems in older patients. Despite this, health care providers often do not recognize functional disabilities in their patients.¹⁴ Therefore, functional assessment becomes a central focus in the initial assessment and care of the older patient.
- Change in functional status is an important presenting symptom in older patients. An acute illness or the decompensation of a known medical problem such as heart or lung disease will usually be accompanied by a functional decline. Knowing the prior functional status enables the provider to immediately recognize an emerging illness that is presenting as functional change.
- Being aware of patient function helps with the prioritization of problems and establishment of the goals of therapy. Restoration of function is an important goal for patients and should also be for

The physical self-maintenance scale (PSMS) activities of daily living		
Patient's Name _____ Date _____		
Rated by _____		
Numbers 1 through 5 in each category represent worsening states of function. Choose the number that best describes the patient's functional status. Scores in all six categories should then be totaled. The higher the final score, the greater the degree of impairment.		
		Score
A. Toileting	1. Cares for self at toilet completely, no incontinence.	
	2. Needs to be reminded or needs help in cleaning self, or has rare (weekly at most) accidents.	
	3. Soiling or wetting while asleep more than once a week.	
	4. Soiling or wetting while awake more than once a week.	
	5. No control of bowels or bladder.	
B. Feeding	1. Eats without assistance.	
	2. Eats with minor assistance at mealtimes and/or with special preparation of food, or help in cleaning up after meals.	
	3. Feeds self with moderate assistance and is untidy.	
	4. Requires extensive assistance for all meals.	
	5. Does not feed self at all and resists efforts of other to feed him/her.	
C. Dressing	1. Dresses, undresses, and selects clothes from own wardrobe.	
	2. Dresses and undresses self with minor assistance.	
	3. Needs moderate assistance in dressing or selection of clothes.	
	4. Needs major assistance in dressing, but cooperates with efforts of others to help.	
	5. Completely unable to dress self and resists efforts of others to help.	
D. Grooming (neatness, hair, nails, hands, face, clothing)	1. Always neatly dressed, well groomed, without assistance.	
	2. Grooms self adequately with occasional minor assistance, e.g., shaving.	
	3. Needs moderate and regular assistance or supervision in grooming.	
	4. Needs total grooming care, but can remain well groomed after help from others.	
	5. Actively negates all efforts of others to maintain grooming.	
E. Ambulation	1. Goes about grounds or city.	
	2. Ambulates within residence or about one block distance.	
	3. Ambulates with assistance of (check one) a () another person, b () railing, c () cane, d () walker, e () wheelchair-gets in and out without help, f () wheelchair-needs help getting in and out.	
	4. Needs total grooming care, but can remain well groomed after help from others.	
	5. Actively negatives all efforts of others to maintain grooming.	
F. Bathing	1. Bathes self (tub, shower, sponge bath) without help.	
	2. Bathes self with help getting in and out of tub.	
	3. Washes face and hands only, but cannot bathe rest of body.	
	4. Does not wash self but is cooperative with those who bathe him/her.	
	5. Does not try to wash self, and resists efforts to keep him/her clean.	
		TOTAL SCORE
Score	1. Can perform the task without any help 2. Can manage the activity with some reminding, prompting, or minor assistance 3. Needs moderate assistance 4. Requires major assistance and support 5. Is totally dependent	

FIGURE 4-4

The physical self-maintenance scale (PSMS) activities of daily living. (Modified from *Assessment of Older People: Self-Maintaining and Instrumental Activities of Daily Living*, *Gerontologist* 9:179, 1969.)

Functional activities questionnaire (instrumental activities of daily living)				
Patient's Name: _____				
Informant's name: _____				
Date: _____ Interviewer: _____				
INSTRUCTIONS				
Place a check mark under the column that best describes the patient's ability to perform the tasks listed below: 3 - Completely unable to perform task 2 - Requires assistance 1 - Has difficulty but accomplishes task, or has never done, but the informant feels could do task with difficulty 0 - Normal performance, or has never done task, but the informant feels the patient could do the task if necessary				
	(3 points)	(2 points)	(1 point)	(0 points)
1. Writing checks, paying bills, balancing a checkbook				
2. Assembling tax records, business affairs, or papers				
3. Shopping alone for clothes, household necessities, or groceries				
4. Playing a game of skill; working on a hobby				
5. Heating water, making a cup of coffee, turning off the stove				
6. Preparing a balanced meal				
7. Keep track of current events				
8. Paying attention to, understanding, or discussing a TV show, book, or magazine				
9. Remembering appointments, family occasions, holidays, and medications				
10. Traveling out of the neighborhood, driving, arranging to take buses				
POINTS PER COLUMN				
				Total points _____

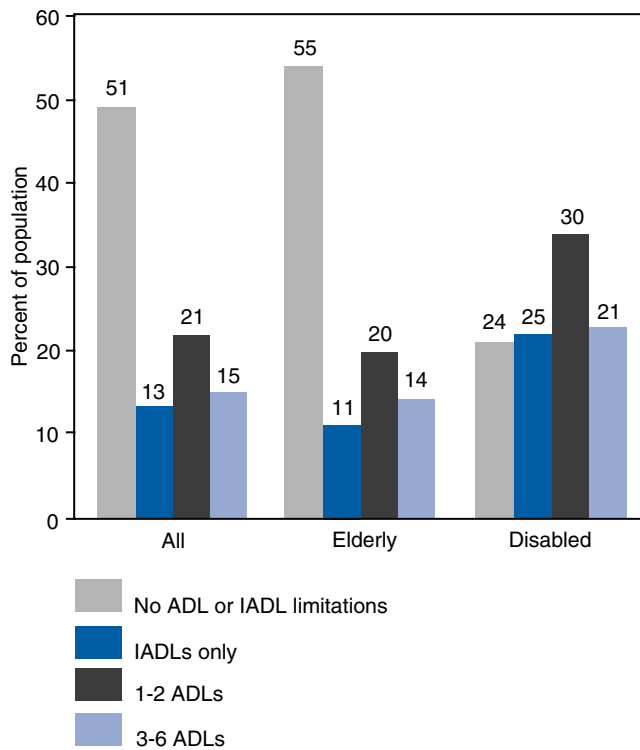
FIGURE 4-5

Functional activities questionnaire (instrumental activities of daily living). (Redrawn from Pfeffer RI, Kurosaki TT, Harrab CH, Chance JM, Filos S. Measurement of Functional Activities in Older Adults in the Community, *J Gerontol* 37:323, 1982.)

- the clinician. At the conclusion of a visit, functional losses should be high on your follow-up agenda.
- Loss of independence in one or more key functions often signals the need for involvement of other members of the health care team, such as physical therapists and occupational therapists. Careful consideration should be given to involve-

- ment of these professionals as soon as functional loss is identified.
- Appreciation of functional status, therefore, holds a central position in the assessment and care of older patients.

● Measuring, preserving, and nurturing functional status is at the core of quality geriatric medicine.

**FIGURE 4-6**

Distribution of Medicare enrollees, by functional status, 2000. (Modified from Centers for Medicaid and Medicare Services, Office of Research, Development, and Information. Data from Medicare Current Beneficiary Survey [MCBS] 2000. Access to Care File. June 2002 Edition. C Section III.B.2. Page 4.)

Because of its importance, functional status should be elicited during the history and parts of it confirmed during the physical examination. There are several readily administered questionnaires or templates in the EMR that can capture and track the status of ADLs¹⁵ and IADLs.¹⁶

ADLs play a central role in the independence of older patients and are now generally used to describe basic self-care skills. There are a number of different assessment instruments that evaluate these functions, and the physical self-maintenance scale (PSMS) is one of them (see Fig. 4-4). ADLs are part of the “language of geriatrics” because they are used in many different care settings to evaluate and recommend treatment older patients. It is a fundamental evaluation tool for rehabilitation in nursing homes, rehabilitation centers, and home health care to name a few areas. The assessment of ADLs is also an integral part of admission evaluation and ongoing care in assisted-living facilities. For those who care for older patients, it is a required “language.”

- Much can be learned about a patient's functional status by observing the patient move about the office and examination room.

IADLs are the other essential component of the language of geriatrics. Unlike ADLs, IADLs are complex mental processes that are required for independent living. Executive function and judgment must be used to accomplish them. Executive functions deal with planning, organizing, sequencing, and performing complex tasks. It is not surprising then, that patients with early cognitive impairment will often manifest themselves first with difficulties in IADLs. This will become apparent clinically, for example, when patients are having difficulty with remembering medication regimens and whether they have even been taking their medications. Another common scenario is worsening difficulty in financial matters, such as forgetting to pay bills or exceptional errors in financial affairs. The functional activities questionnaire (FAQ) is one of several recommended IADL instruments (see Fig. 4-5). Because of its sensitivity to cognitive impairment, reviewing a patient's IADLs in cases of suspicious cognitive impairment will often uncover severe deficits that family members have been handling for some time. Many times in early dementing illness, a patient's MMSE will be in the normal range, but their new difficulty in IADLs will alone be enough to establish the diagnosis of serious degenerative brain disease. ADL and IADL assessments do not take very long. Answers about medication administration, driving, finances, phone use, and shopping can be quickly obtained. Functional status, however, in cases of patients with suspected cognitive impairment must be confirmed by another person in addition to the patient.

- Patients with cognitive impairment are usually oblivious to their IADL deficits. Their IADL status needs to be confirmed by a reliable observer.

Millie Lipton, Part 5

Mrs. Lipton was married for 57 years before the death of her husband from melanoma. She has two daughters and a son. The eldest daughter, Michele, is with her today. Michele made the arrangements for Mrs. Lipton to move here and set up today's appointment. The daughters and son have agreed informally on this arrangement and that Michele will manage the patient's affairs locally.

Mrs. Lipton completed graduate school in business and worked for 30 years as a bookkeeper for a small business. She has never smoked. Her use of alcohol was always rare, confined to social situations, and she has not used any alcohol since her husband died. Mrs. Lipton's father died of heart disease, and

her mother's cause of death is unknown. She has two brothers who are already deceased, from Parkinson's disease and heart disease.

EXPANDED SOCIAL AND FAMILY HISTORY

The social and family history should concentrate on the strengths and weaknesses of family support. The majority of older patients will have a period of dependency in their later years, and knowing the family resources available to provide support is critical to providing optimal care. This requires the addition of several topics to the usual social history assessment when evaluating older patients (Box 4-5).

The family medical history is relatively less important because hereditary risks have usually manifested themselves by old age. However, patients often have strong feelings about the circumstances of their parent's death and may have concerns that their health events in later years will parallel those of parents or other family members. Therefore, knowing this information may help you understand some of their emotions, questions, and behaviors.

Millie Lipton, Part 6

Mrs. Lipton's review of systems indicates that her appetite is good and her weight has been stable. She sleeps well at night with only occasional awakening. She has had a recent eye examination. She acknowledges her hearing loss, and it has been evaluated in the recent past. She has not had any chest pain in years, and her cholesterol was monitored regularly by her former clinician with adjustments in her medication. She has had no respiratory or gastrointestinal symptoms. She has frequent stiffness of her hands and knees that responds to acetaminophen. She denies incontinence and falls.

She has had regular annual examinations that have included mammograms, pap smears, and stool Hemocult testing. She had a full colonoscopy 7 years ago. Immunization status, however, is unclear. The flu season is approaching, and she does not remember ever having a pneumonia vaccination. The records that accompany her do not indicate this immunization either.

THE IMPORTANCE OF THE REVIEW OF SYSTEMS

The review of systems goes beyond the history of present illnesses and past history and uses direct

Box 4-5 Additional Social Assessment of the Older Patient

- Content of an average day
- Suitability and safety of the home
- Availability, attitude, and health of caregivers and neighbors
- Availability of emergency help
- Services received and/or needed
- Transportation needs
- Financial status
- Occupational history and interests

questions to ensure that all systems are adequately covered. This review is particularly important in examining older patients because of the large number of hidden illnesses and geriatric syndromes that are often not mentioned owing to embarrassment, ignorance that something can be done, or fear of a negative impression. Box 4-6 lists geriatric-specific topics to include in a review of systems. For a new patient appointment, the review of systems can often be highly productive in setting priorities for care and follow-up visits.

Box 4-6 Geriatric-Specific Topics to Include in a Review of Systems

General

- Weight change
- Sleep quality
- Depression
- Hearing loss
- Alcoholism
- Falls

Genitourinary

- Incontinence
- Sexuality
- Nocturia

Neurologic

- Confusion
- Memory loss

Musculoskeletal

- Prior fractures
- Range of motion of joints
- Pain

A well-structured systems review is a way to ensure that all necessary background information is covered, and the review should include a thorough documentation of health maintenance activities in the past. For example, in reviewing the eye history, the time of the last eye examination is important to note because of the high incidence of eye disease in older patients. The exact details of these measures are often not well remembered, and old medical records are invaluable in tracing the details.

Millie Lipton, Part 7

You leave the room for a short period of time to update your EMR with what you have learned while your nursing staff prepares Mrs. Lipton for her physical examination. Her daughter does not leave the room and remains behind.

Her temperature is 37.0°F, blood pressure 155/90 mm Hg, pulse 72 and regular, respirations 16, weight 123 pounds. The daughter reports that her mother has never weighed much more than this.

As you return to the examination room to begin, you have already noted during the history portion of the examination that her hearing is impaired. You needed to sit directly in front of Mrs. Lipton for her to understand what you were saying, and you continue this method during the examination, always facing her when speaking. In addition to the hearing loss, the examination of the head reveals mild hair thinning. Her lenses are very clear, reflecting the prior cataract surgery, but the age-related small pupils in both eyes makes your retinal examination incomplete. Fortunately, as you comment on this, her daughter mentions that she has had a recent eye examination and things were fine. Mrs. Lipton's oral hygiene is excellent.

The neck examination reveals excellent carotid upstrokes and no bruits. Her thyroid is normal on examination. Her chest examination reveals a mild kyphosis and reinforces your concern about possible osteoporosis and perhaps compression fractures. The lung examination is remarkable for bilateral dry crackles at the bases only but is otherwise clear. Cardiac examination reveals a very regular rhythm with an occasional extra systole, a normal point of maximal impulse (PMI), and a soft II/VI systolic ejection murmur at the aortic area and apex without radiation elsewhere. Her breast examination reveals redundant skin with homogenous breast tissue.

Mrs. Lipton's abdominal examination is unremarkable, with normal bowel sounds and no organomegaly or bruits. Her pelvic examination reveals vaginal atrophy and the absence of a cervix or uterus. No masses are felt in her adnexa. Rectal examination reveals good sphincter tone, and her stool is Hemoccult negative.

Examination of her joints only reveals mild enlargement of her distal interphalangeal joints with excellent range of motion. Her feet do not have any deformities, and she has good pulses in her lower extremities.

You leave the room to allow her to get dressed. When you return later, you walk her through the "timed get up and go test," which she does very easily and quickly, meeting the standards of the test.

CONDUCT OF THE PHYSICAL EXAMINATION

The conduct of the history taking has already given you considerable opportunity and cues to the issues regarding the physical examination. The astute clinician catalogs these findings as they reveal themselves. The general appearance of the patient, quality and loudness of the voice, and robustness of the handshake are clues. Observing the patient walk to the examining room and/or transfer from a chair to the examining table gives additional information on functional ability.

Once the patient is comfortable, a critical place to start the physical examination is the vital signs. All are important indicators of well-being, especially in the older patient. Abnormalities such as weight loss, an irregular pulse, or mild tachypnea have important implications. It is not unusual for the blood pressure to be elevated when a new patient is seen in a strange environment; so elevated readings should be rechecked. Blood pressure should be taken in the supine position after at least 10 minutes of rest and then immediately after and 3 minutes after standing. Orthostatic hypotension, defined as a drop of 20 mm Hg in systolic blood pressure, rises rapidly with advancing age and is a common finding in those over the age of 85.¹⁷

If excellent medical records accompany the patient, the physical examination may ironically be relatively unrewarding in regard to new findings. There are, however, specific geriatric physical examination findings and observations that are often missed unless the examiner looks for them. Many of these are listed in Box 4-7.

Box 4-7 Important Specific Physical Examination Findings to Note in Older Patients

Eyes	Cataracts Retinal abnormalities Visual acuity
Ears	Hearing evaluation Removal of wax if necessary
Mouth	Condition of teeth and gums Ability to eat Remove dentures if present
Head and neck	Premalignant and malignant skin lesions (usually seen in the most sun-exposed area) Thyroid evaluation Elevated neck veins Range of motion of the cervical spine Auscultation of the carotids
Chest	Kyphosis and/or scoliosis Dry crackles in the lung bases
Breast examination	Remember that breast cancer can occur in the very old
Cardiovascular	Regularity of rhythm Presence of an S_4 is common Atrial and ventricular ectopy Systolic murmurs are common Arterial pulses in extremities (especially legs and feet)
Abdomen	Liver edge below the right costal margin Palpable enlarged aorta Abdominal bruit Rectal examination that reveals fecal impaction
Genitourinary	<i>Male:</i> small testes, prostatic enlargement, and/or nodularity <i>Female:</i> cystocele, rectocele, and uterine descent; adnexal masses in an older women is considered malignant until proven otherwise
Skin	Concerning skin lesions Gait abnormalities
Musculoskeletal	Motor asymmetry Range of motion of each major joint Fine finger movement
Lower extremities	Hygiene Condition of the toenails Presence of edema
Nervous system	Balance and cerebellar testing (see Box 4-8)

A few of these areas merit some additional discussion. Vision and hearing screening are important, given the high prevalence of impaired vision and hearing among older patients. These conditions lead to subsequent functional loss. Visual impairment was predictive of mortality over 10 years, and combined impairment had the highest risk of 10-year functional decline.¹⁸ Annual eye examinations by eye specialists should be encouraged, owing to the high incidence of silent diseases such as glaucoma and macular degeneration. Hearing deficits are more readily discernible

and can be assessed by using the whisper test or an audioscope equipped with tone testing.¹⁹ In Mrs. Lipton's case, her hearing impairment was obvious and her vision was just recently evaluated.

The chest can be difficult to examine because the rib cage is often fixed owing to the changes of aging. Diaphragmatic breathing plays a much more important role in respiratory function in older patients for this reason. Breath sounds may be more difficult to hear, and often dry crackles can be heard at the bases that do not imply serious pathology.

The cardiac examination in the older patient will often have some findings. Atrial and ventricular ectopy of a benign nature are common and do not imply an ominous prognosis.²⁰ A split second heart sound, with inspiration increasing the split, is a normal finding in older patients. An S_4 heart sound is common among older patients without cardiac disease, but an S_3 is always suggestive of congestive heart failure.

Another common cardiac finding is the presence of systolic murmurs in many older patients. Benign murmurs in older patients will typically be an ejection type murmur that is soft (grade 2/6 or less) and heard best at the base and possibly at the apex. These murmurs probably represent turbulence over sclerotic aortic valves. If the murmur is concerning, some patients may merit further evaluation with an electrocardiograph (ECG) and echocardiography. Because left ventricular enlargement has a serious prognosis, careful physical examination for cardiac size is important and, if found, warrants further diagnostic studies.

The nervous system permeates the entire body, so it is not surprising that neurologic changes are extensive in older patients. There is still considerable disagreement among experts regarding normal versus abnormal neurological changes associated with aging. The prevalence of several neurologic findings not associated with disease increases with age. These include elements of cranial nerve function, extrapyramidal function, and some primitive reflexes.²¹ Box 4-8 outlines many of

these manifestations. Because all of these changes are present in only a minority of patients, the challenge is deciding when a change is associated with a new disease process and is abnormal enough to merit workup, or deciding the change is a manifestation of normal aging.

The musculoskeletal system is the source for many common complaints in older patients. Gait and balance testing should be a part of all initial examinations of all older adults. This can be as simple and unobtrusive as the get up and go test.²² This test was subsequently modified to the timed get up and go test,²³ in which the time taken to perform the test is measured and used as a score. A more in-depth discussion of gait and balance testing is in Chapter 18. Observation of the patient while he or she performs this simple evaluation can be very revealing.

Millie Lipton, Part 8

As Mrs. Lipton is getting dressed, you begin to organize your thoughts. You make the following assessment and plan in the EMR.

1. Hypertension Control: not controlled today; reassessed for now, will follow and re-evaluate.
2. Cognitive Impairment: will assist the daughter in obtaining records of the evaluation performed to date; will re-assess her cognitive function with an MMSE next visit. Impression,

Box 4-8 Common Neurologic Changes in Older Patients

All percentages in parentheses are for subjects 85 years and older. For younger persons, the percentages are less.

Cranial nerve function: eye signs

- Unequal pupils (11%)
- Diminished reaction to light and near reflex (9%)

Auditory

- Hearing loss for higher tones

Olfactory

- Diminished olfactory sensitivity
- Extrapyramidal function
- Abnormal gait (20%)
- Increased rigidity and tone in the legs (22%)
- Flexion posture
- Diminished reaction time
- Decreased arm swing (29%)

Motor

- Tremor (17%)
- Increased muscle tone in legs (22%)
- Diminished muscle strength in legs and arms (5%)
- Spontaneous movement decrease (14%)

Sensory

- Diminished vibratory sense distally (21%)
- Proprioception preserved
- Mild increase in threshold for light touch, pain, and temperature

Reflexes

- Diminished or absent ankle jerks (15%)
- Romberg abnormal (14%)

Pathologic reflexes present

- Snout (32%)
- Grasp (28%)
- Root (13%)

because she has both memory loss and mild functional loss, is that she probably has early Alzheimer's disease.

3. **Advance Directives:** introduced the concept today because she has not established any. Give handout on living will and durable power of attorney.
4. **Lipids:** will obtain fasting lipids before her next visit on the present dose of pravastatin to establish whether this is an adequate dose.
5. **Possible Osteoporosis:** her low weight and age are risk factors. She is ambulatory, and her life expectancy is such that she would benefit from treatment. Will change her calcium supplementation to begin Ca 500 mg + 200 IU Vitamin D tablets by mouth (PO) three times a day; will also add a multivitamin with 400 IU of vitamin D. Will discuss the need for bone mineral density testing on the next visit.
6. **Health Maintenance:** immunization status is unclear, and my office assistant will call the previous doctor to ascertain Pneumovax and flu vaccination; will give tetanus booster today.
7. **Coronary Artery Disease:** no symptoms in years; will get a baseline ECG on the next visit, as none are included in her medical records.

Mrs. Lipton will return for an extended appointment for these assessments in approximately 2 weeks.

SYNTHESIS

Often, at the completion of the initial assessment, your top priority is not making new diagnoses but maximizing the medical management of the conditions that have already been identified. Many of the chronic conditions encountered in older patients have corresponding evidence-based guidelines and will need treatment changes. Certainly, the discovery of a new geriatric syndrome is satisfying and opens doors for new treatment, but clarification of medications and meeting disease-specific standards of care are more common accomplishments of the first visit. Finally, there will be a number of past investigations or specialty medical records that will need to be obtained to complete the patient's records.

At the conclusion of the initial visit, it is important to review your goals for this visit: establishing a relationship with the patient (and family if necessary), fully understanding the priorities of care, and developing a plan for follow-up visits. Ask yourself if these have been met.

ORDERING LABORATORY WORK

There are no evidence-based protocols for deciding appropriate laboratory studies in older patients. What each individual patient requires will depend to a great extent on the laboratory history included in prior medical records and the comorbid conditions that accompany each patient. There are, however, well-described, disease-specific laboratory tests. Finally, there may be symptoms elicited during the review of systems that will trigger studies. Therefore, what is ordered at the time of an initial visit for any given patient is a unique response to these many factors.

ATTENTION TO THE CAREGIVER

Older patients often require the assistance of a caregiver, and that person will often attend clinic visits with your patient. In most cases this is a welcome and important circumstance. Caregivers can often provide important clues to subtle changes or problems with medications. In patients with cognitive impairment, the caregiver is often the source of the most reliable information regarding how well the patient is doing. It is important in these situations to ask the caregiver if they have any questions or concerns.

The more dependent the patient, the more demands are placed on the caregiving setting and, depending on the arrangements, on the individual caregiver. In these situations, the astute clinician will realize the importance of the caregiver to the well-being of the patient and will assess the level of stress and difficulty experienced. The role of caregiving has negative psychological effects and can result in anger, depression, anxiety, and frustration.²⁴ Maintaining caregiver health, therefore, is important to the stability of the care setting in preventing institutionalization. The assessment of the patient, therefore, extends in many cases to the caregiver.

Millie Lipton, Part 9

In Mrs. Lipton's family situation, her daughter has employment responsibilities during the day that limit her ability to be with Mrs. Lipton full-time. There will come a time during Mrs. Lipton's Alzheimer's disease when she should not be alone. There are several ways of handling this situation, but closer observation of Mrs. Lipton will most likely be needed in the future. A discussion with the daughter about this issue at a subsequent visit should occur soon. You note this issue in your problem list as number 8, planning for caregiving as the disease progresses.

USE OF THE HEALTH CARE TEAM

Geriatrics by its very nature is multidisciplinary, and good geriatric care is team care. Your clinic nursing staff will play a critical role in collecting and assessing patients and their caregivers. Indeed, your office staff will often be the first to alert you to a change in a patient. Other important team members include home health nurses, physical and occupational therapists, and hospice personnel. Communicating with these professionals will enhance the care you provide and will often provide insights from home visits that are not available to you. Medicare benefits are generous for care provided in these areas, and patients often benefit from early intervention. Consultation with one of these disciplines should be obtained if there is a remote chance your patient will benefit from their skill and assessment.

SUBSEQUENT OFFICE VISITS

It is rare that a new older patient with their multiple medical problems and medication issues will not need some kind of follow-up soon after their first visit to establish care. For this reason it is important to have a scheduling system that takes that into account. This complexity also requires a way to capture the complete synthesis generated on a first visit for use on subsequent visits. Accurate problem lists and medication lists are essential. EMRs excel in this regard for a number of reasons. Every prescription ever written can be easily tracked. Problem lists and medication lists can be added to each clinical encounter. Relevant past medical and social history can be reviewed and added at a click of a button. Past clinical assessments are instantly available and, if done with a comprehensive approach, will make the follow-up visit seamless.

In beginning a subsequent office visit, it is best to prepare by looking at the prior note for recommendations about follow-up and, when beginning the interview, inquire if the patient has any issues that he or she wishes to discuss to be sure agenda items are addressed. Finally, a brief review of the entire problem list and health maintenance activities will often yield additional items that need attention.

Millie Lipton, Part 10

While awaiting her next appointment with you, Millie Lipton falls in her new apartment and sustains a displaced femoral neck fracture. She is admitted to the orthopedic service in your hospital and undergoes a hemiarthroplasty. Her postoperative course is complicated by a delirium for several

days and a urinary tract infection associated with foley catheter placement. On the seventh day, her mental status is improved and she is transferred to the rehabilitation center in your hospital. She spends a total of 4 weeks there and is now ambulatory with a rolling walker and ready for discharge. Her daughter is concerned about her mother living alone during much of the day at the time of discharge, and she leaves a phone message for you to call her about these concerns. The daughter has investigated a local assisted-living facility and wonders if you think that is a good idea. Mrs. Lipton's physical and occupational therapy will continue through home health at the assisted-living facility.

Although you were aware that Mrs. Lipton was admitted for her hip fracture and subsequently transferred to the rehabilitation center, you are not aware of the details of her hospitalization and subsequent rehabilitation stay. Her daughter provides the name of the physician (Dr. Wilson) caring for Mrs. Lipton in the rehabilitation center, and you begin the task of obtaining the hospital discharge summaries and initiating an attempt to contact Dr. Wilson about this patient's current status. Dr. Wilson faxes the rehabilitation discharge summary to your office. An extended hospital discharge follow-up appointment is scheduled with you in your office the day after she is discharged.

Mrs. Lipton arrives with her daughter in your office several days later. She is ambulating with a rolling walker. Vital signs are as follows: temperature 97°F, blood pressure 98/70 mm Hg, pulse 88, respirations 16, and weight 112 pounds. The patient appears to be unfamiliar with your office and does not remember her previous visit. The medication list from the assisted-living facility includes the following: multivitamin daily, amlodipine 5 mg PO daily, pravastatin 20 mg hs, and aspirin 81 mg PO daily. You note that she is not on donepezil or any calcium or vitamin D supplementation.

STUDY QUESTIONS

Mrs. Lipton's clinical situation has changed considerably and has become much more complex. It is clear that she will require extensive re-evaluation and very close follow-up. What would you recommend be done regarding these new and ongoing issues:

1. Mental status (should medications for Alzheimer's disease be restarted?)
2. Weight loss and related nutrition
3. Goals of home health physical and occupational therapy
4. Blood pressure management (Should her medications be cut back? What laboratory work should be requested?)
5. Lipid management (Does she need it given her weight loss?)
6. Advanced directives (What are her expectations?)
7. Osteoporosis (Should she be evaluated and/or treated?)

TRANSITIONAL CARE USE BY OLDER PATIENTS

In the later years of life, the majority of older patients experience care at multiple sites and situations as their medical conditions become more numerous and complex.²⁵ Use of assisted-living facilities, nursing homes, inpatient rehabilitation centers, and home health are examples of common sites in the continuum of care. Transitional care is defined “as a set of actions designed to ensure the coordination and continuity of health care as patients transfer between locations or different levels of care within the same location.”²⁶ Changes in the needs of patients drive the use of these different levels of care, and each site has distinct goals and objectives. Because transitions are associated with a number of identified problems, recommendations have been developed to improve the quality of care during this time (Box 4-9). It is

Box 4-9 Recommendations to Improve the Quality of Transitional Care

1. Clinical professionals must prepare patients and their caregivers to receive care in the next setting and actively involve them in decisions related to the formulation and execution of the transitional care plan.
2. Bidirectional communication between clinical professionals is essential to ensuring high-quality transitional care.
3. Policies should be developed that promote high-quality transitional care.
4. Education in transitional care should be provided to all health care professionals involved in the transfer of patients across settings.

From Coleman EA, Boulton C. The American Geriatric Society Health Care Systems Committee. Improving the quality of transitional care for persons with complex care needs. *J Am Geriatr Soc* 51:556-557, 2003.

important that the primary care provider be aware of the uses of these care sites as they occur, the circumstances that precipitated their use, and the associated medical changes.

- Changes in the site of care for older patients often signals significant changes in health or function. At such times, it is important to understand the issues that precipitated the change and to modify goals and objectives of care.

A transitional care follow-up visit is generally complex and tends to require extensive time and a comprehensive approach, much like a new patient visit. Different levels of care (e.g., hospital, rehabilitation center, home care) all have different goals and objectives for care and associated complexity. Communication between providers at and across each level is critical.

- Transitional care follow-up is often very complex. Patients will need to be assessed and reassessed as they move from one care site to another.

Millie Lipton: Case Discussion

This case illustrates a number of important issues and problems in caring for older patients when transferred between care settings. There is a continued need for ongoing assessment and reassessment to look for the development of new problems and changes in old ones. In addition to the identified problems during the first visit (early Alzheimer's disease, hypertension, and possible osteoporosis), several new problems have developed related to a single event, her hip fracture. As is typically the case in older patients, many of these problems are interrelated. The patient experienced an acute delirium postoperatively, no doubt predisposed to by her suspected dementia and a subsequent urinary tract infection from a foley catheter. Her weight loss reflects poor oral intake over a considerable period of time, as she is now 6 weeks after the fracture. Nutrition is, thus, a new problem, and an evaluation and intervention plan is needed. Her blood pressure is low, perhaps related to her weight loss and poor oral intake; so her blood pressure medication should probably be stopped. With the known gastrointestinal side effects of nausea and diarrhea associated with donepezil, should restarting this medication be delayed until better weight gain is established?

Her hip fracture, advanced age, female sex, and low weight make osteoporosis likely. She is not on adequate oral calcium or vitamin D, and she will most likely require a bisphosphonate. Because you estimate her life expectancy to be at least 4 years and she continues to be ambulatory, bone mineral density testing should probably be done to establish a baseline. Finally, the hip fracture is a considerable functional setback, and you will need to assess her carefully, and on an ongoing basis, for pain and function. Physical and occupational therapy need to continue and be monitored to ensure that she reaches, and you learn what is, her maximal benefit.

ASSESSMENT IN THE HOME, HOSPITAL, AND NURSING HOME

While patients seen in the hospital, nursing home, or at home have unique care settings with very different characteristics, assessment of the same five domains of care is required. Often, one aspect of patient care will take priority at times, but the other domains require monitoring and may deteriorate without careful attention.

Such is the case with hospital care. It is often precipitated by an acute serious medical problem that rightly consumes considerable attention. Worsening congestive heart failure, pneumonia, falls with fractures, or chronic obstructive pulmonary disease (COPD) exacerbation are all good examples. However, hospital admissions with these types of problems are often associated with functional decline and medication changes that require their own interventions and monitoring, and comorbid conditions cannot be forgotten. Good care requires a comprehensive understanding of the patient's characteristics in each of the five domains of care before admission and then carefully following each domain's special problems. Discharge planning begins on the day of admission.

Most nursing home admissions are transfers from acute care hospitals, and the issues discussed earlier are often transferred to this setting for identification, assessment, and treatment. For example, approximately one-quarter of all transfers to nursing homes from hospitals are associated with a change in mental status and will need to be followed and addressed.²⁷ A comprehensive assessment involving the five domains is again essential: mental health, physical health, functional abilities, social supports, and economic resources.

Unlike hospitals and nursing homes, which tend to have standardized staff and procedures, home care is always unique. Often the patient is surrounded by concerned and attentive family, and home is the envi-

ronment that the patient prefers. But in addition to careful coordination with home health care professionals, the primary care provider needs to instruct and encourage the family caregivers. Often these family members lack basic patient assessment skills. Realistic expectations need to be given to the family in terms of what can be accomplished at home, especially if there is an acute medical change.

An irony of these different levels in the continuum of care—nursing homes, hospitals, and home care—is that you will often find the same kind of patient at each level. Many times these patients will have different expectations regarding the availability or desire for aggressive diagnostic procedures or treatment, *but the basic assessment skills required of the clinician are the same.* Careful adaptation of treatment decisions to the care environment and optimization of care is different in each setting.

● Regardless of the care setting, the same basic geriatric assessment skills are required to provide optimal care.

SUMMARY

Assessment of an older patient is a complex and often challenging experience. By focusing on limited goals for this first visit, using standard geriatric principles and excellent medical record-keeping, having a logical approach to the patient, and remaining flexible, both the patient and the health care provider can come away from this first encounter with a feeling of satisfaction and confidence that the goals of this initial visit have been met. Subsequent encounters will need to build on this experience, following the priorities outlined in previous visits, using an evidence-based, problem-oriented approach and being attentive to new problems and events that affect one or several of the five domains of care. Patients transitioning through different levels in the continuum of care require constant assessment and reassessment.

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POSTTEST

1. You are assessing a new patient's functional status. Which item below is *not* an activity of daily living?
 - a. Eating
 - b. Grooming
 - c. Using the phone
 - d. Dressing
 - e. Ambulation
2. An 81-year-old new patient presents with objective memory complaints, and trouble handling financial matters and has gotten lost driving in his hometown. He has a college education. You perform an MMSE with a score of 27/30. To better evaluate this patient's mental status, the appropriate thing to do is
 - a. Perform a clock test
 - b. Perform a set test
 - c. Refer for formal neuropsychological testing
 - d. Repeat the MMSE next visit
3. Functional assessment plays a central role in caring for older patients because of which one?
 - a. Functional changes are common and are often the final common pathway for many illnesses
 - b. Functional changes may be the presenting symptom of a new medical problem
 - c. Functional loss helps to set priorities for assessment and care
 - d. Functional loss should trigger the immediate use of other health care disciplines for therapeutic interventions to restore function
 - e. All of the above
4. In people 80 years or older, which condition listed below is the most common?
 - a. Urinary incontinence
 - b. Degenerative joint disease
 - c. Diabetes mellitus
 - d. Coronary artery disease
 - e. Alzheimer's disease
5. The term *geriatric syndrome* refers to all of the following conditions *except*:
 - a. Urinary incontinence
 - b. BPH
 - c. Falls
 - d. Mental status changes
 - e. Weight loss
6. Reasonable goals for the initial office evaluation of an older patient include all of the following *except*:
 - a. Performing a complete physical examination
 - b. Medication review
 - c. Functional assessment
 - d. Establishing a relationship with the patient
 - e. Determining priorities of care
7. Aspects of disease presentation that are characteristic of older patients include all of the following *except*:
 - a. Multiple medical conditions that often interact
 - b. Related more to "hidden" effects than medication effects
 - c. Vague, ill-defined presenting symptoms rather than traditional symptoms for specific diseases
 - d. The common presentation of a "geriatric syndrome" representing a specific new medical problem
 - e. The presence of diseases almost unique to elders
8. Among the patient-related symptoms listed below, early cognitive impairment from Alzheimer's disease is most likely to become apparent to health care providers by
 - a. Medication errors
 - b. Difficulty with bathing
 - c. Frequent complaints about memory
 - d. Urinary incontinence
 - e. Difficulty with details of their remote medical history

PRETEST ANSWERS

1. d
2. e
3. d

POSTTEST ANSWERS

1. c
2. c
3. e
4. b
5. b
6. a
7. b
8. a