

Appendix Table. Home-Based Primary Care Quality Indicator Set*

Constipation

Initial evaluation	ALL homebound patients should have documentation of the presence or absence of constipation during the initial evaluation.
Routine evaluation	ALL homebound patients should be assessed for constipation every 60 days.
New constipation	IF a homebound patient complains of new-onset constipation, THEN physical examination should include a digital rectal examination. IF a homebound patient complains of constipation, THEN a targeted history should be obtained that documents each of the following: 1) patient's description of constipation symptoms, 2) presence or absence of prolonged and excessive straining before elimination, and 3) results of previous treatments for constipation.
Medication review	IF a homebound patient has symptoms of constipation that correspond in time with the initiation of new medications, THEN the physician should discontinue or justify the necessity of continuing these medications.
Further testing	IF a homebound patient has new constipation, THEN common conditions that cause constipation, including hypothyroidism and electrolyte disturbances, should be ruled out on the basis of clinical or laboratory findings.
First-line treatment	IF a homebound patient has constipation, THEN the first-line treatment should include increased fiber intake (dietary and/or psyllium) and increased fluid intake unless contraindicated.
Second-line treatment	IF a homebound patient has constipation that does not respond to fiber or fluid intake, THEN lactulose, polyethylene glycol, or a short trial of a stimulant (senna or bisacodyl) should be tried sequentially until improvement is documented.
Disimpaction	IF a homebound patient is found to have impacted stool on digital rectal examination, THEN manual disimpaction should be performed, followed by enemas or suppositories as needed.

Continuity and coordination of care

Identify source of care	ALL homebound patients and/or the caregiver should be able to identify a provider or a clinic that they would call when in need of medical care or should know the telephone number or other mechanism by which they can reach this source of care.
Medication follow-up	IF a homebound patient is started on a new prescription medication and he or she has a follow-up visit with the prescribing physician, THEN the medical record at the follow-up visit should document one of the following: 1) that the medication is being taken, 2) that the physician asked about the medication (for example, side effects, adherence, or availability), or 3) that the medication was not started because it was not needed or was changed.
Medication continuity between physicians	IF a homebound patient is under the outpatient care of 2 or more physicians, and 1 physician has prescribed a new prescription medication or a change in medication (medication termination or change in dosage), THEN subsequent medical record entries by the nonprescribing physician should acknowledge the medication change.
Reason for consultation	IF a homebound patient is referred to a consultant physician, THEN the reason for consultation should be documented in the consultant's note.
Document consultant recommendations	IF a homebound patient is referred to a consultant and subsequently visits the referring physician after the visit with the consultant, THEN the referring physician's follow-up note should document the consultant's recommendations, or the medical record should include the consultant's note, within 6 weeks or at the time of the follow-up visit, whichever is later.
Diagnostic test follow-up	IF the outpatient medical record documents that a diagnostic test was ordered for a homebound patient, THEN the medical record at the follow-up visit should document one of the following: 1) the result of the test, 2) that the test was not needed or the reason why it will not be performed, or 3) that the test is still pending.
Hospital admission	IF a homebound patient is admitted to the hospital or brought to the emergency department, THEN the home care primary care physician should contact the emergency department or the hospital-admitting teams to communicate pertinent clinical information.
Medication continuity after hospitalization	IF a homebound patient is discharged from a hospital to home and he or she received a new prescription medication or a change in medication (medication termination or change in dosage) before discharge, THEN the outpatient medical record should acknowledge the medication change within 4 weeks of discharge.
Continuity of test results between care venues	IF a homebound patient is discharged from a hospital to home and the transfer form or discharge summary indicates that a test result is pending, THEN the outpatient record should include the test result within 6 weeks of hospital discharge.
Posthospitalization follow-up appointment	IF a homebound patient is discharged from a hospital to home and the hospital medical record specifies a follow-up appointment for a physician visit or a treatment (for example, physical therapy or radiation oncology), THEN the medical record should document that the visit or treatment took place or that it was postponed or was not needed.
Hospital follow-up within 4 weeks	IF a homebound patient is discharged from a hospital to home, THEN he or she should have a follow-up visit or documented telephone contact within 4 weeks of discharge AND the physician's medical record documentation should acknowledge the recent hospitalization.
Discharge summary in chart	IF a homebound patient is discharged from a hospital to home, THEN there should be a discharge summary in the outpatient physician medical record within 6 weeks.
Interpreter	IF a homebound patient is deaf or does not speak English, THEN an interpreter or translated materials should be employed to facilitate communication between the homebound patient and the health care provider.
Communication with nursing services	IF a homebound patient has visiting nurse services, THEN the medical record should document contact—telephone call, visit, e-mail, or certification paperwork—with the visiting nurse service at least once during each certification period. IF a homebound patient is referred to a visiting nurse agency, THEN the purpose of the referral should be documented in the chart and communicated to the visiting nurse agency.

Dementia

Cognitive and functional screening	IF a homebound patient is new to a physician practice, THEN within 60 days of initial visit, a multidimensional assessment of cognitive ability and assessment of functional status should be documented.
Medication review	IF a homebound patient presents with symptoms of dementia, THEN the physician should review the patient's medication list for initiation of medications that might correspond chronologically to the onset of dementia symptoms. IF a homebound patient presents with symptoms of new-onset cognitive decline that correspond in time with the initiation of new medications, THEN the physician should discontinue or justify the necessity of continuing these medications.
Laboratory testing	IF a homebound patient has newly diagnosed dementia, THEN serum levels of vitamin B ₁₂ and thyroid-stimulating hormone should be measured.

Appendix Table—Continued

Neuroimaging	IF a homebound patient has signs of dementia and focal neurologic findings that suggest an intracranial process, THEN he or she should be offered neuroimaging (brain computed tomography or magnetic resonance imaging).
Caregiver support and patient safety	IF a homebound patient with dementia has a caregiver (and, if capable, the patient assents), THEN the physician should discuss or refer the patient and caregiver for discussion about patient safety, provide education on how to deal with conflicts at home, and inform them about community resources for dementia.
Stroke prophylaxis	IF a homebound patient with dementia has cerebrovascular disease, THEN he or she should be offered appropriate prophylaxis against stroke unless contraindicated.
Screening for depression	IF a homebound patient has dementia, THEN he or she should be screened for depression during the initial evaluation
Depression treatment	IF a homebound patient with dementia has depression, treatment for the depression should be recommended.
Depression	
Recognizing depression	IF a homebound patient presents with new onset of one of the following symptoms: sad mood, feeling down, insomnia or difficulties with sleep, apathy or loss of interest in pleasurable activities, complaints of memory loss, unexplained weight loss greater than 5% in the past month or 10% over 1 year, or unexplained fatigue or low energy, THEN the patient should be asked about or should be treated for depression or should be referred to a mental health professional within 2 weeks of presentation.
Depression and comorbid disease	IF a homebound patient presents with onset or discovery of one of the following conditions: stroke, myocardial infarction, dementia, malignancy (excluding skin cancer), chronic pain, alcohol or substance abuse or dependence, anxiety disorder, or personality disorder, THEN the patient should be asked about and/or should be offered treatment for depression.
Evaluate for pathologic grief	IF a homebound patient reports severe grief continuing more than 2 months after the loss of a spouse or an important relationship, THEN the patient should be asked about depression, should be treated for depression, or should be referred to a mental health professional at the time of the report.
Referral for psychotic depression	IF a homebound patient has depression with psychotic features, THEN the patient should be referred to a psychiatrist and/or should receive treatment with a combination of an antidepressant and an antipsychotic medication or with electroconvulsive therapy.
Documenting depression symptoms	IF a homebound patient receives a diagnosis of a new depression episode, THEN the medical record should document at least three of the nine DSM-IV target symptoms for major depression at the time of diagnosis.
Evaluate thyroid	IF a homebound patient receives a diagnosis of a new depression episode, THEN the medical record should document testing for hypothyroidism (using a thyroid-stimulating hormone level) within 1 month after or 3 months before the diagnosis.
Suicidality	IF a homebound patient receives a diagnosis of a new depression episode, THEN the medical record should document on the day of diagnosis the presence or absence of suicidal ideation and psychosis (consisting of, at a minimum, auditory hallucinations or delusions).
Depression treatment	IF a homebound patient has thoughts of suicide, THEN the medical record should document, on the same date, that the patient either has no immediate plan for suicide or was referred for evaluation for psychiatric hospitalization.
Choice of antidepressant	IF a homebound patient is diagnosed with depression, THEN antidepressant treatment, psychotherapy, or electroconvulsive therapy should be offered within 2 weeks after diagnosis unless there is documentation within that period that the patient has improved or unless the patient has substance abuse or dependence, in which case treatment may wait until 8 weeks after the patient is in a drug- or alcohol-free state.
Psychotic or vegetative depression	IF a homebound patient is started on an antidepressant medication, THEN the following medications should not be used as first- or second-line therapy: tertiary amine tricyclics, MAOIs (unless atypical depression is present), benzodiazepines, or stimulants (except methylphenidate).
Electrocardiogram with tricyclic use	IF a homebound patient has depression with psychotic features (for example, auditory hallucinations, delusions) or has melancholic or vegetative depression with pervasive anhedonia, unreactive mood, psychomotor disturbances, severe terminal insomnia, and weight and appetite loss, THEN he or she should not be treated with psychotherapy alone, unless he or she is unable or unwilling to take medication.
Monitoring suicide risk	IF a homebound patient with a history of cardiac disease is started on a tricyclic antidepressant, THEN a baseline electrocardiogram should be obtained before initiation of or within 3 months after treatment.
Follow-up of treatment	IF a homebound patient is being treated for depression, THEN at each treatment visit, suicide risk should be documented if he or she had suicidal ideation during a previous visit.
	IF a homebound patient is being treated for depression with antidepressants, THEN the antidepressants should be prescribed at appropriate starting doses, and they should have an appropriate titration schedule to a therapeutic dose, therapeutic blood level, or remission of symptoms by 12 weeks.
	IF a homebound patient has no meaningful symptom response after 6 weeks of treatment, THEN one of the following treatment options should be initiated by the 8th week of treatment: medication dose should be optimized or the patient should be referred to a psychiatrist (if initial treatment was medication), or medication should be initiated or referral to a psychiatrist should be offered (if initial treatment was psychotherapy alone).
	IF a homebound patient responds only partially after 12 weeks of treatment, THEN one of the following treatment options should be instituted by the 16th week of treatment: maximize the dose of the selected medication, switch to a different medication class or add a second medication to the first (if initial treatment includes medication), add psychotherapy (if the initial treatment was medication), try medication (if initial treatment was psychotherapy without medication), consider electroconvulsive therapy, or refer to a psychiatrist.

Appendix Table—Continued

Continuing antidepressant therapy IF a homebound patient has responded to antidepressant medication, THEN he or she should be continued on the drug at the same dose for at least 6 months and should make at least one clinician contact (home visit or telephone) during that time period.
 IF a homebound patient has experienced three or more episodes of depression, THEN the patient should receive maintenance antidepressant medication for at least 36 months.

Diabetes

Glycated hemoglobin level measurement IF a homebound patient has diabetes, THEN measurement of his or her glycated hemoglobin level should be offered at least every 6 months.

Improving glycemic control IF a homebound patient has an elevated glycated hemoglobin level, THEN he or she should be offered a therapeutic intervention aimed at improving glycemic control within 1 month if the glycated hemoglobin level is 9.0% or greater.

Examine feet IF a homebound elder has diabetes, THEN his or her feet should be examined by the primary care provider at every visit.

Proteinuria screening IF a diabetic homebound patient does not have established renal disease and is not receiving an ACE inhibitor or ACE receptor blocker, THEN an annual test for proteinuria should be offered.

Treatment of proteinuria IF a diabetic homebound patient has proteinuria, THEN he or she should be offered therapy with an ACE inhibitor.

Regular blood pressure measurement IF a homebound patient has diabetes, THEN his or her blood pressure should be checked at each home visit.

Intervene for glucose level >300 mg/dL IF a homebound patient has a glucose level greater than 300 mg/dL, THEN specific therapeutic intervention aimed at glycemic control should be initiated within 2 weeks or care goals or other records should indicate why this is not appropriate.

Diabetic education IF a diabetic homebound patient has a glycated hemoglobin level of 10% or greater, THEN he or she should be offered diabetic education, either by his or her primary care physician or through referral, at least annually.

Blood pressure control IF a diabetic homebound patient has elevated blood pressure, THEN he or she should be offered a therapeutic intervention to lower blood pressure within 1 month if blood pressure is greater than 140/90 mm Hg.

Aspirin therapy ALL diabetic homebound patients who are not on other anticoagulant therapy should be offered daily aspirin therapy unless contraindicated.

Lipid treatment IF a diabetic homebound patient has a fasting total cholesterol level of 240 g/dL or greater, THEN he or she should be offered an intervention to lower cholesterol level.

Routine eye examination IF a diabetic homebound patient is not blind, THEN he or she should be offered an annual dilated eye examination performed by an ophthalmologist, an optometrist, or a diabetes specialist.

End-of-life care

Advance directives and surrogates ALL homebound patients should have in their outpatient chart one of the following: 1) an advance directive indicating the patient's surrogate decisionmaker, 2) documentation of a discussion about who would be a surrogate decisionmaker or a search for a surrogate, or 3) indication that there is no identified surrogate.
 IF a homebound patient with dementia, coma, or altered mental status is admitted to the hospital and survives 48 hours, THEN the outpatient medical record should document that the following information was communicated to the inpatient care team within 48 hours of admission: 1) advance directives indicating the patient's surrogate decisionmaker, 2) who could be a surrogate decisionmaker, or 3) there is no identified possible surrogate.

Documentation of care preferences IF a homebound patient with severe dementia, coma, or altered mental status is admitted to the hospital and survives 48 hours, THEN the outpatient medical record should document that the patient's prior preferences for care were communicated to the inpatient care team within 48 hours of admission.
 IF a homebound patient is admitted directly to the intensive care unit (from the outpatient setting or emergency department) and survives 48 hours, THEN the outpatient medical record should document that the patient's prior preferences for care were communicated to the inpatient care team within 48 hours of admission.

Preferences about future health states IF a homebound patient indicates (during an interview) that he or she would rather die than live permanently comatose, ventilated, or tube-fed, THEN 1) the chart should document a discussion of life-sustaining treatment preferences, 2) the chart should contain an advance directive, or 3) the patient should indicate (during the interview) that he or she discussed this topic with the physician or does not wish to discuss this.

Advance directive continuity IF a homebound patient has an advance directive in the outpatient, inpatient, or nursing home medical record or the patient reports the existence of an advance directive in an interview, and the patient receives care in a second venue, THEN 1) the advance directive should be present in the medical record at the second venue or 2) documentation should acknowledge its existence, its contents, and the reason that it is not in the medical record.

Life-sustaining care decisions IF a homebound patient with decision-making capacity has orders written in the hospital, home, or nursing home to withhold or withdraw a particular treatment (for example, a do-not-resuscitate order), THEN the medical record should document 1) patient participation in the decision or 2) why the patient did not participate in the decision.

Care consistency with preferences IF a homebound patient has specific treatment preferences (for example, a do-not-resuscitate order, no tube feeding, or no hospital transfer) documented in a medical record, THEN these treatment preferences should be followed.

Mechanical ventilator withdrawal IF a noncomatose, homebound patient is not expected to survive and a mechanical ventilator is withdrawn or intubation is withheld, THEN the patient should receive or have orders for an opiate or benzodiazepine or barbiturate infusion to reduce dyspnea, and the chart should document whether the patient has dyspnea.

Care of the dying patient

Dyspnea treatment IF a dying homebound patient had dyspnea, THEN the chart should document how the dyspnea was treated and follow-up should be documented about the dyspnea.

Pain treatment IF a dying homebound patient was conscious, THEN the medical record should contain documentation about pain or lack of pain during the last 3 days of life.

Appendix Table—Continued

Spirituality	IF a dying homebound patient was conscious, THEN the medical record should contain documentation that emotional and/or spiritual suffering was addressed.
Hospice	IF a homebound patient has a terminal illness for which comfort is the stated goal of care, THEN the medical record should document an offer of referral to a hospice program.
Caregiver burden	IF a homebound patient dies at home, THEN assessment of caregiver burden should be documented.
Falls	
Asking about falls	ALL homebound patients who are not completely confined to a bed should have documentation that they were asked at every visit about the occurrence of recent falls.
Detecting balance and gait disturbances	ALL ambulatory homebound patients should have documentation that they were asked about or were examined for the presence of balance or gait disturbances annually.
Basic fall evaluation	IF a homebound patient reported one fall in the past year, THEN there should be documentation that a basic fall evaluation was performed that resulted in specific diagnostic and therapeutic recommendations.
Gait-mobility and balance evaluation	IF a homebound patient reports or is found to have new or worsening difficulty with ambulation, balance, or mobility, THEN there should be documentation that a basic gait, mobility, and balance evaluation was performed within 1 month that resulted in specific diagnostic and therapeutic recommendations.
Exercise and assistive device prescription	IF a homebound patient demonstrates decreased balance or proprioception, or increased postural sway, THEN an appropriate exercise program should be offered and an evaluation for an assistive device should be performed. IF a homebound patient is found to have problems with gait, strength (for example, ≤ 4 out of 5 on manual muscle testing, or the need to use his or her arms to rise from a chair), or endurance (for example, dyspnea on mild exertion), THEN an exercise program should be offered.
Hearing loss	
Screening for hearing loss	ALL homebound patients should have a documented hearing assessment as part of the initial evaluation.
Formal audiologic evaluation	IF an initial hearing assessment of a homebound patient indicates hearing impairment, the etiology of which cannot be determined by the visiting physician, THEN he or she should be offered a formal audiologic evaluation within 3 months.
Ear examination	IF a homebound patient has a hearing problem or fails a hearing screening, THEN he or she should have an ear examination within 3 months.
Referral to audiologist	IF a homebound patient is a hearing aid candidate, THEN he or she should be offered referral to an audiologist within 3 months after audiologic examination.
Heart failure	
ACE inhibitor use	IF a homebound patient has asymptomatic left ventricular dysfunction with a left ventricular ejection fraction of 40% or less, THEN an ACE inhibitor should be offered. IF a homebound patient has symptomatic heart failure and left ventricular ejection fraction of 40% or less, THEN he or she should be offered treatment with an ACE inhibitor.
Medical history	IF a homebound patient has newly diagnosed heart failure, THEN a history should be taken at the time of diagnosis and hospitalization to document the presence or absence of previous myocardial infarction; coronary artery disease; revascularization; current symptoms of chest pain or angina; history of hypertension, diabetes, hypercholesterolemia, valvular heart disease, or thyroid disease; smoking status; current medications; and functional capacity (for example, New York Heart Association functional status).
Physical examination	IF a homebound patient has newly diagnosed heart failure, THEN the following physical examination findings should be documented at presentation: body weight (if able to stand); blood pressure; heart rate; and results of lung, cardiac, and abdominal or lower-extremity examination.
Diagnostic testing	IF a homebound patient has newly diagnosed heart failure, THEN the following studies should be recommended and completed within 1 month of diagnosis in patients with heart failure (unless the tests were performed within the previous 3 months): chest radiography; electrocardiography; complete blood count; and measurement of serum sodium and potassium, serum creatinine, and thyroid-stimulating hormone levels (in patients with atrial fibrillation or heart failure of no obvious etiology).
Patient education	IF a homebound patient has newly diagnosed heart failure, THEN education about disease management should be provided and documented.
Evaluation of ejection fraction	IF a homebound patient has newly diagnosed heart failure, THEN evaluation of left ventricular ejection fraction within 1 month should be recommended.
β -Blocker use	IF a homebound patient has heart failure, left ventricular ejection fraction of 40% or less, and New York Heart Association class I to III disease, THEN a β -blocker should be offered unless the patient has a documented contraindication (for example, uncompensated heart failure).
Calcium-channel blocker use	IF a homebound patient has heart failure, left ventricular ejection fraction of 40% or less, and no atrial fibrillation, THEN from among the three generations of calcium-channel blocker medications, he or she should not be treated with a first- or second-generation calcium-channel blocker.
Digoxin monitoring	IF a homebound patient with heart failure is treated with digoxin, THEN the digoxin level should be checked within 1 week of initiation or dosing change. IF a homebound patient with heart failure is treated with digoxin, THEN the digoxin level should be checked within 1 week if signs of toxicity develop.
Atrial fibrillation	IF a homebound patient has heart failure and atrial fibrillation, THEN anticoagulation should be offered to achieve an INR of 2.0 to 3.0. IF a homebound patient has heart failure and atrial fibrillation AND documented contraindications to anticoagulation, THEN aspirin should be offered.
Follow-up after heart failure hospitalization	IF a homebound patient returns to the home after hospitalization for heart failure, THEN he or she should have follow-up that includes weight measurement (if able to stand) within 7 days after hospital discharge.

Appendix Table—Continued

Hypertension

Cardiovascular risk documentation	IF a homebound patient is newly diagnosed with hypertension, THEN there should be documentation regarding the presence or absence of other cardiovascular risk factors.
Ascertaining the hypertension diagnosis	IF a homebound patient is diagnosed with hypertension and has a blood pressure below 160/100 mm Hg, THEN there should be evidence that two or more blood pressure measurements of 140/90 mm Hg or greater were obtained before diagnosis.
Physical examination	IF a homebound patient is diagnosed with new hypertension, THEN a physical examination within 4 weeks of the diagnosis should include a fundoscopic eye examination, a lung examination, a cardiac examination (including an examination of pulses), an abdominal examination (including assessment for bruits), and an extremity examination.
Pharmacologic management	IF a homebound patient remains hypertensive after nonpharmacologic intervention, THEN pharmacologic antihypertensive treatment should be initiated. IF a homebound patient requires pharmacotherapy for treatment of hypertension in the outpatient setting, THEN a once- or twice-daily medication should be used unless there is documentation regarding the need for agents that require more frequent dosing. IF a homebound patient has hypertension and has renal parenchymal disease with a serum creatinine concentration greater than 1.5 mg/dL or more than 1 g of protein/24 h of collected urine, THEN therapy with an ACE inhibitor should be offered. IF a homebound patient is diagnosed with hypertension and pharmacologic intervention is initiated, THEN follow-up blood pressure checks should occur every 2 weeks until blood pressure control ($\leq 140/90$ mm Hg) is achieved. IF a homebound patient with hypertension is treated with pharmacologic therapy and has achieved blood pressure control goal, THEN follow-up blood pressure checks should occur at least every 3 months.

Insomnia

Initial evaluation	ALL homebound patients should be evaluated for insomnia during an initial evaluation. IF a homebound patient complains of insomnia, THEN a chart review and a targeted history should be completed to identify and treat common comorbid conditions associated with insomnia, such as medication use, depression, substance abuse, poor sleep hygiene, caffeine, chronic pain, cardiopulmonary disease, and/or obstructive sleep apnea.
Self-medication	IF a homebound patient has symptoms of insomnia, THEN the primary care physician should assess for self-medication with alcohol or over-the-counter antihistamines and recommend discontinuation or avoidance of these agents.
Nonpharmacologic therapy	IF a homebound patient has insomnia, THEN first-line therapy should be nonpharmacologic and should start with behavioral or cognitive-behavioral therapy.
Medication therapy	IF a homebound patient has insomnia requiring medication, THEN the use of long-acting benzodiazepines should be avoided.

Ischemic heart disease

Early aspirin therapy	IF a homebound patient has symptoms of acute myocardial infarction or unstable angina, THEN he or she should be given aspirin therapy within 1 hour of presentation.
Cholesterol level evaluation	IF a homebound patient has established coronary heart disease and his or her cholesterol level is not known, THEN he or she should be offered a fasting cholesterol evaluation, including total, LDL, and HDL cholesterol levels.
Antiplatelet therapy	IF a homebound patient has established coronary heart disease and is not receiving warfarin, THEN he or she should be offered antiplatelet therapy.
Smoking cessation	IF a homebound patient with established coronary heart disease smokes, THEN he or she should be offered counseling for smoking cessation at every visit and have this offer documented in the medical record.
β -Blocker therapy	IF a homebound patient has had an acute myocardial infarction, THEN he or she should be offered a β -blocker.
Myocardial infarction transfer to the hospital	IF a homebound patient has an acute myocardial infarction by electrocardiography and does not have a do-not-hospitalize or do-not-resuscitate order, THEN he or she should be transferred to the hospital or the record should document why this is not indicated.

Malnutrition

Document weight loss	IF a homebound patient has involuntary weight loss of greater than or equal to 10% of body weight over 1 year or less, THEN weight loss (or a related disorder) should be documented in the medical record.
Evaluate weight loss and hypoalbuminemia	IF a homebound patient has documented involuntary weight loss or hypoalbuminemia (< 3.5 g/dL), THEN he or she should receive an evaluation for potentially reversible causes of poor nutritional intake.
Evaluate comorbid conditions	IF a homebound patient has documented involuntary weight loss or hypoalbuminemia (< 3.5 g/dL), THEN he or she should receive an evaluation for potentially relevant comorbid conditions, including medications that might be associated with decreased appetite (for example, digoxin, fluoxetine, anticholinergics), depressive symptoms, and cognitive impairment.

Medication use

Drug indication	IF a homebound patient is prescribed a new drug, THEN the prescribed drug should have a clearly defined indication documented in the record.
Patient education	IF a homebound patient is prescribed a new drug, THEN the patient (or, if incapable, a caregiver) should receive education about the purpose of the drug, how to take it, and the expected side effects or important adverse reactions.
Medication list	For ALL homebound patients, primary care physicians' outpatient medical records should contain an up-to-date medication list.
Response to therapy	EVERY new drug that is prescribed to a homebound patient on an ongoing basis for a chronic medical condition should have documentation of the response to therapy within 6 months.
Periodic drug regimen review	ALL homebound patients should have a drug regimen review at least every 6 months.
Monitoring of warfarin therapy	IF a homebound patient is prescribed warfarin, THEN an INR should be determined within 4 days after initiation of therapy and at least every 6 weeks.
Monitoring of diuretic therapy	IF a homebound patient is prescribed a thiazide or loop diuretic, THEN he or she should have electrolytes checked within 1 week of initiating therapy and every 6 months.

Appendix Table—Continued

Oral hypoglycemic medication	IF a homebound patient is prescribed an oral hypoglycemia drug, THEN chlorpropamide should not be used.
Anticholinergic medications	ALL homebound patients should not be prescribed a medication with strong anticholinergic effects if alternatives are available.
Barbiturates	IF a homebound patient needs control of seizures, THEN barbiturates should not be used.
Opioid analgesic	IF a homebound patient requires analgesia, THEN meperidine should not be used.
Osteoarthritis	
Assessment of pain and functional status	IF a homebound patient is diagnosed with symptomatic osteoarthritis, THEN his or her functional status and the degree of pain should be assessed at each visit.
Aspiration of hot joints	IF a homebound patient has monoarticular joint pain associated with redness, warmth, or swelling AND the patient also has an oral temperature greater than 38.0 °C and does not have a previously established diagnosis of pseudogout or gout, THEN diagnostic aspiration of the painfully swollen, red joint should be performed that day.
Exercise therapy	IF an ambulatory homebound patient is newly diagnosed with osteoarthritis of the knee, has no contraindication to exercise, and is physically and mentally able to exercise, THEN a directed or supervised strengthening or aerobic exercise program should be prescribed within 3 months of diagnosis. IF an ambulatory homebound patient has had a diagnosis of symptomatic osteoarthritis of the knee for longer than 12 months and is physically and mentally able to exercise, THEN there should be evidence that a physical therapy evaluation for focused strengthening exercises was prescribed at least once since the time of diagnosis.
First-line pharmacologic therapy	IF oral pharmacologic therapy is initiated to treat osteoarthritis in a homebound patient, THEN acetaminophen should be the first drug used, unless there is a documented contraindication to use. IF oral pharmacologic therapy for osteoarthritis in a homebound patient is changed from acetaminophen to a different oral agent, THEN there should be evidence that the patient has had a trial of maximum-dose acetaminophen (suitable for age and comorbid conditions).
NSAIDs	IF a patient is treated with a COX-nonspecific NSAID, THEN there should be evidence that the patient was advised of the risk for gastrointestinal bleeding, as well as cardiovascular risk associated with these drugs.
Osteoporosis	
Prevention	ALL homebound patients should be counseled at least once regarding intake of dietary calcium and vitamin D and weight-bearing exercises.
Identifying secondary osteoporosis	IF a homebound patient has a new diagnosis of osteoporosis, THEN during the initial evaluation period, an underlying cause of osteoporosis should be sought by checking medication use and current alcohol use.
Calcium and vitamin D for osteoporosis	IF a homebound patient has osteoporosis, THEN use of calcium and vitamin D supplements should be recommended at least once.
Calcium and vitamin D with corticosteroid use	IF a homebound patient is taking corticosteroids for more than 1 month, THEN the patient should be offered calcium and vitamin D.
Treatment of osteoporosis	IF a female homebound patient is newly diagnosed with osteoporosis, THEN the patient should be offered treatment with bisphosphonates within 3 months of diagnosis.
Mobilization	IF a homebound patient is bedfast, THEN mobilization should be attempted unless there is a contraindication.
Pain management	
Screening for pain	ALL homebound patients should be screened for pain at each visit.
Targeted history and physical examination	IF a homebound patient reports a new painful condition, THEN a targeted history and physical examination should be initiated within 1 month.
Constipation with opioid use	IF a homebound patient with chronic pain is treated with opioids, THEN he or she should be offered a bowel regimen, or the medical record should document the potential for constipation or explain why bowel treatment is not needed.
Treating pain	IF a homebound patient has a newly reported chronic painful condition, THEN treatment should be offered.
Reassessment of pain control	IF a homebound patient is treated for a chronic painful condition, THEN he or she should be assessed for a response within 3 months.
Pneumonia and influenza	
Pneumococcal vaccination	IF a homebound patient with no history of allergy to the pneumococcal vaccine is not known to have already received a pneumococcal vaccine or if the patient received it more than 5 years ago (if before age 65 years), THEN a pneumococcal vaccine should be offered.
Influenza vaccination	IF a homebound patient has no history of anaphylactic hypersensitivity to eggs or to other components of the influenza vaccine, THEN the patient should be offered an annual influenza vaccination.
Vaccination rates	IF pneumococcal or influenza vaccination rates among patients of a health delivery organization are low (60% of persons at risk for pneumococcal and influenza disease), THEN methods to increase the rate of vaccination should be used.
Vaccination of health care workers	IF a health care organization cares for homebound patients, THEN it should have a formal plan to offer and encourage influenza vaccination among its employees.
Smoking cessation	IF a homebound patient smoker develops pneumonia, THEN the smoker should be advised to quit smoking.

Appendix Table—Continued

Hospitalized pneumonia	IF a homebound patient with pneumonia has unstable vital signs despite a trial of antibiotic therapy and does not have a do-not-hospitalize order, THEN the patient should be transferred to the hospital or the record should document why that it is not indicated.
Pressure ulcers	
Preventive intervention	IF a homebound patient is identified as at risk for pressure ulcer development or a pressure ulcer risk assessment score indicates that the person is at risk, THEN a preventive intervention addressing repositioning needs and pressure reduction (or management of tissue loads) must be instituted.
Nutritional intervention	IF a homebound patient is identified as at risk for pressure ulcer development and has malnutrition (involuntary weight loss of 10% over 1 year or low albumin or prealbumin levels), THEN nutritional intervention or dietary consultation should be instituted.
Evaluation	IF a homebound patient presents with a pressure ulcer, THEN the pressure ulcer should be assessed for location, depth and stage, size, and presence of necrotic tissue.
Management	IF a homebound patient presents with a clean, full-thickness pressure ulcer and has no improvement after 2 weeks of treatment, THEN the appropriateness of the treatment plan and the presence of cellulitis or osteomyelitis should be assessed. IF a homebound patient presents with a partial-thickness pressure ulcer and has no improvement after 2 weeks of treatment, THEN the appropriateness of the treatment plan should be assessed.
Debridement	IF a homebound patient presents with a full-thickness sacral or trochanteric pressure ulcer covered with necrotic debris or eschar, THEN debridement by using sharp, mechanical, enzymatic, or autolytic procedures should be done within 3 days of diagnosis.
Cleansing	IF a homebound patient has a stage 2 or greater pressure ulcer, THEN topical antiseptics (i.e., hydrogen peroxide, iodine-based solutions) should not be ordered for wound care.
Topical dressings	IF a homebound patient presents with a clean, full-thickness or a partial-thickness pressure ulcer, THEN a moist, wound-healing environment should be provided with topical dressings.
Preventive care	
Geriatric evaluation	ALL homebound patients newly admitted to a physician practice should receive, within 6 months, the elements of a comprehensive geriatric assessment.
Geriatric evaluation follow-up	IF the elements of a comprehensive geriatric assessment are performed, THEN follow-up should assure the implementation of recommendations.
Alcohol screening	ALL homebound patients should be screened at least once to detect problem and/or hazardous drinking by taking a history of alcohol use or by using standardized screening questionnaires (for example, CAGE assessment or AUDIT).
Tobacco screening and counseling	ALL homebound patients should receive screening for tobacco use and nicotine dependence. ALL homebound patients who smoke should be counseled annually about smoking cessation. IF a homebound patient uses tobacco regularly, THEN he or she should be offered counseling and/or pharmacologic therapy at least once to stop tobacco use.
Physical activity screening	ALL homebound patients should receive an assessment of their activity level and be provided with counseling at least once to promote regular physical activity.
Colorectal cancer screening	ALL homebound patients should be offered screening for colorectal cancer at least once with fecal occult blood testing or should have had sigmoidoscopy in the last 5 years or colonoscopy in the last 10 years.
Stroke and atrial fibrillation	
Carotid artery imaging	IF a male homebound patient has carotid artery symptoms and is diagnosed with transient ischemic attack or nondisabling stroke and the medical record does not document that the patient is not a candidate for carotid surgery, THEN a carotid artery imaging study should be offered and performed within 4 weeks.
Contraindication	IF the combined risk of surgery for a homebound patient (patient characteristics and hospital or surgeon experience) is 10% or greater, THEN carotid endarterectomy should not be performed.
Anticoagulation for atrial fibrillation	IF a homebound patient has atrial fibrillation for more than 48 hours and has any “high-risk” condition (impaired left ventricular function; female older than 75 years of age; hypertension or systolic blood pressure greater than 160 mm Hg; or prior ischemic stroke, transient ischemic attack, or systemic embolism), THEN he or she should be offered oral anticoagulant therapy or antiplatelet therapy if the medical record documents a reason not to give anticoagulant therapy.
Stroke imaging before anticoagulation	IF a homebound patient has a presumed stroke, THEN CT or MRI of the head should be recommended and performed before initiation or continuation of thrombolytic treatment, anticoagulant therapy, or antiplatelet therapy.
Monitoring warfarin therapy	IF a homebound patient is taking warfarin for atrial fibrillation, THEN an INR should be checked within 4 days of the first dose and at least every 6 weeks.
Antiplatelet therapy for acute stroke	IF a homebound patient is diagnosed with acute atherothrombotic ischemic stroke or with a transient ischemic attack, THEN antiplatelet treatment should be offered within 48 hours after the stroke or transient ischemic attack, unless the patient is already receiving anticoagulant treatment.
Smoking cessation	IF a homebound patient has a transient ischemic attack or stroke, THEN the medical record should document that smoking status was assessed and that smokers were counseled to stop smoking.
Hospitalized for stroke	IF a homebound patient is suspected of having a stroke and there is no do-not-hospitalize order or advance directive proscribing transfer to the hospital, THEN the patient should be transferred to a hospital or the chart should document why transfer is not indicated.
Rehabilitation for stroke	IF a homebound patient has had a stroke with resultant functional disability and meets standard criteria for rehabilitation potential, THEN the patient should be offered formal rehabilitation.
Statins	IF a homebound patient younger than 70 years of age has sustained a thrombotic stroke or transient ischemic attack and if two lipid measurements at least 2 weeks apart confirm an LDL cholesterol level >130 mg/dL and/or total cholesterol:HDL cholesterol ratio >4, THEN the patient should be offered treatment.
Urinary incontinence	
Initial evaluation	ALL homebound patients should have documentation of the presence or absence of urinary incontinence during the initial evaluation.

Continued on following page

Appendix Table—Continued

Targeted history	IF a homebound patient has new urinary incontinence that persists for more than 1 month or urinary incontinence at the time of a new evaluation, THEN a targeted history should be obtained that documents each of the following: 1) characteristics of voiding, 2) ability to get to the toilet, 3) previous treatment for urinary incontinence, 4) importance of the problem to the patient, and 5) mental status.
Discussion of treatment options	IF a homebound patient has new urinary incontinence or urinary incontinence at the time of a new evaluation, THEN treatment options should be discussed.
Behavioral therapy	IF a cognitively intact homebound patient who is capable of independent toileting has documented stress, urge, or mixed urinary incontinence without evidence of hematuria or high post-void residual, THEN behavioral treatment should be offered.
Catheter use	IF a homebound patient has clinically significant, newly discovered overflow urinary incontinence and indwelling urethral catheterization is used, THEN there should be documentation that the patient is not a candidate for alternative interventions as a result of severe physical or mental impairments or does not want alternative interventions.

Vision care

Comprehensive eye examination	ALL homebound patients with meaningful vision should be offered an eye evaluation every 2 years that includes the essential components of a comprehensive eye examination.
Urgent signs and symptoms	IF a homebound patient has sudden-onset visual changes, eye pain, corneal opacity, or severe purulent discharge, THEN the patient should be examined within 48 hours by an ophthalmologist.
Chronic signs and symptoms	IF a homebound patient develops progression of a chronic visual deficit that now interferes with his or her ability to perform needed or desired activities, THEN he or she should have an ophthalmic examination by a person skilled at ophthalmic examination within 2 months.
Function evaluation for cataract	IF a homebound patient is diagnosed with a cataract, THEN assessment of visual function with respect to his or her ability to perform needed or desired activities should be performed every 12 months.
Macular degeneration evaluation	IF a homebound patient with age-related macular degeneration has a new-onset change in vision, THEN he or she should have a dilated retinal examination of the affected eye within 3 days.
Diabetic retinopathy	IF a homebound patient with diabetes has a retinal examination, THEN the presence and/or degree of diabetic retinopathy should be documented. IF a homebound patient has proliferative diabetic retinopathy, THEN a dilated eye examination should be performed at least every 4 months.
Macular edema	IF a homebound patient with diabetes is diagnosed with macular edema, THEN a dilated eye examination should be performed at least every 6 months.
Cataract extraction	IF a homebound patient is diagnosed with a cataract that limits the patient's ability to perform needed or desired activities, THEN cataract extraction should be offered.
Cataract surgery follow-up	IF a homebound patient undergoes cataract surgery, THEN a follow-up ocular examination should occur within 48 hours and re-examination should occur within 3 months.
Continuity of ocular therapy	IF a homebound patient who has been prescribed an ocular therapeutic regimen becomes hospitalized, THEN the regimen should be administered in the hospital unless discontinued by an ophthalmologic consultant.

* ACE = angiotensin-converting enzyme; AUDIT = Alcohol Use Disorders Identification Test; COX = cyclooxygenase; CT = computed tomography; DSM-IV = Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition; HDL = high-density lipoprotein; INR = international normalized ratio; LDL = low-density lipoprotein; MAOI = monoamine oxidase inhibitor; MRI = magnetic resonance imaging; NSAID = nonsteroidal anti-inflammatory drug.