

WORKING P A P E R

Appendix to Application of ACOVE-3 Quality Indicators to Patients with Advanced Dementia and Poor Prognosis (Appendices 1 & 2 and Figures 1 & 2)

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WR-515/2
August 2007

Application of ACOVE-3 Quality Indicators To Patients with Advanced Dementia and Poor Prognosis

Appendix 1

Appendix 2

Figure 1

Figure 2

Appendix 1: ACOVE-3 QI Dimensions and Proposed Exclusion for Poor Prognosis and Advanced Dementia

Description of QI	Cont & Coord	Improve Short	Improve Intermed	Prevent Short	Prevent Intermed	Prevent Long	Burden Low	Burden Mod	Burden High	Low Priority	Impact for AD	AD Exclude	PP Exclude
BPH													
<p>1. IF a male VE complains of new or worsening urinary frequency, urgency, urinary incontinence,* nocturia, decreased force of stream, feeling of incomplete bladder emptying, or post void dribbling (Lower Urinary Tract Symptoms or LUTS), THEN a history should document the following:</p> <ul style="list-style-type: none"> • Medications associated with symptoms • Neurologic conditions that can affect the urologic system • Prior urologic, neurosurgical, orthopedic, or general surgery procedures • Whether symptoms are bothersome • Prior treatment 		X					X					I	I
<p>2. IF a male VE complains of new LUTS*, THEN a rectal exam (including prostate size, degree of tenderness, and nodularity) and abdominal exam should be performed. *For incontinence, see UI #5</p>		X					X					I	I
<p>3. IF a male VE complains of new or worsening LUTS, THEN a urinalysis (microscopic exam or dipstick) should be performed AND a urine culture, if the urinalysis demonstrates pyuria or hematuria.</p>		X					X					I	I
<p>4. IF a male VE presenting with new/worsening urinary incontinence, or complaints of incomplete emptying or LUTS and has neurologic disease (e.g. spinal cord injury, multiple sclerosis) or has had a procedure that can affect innervation of the bladder or urethral sphincter mechanism (e.g. spinal surgery), THEN he should have a post-void residual measurement</p>		X						X				I	I

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5. IF a male VE presenting with new or worsening LUTS has a history of lower tract urologic surgery or urethral trauma (including traumatic catheterizations), THEN he should be referred to a urologist within 2 months		X						X				E	E
6. IF a male VE has new microhematuria (>3 RBCs/hpf) and a negative urine culture (or has 1 positive and 1 negative urinalysis), THEN a repeat urinalysis should be performed within 1 month.					X		X					E	E
7. IF a male VE has unexplained gross hematuria or microhematuria (>3 RBCs/hpf on 2 of 3 urinalyses) and a negative urine culture, THEN he should have the following within 3 months: <ul style="list-style-type: none"> • Serum creatinine • Upper urologic tract imaging • Referral to a urologist or nephrologist. 					X			X				E	E
8. IF a male VE receives a screening prostate specific antigen (PSA) test, THEN the chart should document a discussion of the pros and cons of the test.				X			X					I	I
9. IF a male VE with presumed BPH has bladder stones, urinary retention (>1 episode), urinary tract infection or renal failure with hydronephrosis, THEN the patient should be referred to a urologist.			X					X				E (except urinary retention)	E (except urinary retention)
10. IF a male VE with BPH has an AUA SI score ≤ 7 , the symptoms are not bothersome, and the patient is not known to have bilateral hydronephrosis, bladder stones, hematuria attributable to the prostate or urinary tract infection, THEN he should not be prescribed medications or surgery for BPH.				X			X					I	I
11. IF a male VE with BPH has moderate to severe symptoms (or an AUA SI score >7) that are bothersome, THEN the medical record should document that treatment options were discussed (e.g., medical, surgical, watchful waiting).		X					X					I	I

Description of QI	Cont & Coord	Improve Short	Improve Intermed	Prevent Short	Prevent Intermed	Prevent Long	Burden Low	Burden Mod	Burden High	Low Priority	Impact for AD	AD Exclude	PP Exclude
12. IF a male VE has surgery for BPH, THEN a urinalysis or a urine culture should have been done within 6 weeks prior to surgery AND treated, if necessary.				X			X					I	I
Breast Cancer													
1. IF a female VE is less than age 70, THEN she should be offered mammographic screening for breast cancer every 2 years.						X	X					E	E
2. IF a female VE is diagnosed with breast cancer, THEN physical and psychosocial performance status should be evaluated.				X			X					I	I
3. IF a female VE is diagnosed with breast cancer, THEN comorbid illnesses should be evaluated.				X			X					I	I
4. IF a female VE has a new diagnosis of breast cancer, THEN there should be documentation of a discussion regarding: <ul style="list-style-type: none"> • Surgical options and goals of therapy • Post-treatment quality of life • Functional outcomes • Risk and benefits of adjuvant therapy 	X						X					I	I
5. IF a female VE is diagnosed with locally invasive breast cancer, THEN tumor size, grade, and margins should be recorded after surgery.	X						X					I	I
6. IF a female VE is diagnosed with locally invasive breast cancer, THEN the estrogen and progesterone receptor status of the tumor should be documented.		X					X					I	I
7. IF a female VE is diagnosed with locally invasive breast cancer and chemotherapy is planned, THEN at the time of diagnosis HER-2/neu receptor status should be evaluated.						X	X					E	E

Description of QI	Cont & Coord	Improve Short	Improve Intermed	Prevent Short	Prevent Intermed	Prevent Long	Burden Low	Burden Mod	Burden High	Low Priority	Impract for AD	AD Exclude	PP Exclude
8. IF a female VE is diagnosed with locally invasive breast cancer, chemotherapy is planned, and she has a score of 2+ for HER-2/neu over-expression by immunohistochemistry testing, THEN HER-2/neu receptor status should be confirmed by fluorescence in-situ hybridization (FISH).						X	X					E	E
9. IF a female VE with locally invasive breast cancer has any of the following: (a) symptoms of bone pain, (b) elevated serum alkaline phosphatase, (c) tumor size >5cm, or (d) positive lymph nodes, THEN radiographic bone imaging should be performed during the staging work-up.					X		X					E (except bone pain)	E (except bone pain)
10. IF a female VE is diagnosed with early stage locally invasive breast cancer (Stage I-III) and chemotherapy is planned, THEN the patient should undergo axillary staging with either a sentinel lymph node biopsy or a complete axillary lymph node dissection at the time of surgery.					X				X			E	E
11. IF a female VE is diagnosed with only lobular carcinoma in-situ, THEN further surgical resection should not be performed.				X			X					I	I
12. IF a female VE is diagnosed with ductal carcinoma in-situ or early stage invasive breast cancer, THEN breast-conserving surgery should be offered.					X				X			E	E
13. IF a female VE with locally invasive breast cancer is treated with a mastectomy, THEN she should be offered breast reconstruction.			X						X			E	E
14. IF a female VE is diagnosed with early stage invasive breast cancer and undergoes a lumpectomy, THEN breast radiation therapy should be discussed.					X				X			E	E

Description of QI	Cont & Coord	Improve Short	Improve Intermed	Prevent Short	Prevent Intermed	Prevent Long	Burden Low	Burden Mod	Burden High	Low Priority	Impact for AD	AD Exclude	PP Exclude
15. IF a female VE is diagnosed with invasive breast cancer with a tumor >5cm OR ≥4 positive lymph nodes and undergoes mastectomy, THEN postoperative radiation therapy should be discussed within 2 months after surgery or after chemotherapy.					X				X			E	E
16. IF a female VE is diagnosed with estrogen receptor-positive locally invasive breast cancer of >1 cm size, THEN adjuvant hormonal therapy should be offered.						X	X					E	E
17. IF a female VE with a life expectancy >5 years is diagnosed with locally invasive breast cancer with ≥4 positive lymph nodes, THEN adjuvant chemotherapy should be offered.						X			X			E	E
18. IF a female VE with normal cardiac function and a life expectancy >5 years is diagnosed with locally invasive breast cancer with positive lymph nodes and HER-2/neu receptor over-expression, THEN adjuvant chemotherapy with trastuzumab should be offered.						X			X			E	E
19. IF a female VE is diagnosed with nonmetastatic breast cancer and receives primary treatment, THEN the patient should not receive follow-up surveillance with imaging (e.g., CT scan) or laboratory studies (e.g., CA 15-3, CA 27.29, CEA).				X			X					I	I
20. IF a female VE is diagnosed with advanced breast cancer with symptomatic or lytic bone metastasis, THEN bisphosphonate treatment should be offered.		X					X					I	I
21. IF a female VE is diagnosed with advanced estrogen receptor-positive breast cancer with bone metastasis and without extensive visceral involvement, THEN endocrine therapy should be offered.		X					X					I	I

Description of QI	Cont & Coord	Improve Short	Improve Intermed	Prevent Short	Prevent Intermed	Prevent Long	Burden Low	Burden Mod	Burden High	Low Priority	Impract for AD	AD Exclude	PP Exclude
22. IF a female VE has symptomatic multifocal metastatic hormone-refractory breast cancer OR symptomatic hormone receptor-negative breast cancer with extensive visceral metastasis, THEN treatment with systemic chemotherapy should be offered.			X						X			E	E
23. IF a female VE with normal cardiac function with HER-2/neu-positive metastatic breast cancer is treated with systemic chemotherapy, THEN trastuzumab should be offered.						X		X				E	E
COPD													
1. IF a VE presents with noncardiac exertional dyspnea, chronic cough (≥ 6 months), wheeze or ≥ 2 episodes/year of bronchitis, THEN s/he should have spirometry.		X						X			X	E	E
2. IF a VE with COPD lives with others who smoke, THEN the patient and/or smoker should be counseled to eliminate smoking in the home.				X			X					I	I
3. IF a VE with COPD is new to a primary care practice, THEN smoking status should be documented, and if the patient ever smoked, smoking status should be assessed annually.				X			X					I	I
4. IF a VE with COPD is a current smoker, THEN counseling to quit smoking should be documented annually.				X			X					I	I
5. IF a VE with COPD does not use supplemental oxygen and has a post-bronchodilator FEV ₁ <50% predicted (or unknown), THEN oxygenation (pulse oximetry or arterial blood gas) should be assessed annually.				X			X					I	I
6. IF a VE has COPD (GOLD stage ≥ 1), THEN s/he should be prescribed a rapid-acting bronchodilator.		X					X					I	I
7. IF a VE with COPD is given a new inhaler device, spacer, or nebulizer, THEN training to use the device should be documented.		X					X					I	I

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8. IF a VE with moderate-very severe COPD (GOLD stage II-IV) has symptoms not controlled by PRN bronchodilator use or had ≥ 2 exacerbations in the past year, THEN a long-acting bronchodilator should be prescribed.		X					X					I	I
9. IF a VE with severe-very severe COPD (GOLD stage III-IV) has ≥ 2 exacerbations requiring antibiotics or oral corticosteroids in the past year, THEN (in addition to a long-acting bronchodilator) inhaled steroids (if not on oral steroids) should be prescribed.		X					X					I	I
10. IF a VE with COPD has a pO ₂ < 55 mmHg or an O ₂ Sat < 88% (not during an exacerbation), THEN long-term oxygen therapy should be offered.				X			X					I	I
11. IF a VE with COPD is prescribed long-term oxygen therapy, THEN encouragement to use it >18 hours/day (including portable oxygen) should be documented.				X			X					I	I
Colorectal Cancer Care													
1. IF a VE is less than age 70, THEN there should be documentation that the option of colorectal cancer screening was discussed.						X	X					E	E
2. IF a VE is diagnosed with colorectal cancer, THEN physical and psychosocial performance status should be evaluated.				X			X					I	I
3. IF a VE is diagnosed with colorectal cancer, THEN comorbid illnesses should be evaluated.				X			X					I	I
4. IF a VE has a new diagnosis of colorectal cancer and is a candidate for therapy, THEN s/he should have a pre-treatment CEA level.			X				X					E	E
5. IF a VE with a new diagnosis of colon or rectal cancer is a candidate for elective resection of the primary tumor and has an elevated (or unknown) CEA, THEN pre-treatment imaging with a CT scan (or similar imaging) of the abdomen and pelvis should be done.					X			X				E	E

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6. IF a VE has a new diagnosis of rectal cancer with a normal CEA and is a candidate for elective resection of the primary tumor, THEN pelvic imaging should be performed by ultrasound (EUS or TRUS), MRI or CT.			X					X				E	E
7. IF a VE has a new diagnosis of colorectal cancer and is a candidate for potential cure, THEN s/he should have a total colonic exam prior to surgery.						X		X				E	E
8. IF a VE underwent colorectal cancer resection for cure and total colonic examination was not performed preoperatively (e.g. due to an obstructing lesion), THEN total colonic examination should be performed within 6 months after surgery.						X		X				E	E
9. IF a VE has a new diagnosis of colorectal cancer, THEN there should be documentation of a discussion regarding: <ul style="list-style-type: none"> • Surgical options and goals of surgery • Post treatment quality of life • Functional outcomes • Risks and benefits of adjuvant therapy (if colon cancer) or neoadjuvant therapy (if rectal cancer) 				X			X					I	I
10. IF a VE undergoes surgery for colorectal cancer, THEN a qualified physician (e.g. surgeon, oncologist, radiation oncologist) should discuss with the patient/caregiver final pathology (e.g., stage, status of lymph nodes, margins), and indications for further treatment (e.g., chemotherapy, radiation therapy).	X						X					I	I
11. IF a VE has a new diagnosis of colorectal cancer and is not a candidate for surgical therapy, THEN this should be noted as well as an alternative treatment plan.	X						X					I	I
12. IF a VE is diagnosed with incurable, metastatic colorectal cancer, THEN prognosis and end-of-life discussions should be documented.	X						X					I	I

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13. IF a VE with a new diagnosis of rectal cancer is to be treated surgically, THEN the surgeon should preoperatively (or pre-neoadjuvant therapy) assess the mass (e.g., digital rectal exam or flexible sigmoidoscopy).		X					X					I	I
14. IF a VE with a new diagnosis of colorectal cancer is to have elective abdominal perineal resection or other procedure with planned creation of an ostomy, THEN the ostomy should be sited preoperatively and documented in the medical record (e.g. enterostomal therapy note or operative note).				X			X					I	I
15. IF a VE has stage III colon cancer, THEN adjuvant chemotherapy should be given within 4 months of surgery.					X				X			E	E
16. IF a VE is thought to have stage II or III mid-low rectal cancer and is a candidate for surgery, THEN preoperative neoadjuvant chemotherapy and radiation therapy should be given.					X				X			E	E
17. IF a VE had surgical resection for stage II or III rectal cancer and did not receive neoadjuvant radiation and/or chemotherapy, THEN postoperative adjuvant chemotherapy and/or radiation therapy should be provided within 4 months of surgery.					X				X			E	E
18. IF a VE with > stage I colorectal cancer underwent resection for cure, THEN a history and physical examination should be performed every 6 months for the first 2 years after surgery and annually during years 3 to 5.					X		X					E	E
19. IF a VE with > stage I colorectal cancer underwent resection for cure, THEN a CEA level should be performed every 3 months for the first 2 years after surgery and annually during years 3 to 5.					X		X					E	E
20. IF a VE underwent colorectal cancer resection for cure, THEN a colonoscopy should be performed within 3 years after surgery.						X		X				E	E

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21. IF a VE had prior colorectal cancer resection for cure and has an elevated CEA > 7.5 (confirmed by retesting if <10), THEN further workup should be initiated (e.g. colonoscopy, radiological imaging).					X			X				E	E
Continuity and Coordination of Care													
1. ALL VEs should be able to identify a physician or a clinic to call for medical care or know the telephone number/other mechanism to reach this source of care.	X						X					I	I
2. IF a VE outpatient is prescribed a new chronic disease medication, and s/he has a follow-up visit with the prescribing physician, THEN 1 of the following should be noted at the follow-up visit: <ul style="list-style-type: none"> • Medication is being taken • Patient was asked about the medication (e.g., side effects, adherence, availability) • Medication was not started because it was not needed or changed. 	X						X					I	I
3. IF a VE is under the outpatient care of ≥ 2 physicians, and one physician prescribed a new chronic disease medication or a change in prescribed medication, THEN the non-prescribing physician should acknowledge the medication change at the next visit.	X						X					I	I
4. IF an outpatient, VE was referred to a consultant and revisited the referring physician, THEN the referring physician's medical record should acknowledge the consultant's recommendations, include the consultant's report, or indicate why the consult did not occur.	X						X					I	I

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<p>5. IF an outpatient VE was given an order for a diagnostic test, THEN 1 of the following should be documented at the follow-up visit:</p> <ul style="list-style-type: none"> • Result of the test initialed/acknowledged • Note that the test was not needed/reason why it will not be performed • Note that the test is pending 	X						X					I	I
<p>6. IF a VE misses a required preventive care event that is recurrent with a specific periodicity, THEN there should be medical record documentation of a reminder that the preventive care is needed within one full interval since the missed event.</p>	X						X					I	I
<p>7. IF a VE is treated at an emergency department or admitted to a hospital, THEN there should be documentation (during the ER visit or within the first 2 days after admission) of communication with a continuity physician, of an attempt to reach a continuity physician, or that there is no continuity physician.</p>	X						X					I	I
<p>8. IF a VE is discharged from a hospital to home and survives ≥ 6 weeks after discharge, THEN a physician visit or telephone contact should be documented within 6 weeks of discharge AND the medical record should document acknowledgement of the recent hospitalization.</p>	X						X					I	I
<p>9. IF a VE is discharged from a hospital to home and received a new chronic disease medication or a change in medication prior to discharge, THEN the outpatient medical record should document the medication change within 6 weeks of discharge.</p>	X						X					I	I
<p>10. IF a VE is discharged from a hospital to home with a new medication that requires a serum medication level to be checked, THEN the medical record should document the medication level, that the medication was stopped, or that the level was not needed.</p>	X						X					I	I

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11. IF a VE is discharged from a hospital to home or a nursing home and the transfer form or discharge summary indicates that a test result is pending, THEN the outpatient or nursing home medical record should include the test result within 6 weeks of hospital discharge or indicate that the result was followed-up elsewhere or why the result cannot be obtained.	X						X					I	I
12. IF a VE is discharged from a hospital to home or a nursing home and the hospital medical record specifies a follow-up appointment for a physician visit or a treatment (e.g., physical therapy or radiation oncology), THEN the medical record should document that the visit/treatment took place, that it was postponed, or not needed.	X						X					I	I
13. IF a VE is discharged from a hospital to home or nursing home, THEN there should be a discharge summary in the outpatient or nursing home medical record.	X						X					I	I
14. IF a VE is discharged from a nursing home to home, THEN there should be a discharge summary in the outpatient medical record.	X						X					I	I
15. IF a VE is new to a primary care practice, THEN the medical record should contain medical records from a prior care source, a request for such medical records, or an indication that such records are unavailable.	X						X					I	I
16. IF a VE is deaf or does not speak English, THEN an interpreter or translated materials should be utilized to facilitate communication	X						X				X	E	I
Dementia													
1. IF a VE is new to a primary care practice or inpatient service, THEN there should be a documented assessment of cognitive ability and functional status.				X			X					I	I
2. ALL VEs should be evaluated annually for changes in memory and function.				X			X				X (memory only)	E (memory only)	I

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3. IF a VE screens positive for dementia, THEN the physician should document an objective cognitive evaluation that tests ≥ 2 cognitive domains.		X					X				X	E	I
4. IF a VE screens positive for dementia, THEN the physician should review the patient's medications (including over-the-counter) for any that may be associated with mental status changes.		X					X					I	I
5. IF a VE screens positive for dementia and is taking medications that are commonly associated with mental status changes in the elderly, THEN the physician should discontinue or justify continuing these medications.		X					X					I	I
6. IF a VE is newly diagnosed with dementia, THEN a clinician should perform a neurologic examination that includes evaluation of gait, motor function, and reflexes.		X					X					I	I
7. IF a VE is newly diagnosed with dementia, THEN complete blood count, thyroid testing, electrolytes, liver function tests, glucose, blood urinary nitrogen, serum B ₁₂ and a syphilis test should be performed.		X					X					I	I
8. IF a VE is newly diagnosed with dementia AND has risk factors for HIV, THEN HIV testing should be offered.		X					X					I	I
9. IF a VE has newly diagnosed dementia, THEN s/he should be screened for depression during the initial evaluation period.		X					X					I	I
10. IF a VE has been diagnosed with mild to moderate Alzheimer's disease, mild to moderate vascular dementia, or Lewy body dementia, THEN there should be a documented discussion with the patient and/or caregiver about cholinesterase inhibitor treatment				X			X			X		E	E
11. IF a VE has mild to moderate vascular or mixed dementia, THEN s/he should receive stroke prophylaxis.					X		X					E	E

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<p>12. IF a VE with dementia has a caregiver, THEN the patient and/or caregiver should be given information on the following:</p> <ul style="list-style-type: none"> • Dementia diagnosis, prognosis, and associated behavioral symptoms • Home occupational safety • Community resources 				X			X					I	I
<p>13. IF a VE has dementia, THEN s/he should be screened annually for behavioral symptoms of dementia.</p>		X					X					I	I
<p>14. IF a VE with dementia has behavioral symptoms, THEN specific target symptoms should be documented and behavioral interventions instituted first or concurrently with pharmacotherapy, OR if treating first with a pharmacologic intervention, then severe symptoms or safety concerns should be present and documented.</p>		X					X					I	I
<p>15. IF a VE with dementia and behavioral symptoms is newly treated with an antipsychotic, THEN there should be a documented risk-benefit discussion.</p>				X			X					I	I
<p>16. IF a VE has newly diagnosed dementia, THEN 1 of the following should occur (consistent with state law):</p> <ul style="list-style-type: none"> • Patient advised not to drive a motor vehicle • Referral to the Department of Motor Vehicles to test driving ability • Referred to a driver's safety course that includes assessment of driving ability 				X			X					I	I
<p>17. IF a VE with dementia is physically restrained in the hospital, THEN the target behavioral disturbance/safety issue justifying the use of restraints must be documented in the medical record and communicated to the patient and/or caregiver/guardian.</p>				X			X					I	I

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Depression													
1. ALL VEs should have documentation of a screen for depression during the initial evaluation and annually.		X					X				X	E	I
2. IF a VE is admitted to a nursing home, THEN the patient should have documentation of a screen for depression within 2 weeks of admission and annually.		X					X				X	E	I
3. IF a vulnerable elder presents with one of the following symptoms (and the symptom has not previously been documented as a chronic condition): <ul style="list-style-type: none"> Sad mood, feeling down Insomnia or difficulties with sleep Apathy or loss of interest in pleasurable activities Complaints of memory loss Unexplained weight loss $\geq 5\%$ in the past month or $\geq 10\%$ in the past year Unexplained fatigue or low energy 		X					X				X	E	I
4. IF a VE receives a diagnosis of a new depression episode, THEN the medical record should document at least 3 of the 9 Diagnostic and Statistical Manual (DSM-IV) target symptoms for major depression within 2 weeks of diagnosis.		X					X				X	E	I
5. IF a VE 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.							X				X	E	I
6. IF a VE 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 that the patient was referred for evaluation for psychiatric hospitalization.				X			X					I	I

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7. IF a VE has thoughts of suicide, THEN the medical record should document, on the same date, that the patient was asked about access to firearms.				X			X					I	I
8. IF a VE receives a diagnosis of a new depression episode, THEN the medical record should document evaluation of the following within 1 month or in the prior 3 months: <ul style="list-style-type: none"> • Hypothyroidism for women • Substance dependence or abuse 		X					X					I	I
9. IF a VE is diagnosed with depression, THEN antidepressant treatment, psychotherapy, or electroconvulsive therapy (ECT) 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.		X					X					I	I
10. IF a VE is started on antidepressant medication, THEN the following medications should not be used as 1 st - or 2 nd -line therapy: tertiary amine tricyclics (amitriptyline, imipramine, doxepin, clomipramine, trimipramine); monoamine oxidase inhibitors (unless atypical depression is present); benzodiazepines; or stimulants (except methylphenidate).				X			X					I	I
11. IF a VE has depression with psychotic features, THEN s/he should be referred to a psychiatrist OR should receive treatment with a combination of an antidepressant and an antipsychotic, or with ECT.		X					X					I	I
12. IF a VE with a history of cardiac disease is started on a tricyclic medication, THEN a baseline electrocardiogram should be performed prior to initiation if not done in the prior 3 months.				X			X					I	I

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13. IF a vulnerable elder is taking a SSRI, THEN a MAOI should not be used for at least 2 weeks after termination of the SSRI (and for at least 5 weeks after termination of fluoxetine).				X			X					I	I
14. IF a VE is taking a MAOI, THEN he or she should not receive medications that have the potential for serious interactions with MAOIs or for at least 2 weeks after termination of the MAOI.				X			X					I	I
15. IF a VE is newly treated for depression, THEN the following should be documented at the first follow-up visit to the same physician or to a mental health provider within 4 weeks of treatment initiation: <ul style="list-style-type: none"> Degree of response to at least 2 of the 9 DSM-IV target symptoms for major depression Medication side effects, if he or she is taking antidepressant medications 		X					X				X	E	I
16. IF a VE is newly treated for depression and has suicidal ideation at an outpatient visit, THEN at the next follow-up visit, which must occur within 1 week, documentation should reflect asking about suicide risk.				X			X				X	E	I
17. IF a vulnerable elder has no meaningful symptom response after 6 weeks of depression treatment, THEN one of the following treatment options should be initiated by the 8th week of treatment: medication dose should be optimized or changed, 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).		X					X					I	I

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18. IF a vulnerable elder with depression responds only partially after 12 weeks of treatment, THEN one of the following treatment options should be instituted by the 16th week of treatment: 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 ECT; or refer to a psychiatrist.		X					X					I	I
19. IF a VE with depression has responded to antidepressant medication, THEN s/he should be continued on the drug at the same dose for at least 6 months, and make at least 1 clinician contact (office visit or phone) during that time period.		X					X					I	I
20. IF a VE has experienced 3 or more episodes of depression, THEN s/he should receive maintenance antidepressant medication with the same type and dose of medication for at least 24 months with at least 4 office or telephone visits for depression during that period.			X				X					I	I
Diabetes Mellitus													
1. IF a VE has diabetes, THEN glycated hemoglobin should be measured annually.						X	X					E	E
2. IF a VE has an elevated HgbA1c, THEN a therapeutic intervention should occur: <ul style="list-style-type: none"> • HgbA1c 9-10.9%: Within 3 months • HgbA1c ≥11%: Within 1 month 					X			X				E	E
3. IF a diabetic VE does not have established renal disease and is not receiving an ACE inhibitor or ARB, THEN a test for proteinuria should be done annually.						X	X					E	E
4. IF a diabetic VE has proteinuria, THEN an ACE inhibitor or ARB should be prescribed.						X	X					E	E
5. IF a VE has diabetes, THEN a foot exam should be performed annually.				X			X			X		E	E

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6. IF a VE with diabetes has a retinal examination, THEN the presence and/or degree of diabetic retinopathy should be documented.				X			X					I	I
7. IF a diabetic VE is not blind, and did not have retinopathy on a previous examination, THEN s/he should have a retinal eye examination performed by a specialist every 2 years.						X	X					E	E
8. IF a VE has diabetes, THEN blood pressure should be measured at each primary care and endocrinology visit.						X	X					E	E
9. IF a diabetic VE has a persistent (on 2 consecutive visits) elevation of systolic BP >130 mm Hg, THEN an intervention (pharmacologic, lifestyle, compliance, etc.) should occur or there should be documentation of a reversible cause/other justification for the elevation.						X	X					E	E
10. IF a diabetic VE is not on anticoagulant/antiplatelet therapy, THEN daily aspirin should be prescribed.						X	X					E	E
11. IF a diabetic VE has fasting LDL >130 mg/dl, THEN a pharmacologic or lifestyle intervention should be offered within 3 months.						X	X					E	E

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End of life Care													
<p>1. IF a VE dies an expected death with metastatic cancer, oxygen dependent pulmonary disease, NYHA Class III-IV congestive heart failure, end-stage liver disease, end-stage (stage IV) renal disease, or dementia, THEN the chart should document the following within the 6 months prior to death:</p> <ul style="list-style-type: none"> • Pain and other symptoms • Spiritual and existential concerns • Caregiver burdens/need for practical assistance • Advance care planning 		X					X					I	I
<p>2. IF a VE dies an expected death with metastatic cancer, oxygen dependent pulmonary disease, NYHA Class III-IV congestive heart failure, end-stage liver disease, end-stage (stage IV) renal disease, or dementia, THEN the chart should document 1 of the following within the 6 months prior to death:</p> <ul style="list-style-type: none"> • Discussion of the medical condition/goals for treatment with a designated surrogate • Patient's preference for not involving a designated surrogate in discussions • Note that a surrogate decision maker is unavailable 		X					X					I	I
<p>3. ALL VEs should have in the outpatient chart:</p> <ul style="list-style-type: none"> • Patient's surrogate decision maker • Documentation of a discussion to identify/search for a surrogate decision maker 	X						X					I	I

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4. IF a VE 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 the advance directive should be present in the medical record at the second venue or documentation should acknowledge its existence and its contents.	X						X					I	I
5. IF a VE is admitted to the hospital or nursing home, THEN within 48 hours of admission the medical record should contain: Patient's surrogate decision maker, or Documentation of a discussion to identify/search for surrogate decision maker.	X						X					I	I
6. IF a VE with severe dementia is admitted to the hospital and survives 48 hours, THEN within 48 hours of admission, the medical record should document that the patient's preferences for care have been considered OR an attempt was made to identify them.	X						X					I	I
7. IF a VE is admitted to the intensive care unit and survives 48 hours, THEN within 48 hours of intensive care unit admission, the medical record should document that the patient's preferences for care have been considered OR an attempt was made to identify them.	X						X					I	I
8. IF a hospitalized VE requires mechanical ventilation (for > 48 hours), THEN within 48 hours of the initiation of mechanical ventilation, the medical record should document the goals of care and the patient's preference for mechanical ventilation or why this information is unavailable.	X						X					I	I

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9. IF a VE with decision-making capacity has orders in the hospital/nursing home to withhold or withdraw a life-sustaining treatment (e.g., DNR order), THEN the medical record should document patient participation in the decision OR why the patient did not participate.	X						X					I	I
10. IF a VE has documented treatment preferences to withhold or withdraw life-sustaining treatment (e.g., DNR order, no tube feeding, no hospital transfer), THEN these treatment preferences should be followed.	X						X					I	I
11. IF a VE with dementia has a gastrostomy or J-tube tube placed, THEN prior to placement, the medical record should document 1 of the following: <ul style="list-style-type: none"> • Patient preferences concerning tube feeding • If patient is decisionally incapacitated and a surrogate decision maker is available, discussion of patient preferences or best interests • If patient is decisionally incapacitated and a surrogate decision maker is NOT available, a formal decision mechanism should be used. 	X						X					I	I
12. IF a VE is diagnosed with lung cancer or cancer metastatic to lung, NYHA Class III-IV congestive heart failure, or oxygen dependent pulmonary disease, THEN a self-reported assessment of dyspnea should be documented in the outpatient chart.		X					X					I	I
13. IF a VE with metastatic cancer or oxygen dependent pulmonary disease has dyspnea refractory to non-opiate medications, THEN opiate medications should be offered.		X					X					I	I

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14. IF a VE is in hospice or has a preference for no hospitalization and is living with oxygen dependent pulmonary disease, lung cancer, or NYHA Class III-IV congestive heart failure, THEN the medical record should document a plan for management of worsening or emergent dyspnea.				X			X					I	I
15. IF a VE who had dyspnea in the last 7 days of life died an expected death, THEN the chart should document dyspnea care and follow-up.	X						X					I	I
16. IF a noncomatose VE is not expected to survive and a mechanical ventilator is withdrawn or withheld, THEN the chart should document whether the patient has dyspnea and the patient should receive (or have orders available for) an opiate/ benzodiazepine/barbiturate infusion.		X					X					I	I
17. IF a VE with end-stage metastatic cancer is treated with opiates for pain, THEN the medical record should document a plan for management of worsening or emergent pain.				X			X					I	I
18. IF a VE who was conscious during the last 7 days of life died an expected death, THEN the medical record should contain documentation about presence/absence of pain during the last 7 days of life.		X					X					I	I
19. IF a VE with end-stage metastatic cancer has obstructive gastrointestinal symptoms, THEN the medical record should document a plan for management of worsening or emergent nausea and vomiting.				X			X					I	I
20. IF a VE is a caregiver for a spouse/significant other/dependent that is terminally ill or has very limited function, THEN the VE should be assessed for caregiver financial, physical, and/or emotional stress.				X			X				X	E	I

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21. IF a VE's spouse/significant other dies, THEN the VE should be assessed for depression or thoughts of suicidality within 6 months				X			X				X	E	I
Falls and Mobility Problems													
1. ALL VEs should have documentation that they were asked annually about the occurrence of recent falls.				X			X					I	I
2. IF a VE reports a history of ≥ 2 falls (or 1 fall with injury) in the past year, THEN there should be documentation of a basic fall history (circumstances, medications, chronic conditions, mobility, alcohol intake) within 3 months of the report (or within 4 weeks of the report, if the most recent fall occurred in the past 4 weeks).				X			X					I	I
3. IF a VE reports a history of ≥ 2 falls (or 1 fall with injury) in the past year, THEN there should be documentation of orthostatic vital signs (blood pressure and pulse) within 3 months of the report (or within 4 weeks of the report, if the most recent fall occurred in the past 4 weeks).				X			X					I	I
4. IF a VE reports a history of ≥ 2 falls (or 1 fall with injury) in the past year, THEN there should be documentation of receipt of an eye exam in the past year, or evidence of visual acuity testing within 3 months of the report.				X			X				X	E	I
5. IF a VE reports a history of ≥ 2 falls (or 1 fall with injury) in the past year, THEN there should be documentation of a basic gait, balance, and strength evaluation within 3 months of the report (or within 4 weeks of the report, if the most recent fall occurred in the past 4 weeks).				X			X					I	I

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6. IF a VE has new or worsening difficulty with ambulation, balance, or mobility, THEN there should be documentation of a basic gait, balance, and strength evaluation within 3 months of the report.				X			X					I	I
7. IF a VE reports a history of ≥ 2 falls (or 1 fall with injury) in the past year, THEN there should be documentation of an assessment of cognitive status in the past 6 months or within 3 months of the report (or within 4 weeks of the report, if the most recent fall occurred in the past 4 weeks).				X			X				X	E	I
8. IF a VE reports a history of ≥ 2 falls (or 1 fall with injury) in the past year, THEN there should be documentation of an assessment and modification of home hazards recommended in the past year or within 3 months of the report.				X			X					I	I
9. IF a VE reports a history of ≥ 2 falls (or 1 fall with injury) in the past year and is taking a benzodiazepine, THEN there should be documentation of a discussion of related risks and assistance offered to reduce/discontinue benzodiazepine use.				X			X					I	I
10. IF a VE demonstrates decreased balance/proprioception or increased postural sway AND does not have an assistive device, THEN an evaluation/prescription for an assistive device should be offered within 3 months.				X			X					I	I
11. IF a VE reports a history of ≥ 2 falls (or 1 fall with injury) in the past year AND has an assistive device, THEN there should be documentation of an assistive device review in the past 6 months or within 3 months of the report (or within 4 weeks of the report, if the most recent fall occurred in the past 4 weeks).				X			X					I	I

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12. IF a VE is found to have a problem with gait, balance, strength, or endurance, THEN there should be documentation of a structured/supervised exercise program offered in the past 6 months or within 3 months of the report.				X			X			X	X	E	E
Hearing Loss													
1. ALL VEs should have an annual evaluation of hearing status.		X					X			X		E	E
2. ALL VEs should have an evaluation of hearing status as part of the initial evaluation.		X					X			X		E	E
3. IF a VE has a self-reported hearing problem or fails a hearing screening, THEN s/he should be referred for formal evaluation by an otolaryngologist/audiologist within 3 months.		X					X			X		E	E
4. IF a VE is a hearing aid candidate (by audiometry), THEN s/he should be offered rehabilitation with a hearing aid.		X					X			X		E	E
5. IF a VE has a conductive hearing loss (by audiometry), THEN the patient should be offered a referral to an otolaryngologist.		X						X				E	E
6. IF a VE has profound bilateral sensorineural hearing loss that has not responded to hearing aid rehabilitation, THEN s/he should be offered referral for cochlear implantation.		X							X			E	E
7. IF audiometry and formal evaluation reveal that a VE's hearing loss would not benefit from a hearing aid (or cannot afford it) or treatment from an otolaryngologist OR has persistent hearing handicap, THEN s/he should be offered hearing rehabilitation or an assistive listening device (telephone amplifiers, TTY/TDD devices, television headphones, infrared systems, lighted telephones, door knock alert systems, vibrating clocks, or smoke detectors with strobe lights).		X					X				X	E	I

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Heart Failure													
1. IF a VE has a left ventricular ejection fraction (LVEF) <40%, THEN s/he should receive an ACE inhibitor (or an ARB if ACEI intolerant).			X				X					E	E
2. IF a VE is newly diagnosed with heart failure, THEN s/he should have a history taken at diagnosis/hospitalization that documents the following: <ul style="list-style-type: none"> • Symptoms of volume overload • Current symptoms of chest pain/angina • Prior myocardial infarction, coronary artery disease, or revascularization • Hypertension • Diabetes • Hypercholesterolemia • Valvular heart disease • Thyroid disease • Alcohol use • Smoking • Current medications • NYHA functional class or other description of functional status 		X					X					I	I
3. IF a VE is newly diagnosed with heart failure, THEN s/he should have a physical examination at diagnosis/hospitalization that documents the following: <ul style="list-style-type: none"> • Weight • Blood pressure and heart rate • Lung examination • Cardiac examination • Abdominal examination • Lower extremity examination. 		X					X					I	I

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<p>4. IF a VE is newly diagnosed with heart failure, THEN s/he should undergo the following studies within 1 month of diagnosis if not done in the prior 3 months:</p> <ul style="list-style-type: none"> • Chest x-ray • Electrocardiogram • Complete blood count • Serum electrolytes • Blood urea nitrogen • Creatinine • Glucose • Albumin • Liver function tests • Thyroid stimulating hormone • Urinalysis 		X					X					I	I
<p>5. IF a VE is newly diagnosed with heart failure or has known heart failure with an unexplained clinical deterioration, THEN s/he should have an evaluation of left ventricular function.</p>		X						X				E	E
<p>6. IF a VE is hospitalized with heart failure, THEN s/he should have the following performed within 1 day: serum electrolytes, creatinine and blood urea nitrogen.</p>		X					X					I	I
<p>7. IF a VE has heart failure and LVEF <40%, THEN s/he should be treated with a beta-blocker known to prolong survival (carvedilol, metoprolol or bisoprolol).</p>					X		X					E	E
<p>8. IF a VE has heart failure, LVEF <40% and no atrial fibrillation, THEN s/he should not be treated with a 1st- or 2nd-generation calcium channel blocker.</p>		X					X					I	I
<p>9. IF a VE has heart failure and LVEF <40%, THEN s/he should not be treated with a type I antiarrhythmic agent unless an implantable cardioverter defibrillator is in place.</p>		X					X					I	I

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10. IF a VE with heart failure is taking digoxin and has signs of toxicity, THEN a digoxin level should be checked or digoxin discontinued within 1 week.		X					X					I	I
11. IF a VE is newly diagnosed or hospitalized with heart failure, THEN patient counseling in the following areas should be provided and documented: <ul style="list-style-type: none"> • Medication use, dosage, intervals, side effects • Low-salt diet • Exercise/physical activity • Smoking cessation • Weight monitoring • Symptom management • Avoiding/minimizing use of NSAIDs • Prognosis/end-of-life issues 		X					X					I	I
12. IF a VE has heart failure, THEN the following physical exam elements should be documented at each primary care/cardiology outpatient visit: <ul style="list-style-type: none"> • Weight • Blood pressure • Heart rate • Assessment of volume overload 		X					X					I	I
Hospital Care & Surgery													
1. IF a hospitalized VE is at very high risk for venous thrombosis, THEN s/he should be on DVT prophylaxis (pharmacologic or sequential/intermittent compression).				X			X					I	I
2. IF a VE has moderate-high risk for endocarditis and a high-risk procedure is planned, THEN endocarditis prophylaxis should be given.				X			X					I	I
3. IF a hospitalized VE has a new temporary central venous catheter placed, THEN the medical record should document that maximal barrier precautions were used.				X			X					I	I

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4. IF a hospitalized VE has a temporary central venous catheter placed, THEN there should be daily documentation of examination of line site for signs of infection and continued need for the central line.				X			X					I	I
5. IF a hospitalized VE has an indwelling bladder catheter placed, THEN the indication or continued need for the catheter should be documented at least every 3 days until its removal.				X			X					I	I
6. IF a hospitalized VE has a suspected/definite diagnosis of delirium, acute confusional state, or reduced level of consciousness, THEN there should be a documented attempt to attribute the altered mental state to a potential etiology.				X			X					I	I
7. IF a VE who is ambulatory as an outpatient is hospitalized for >48 hours AND is not receiving intensive or palliative care, THEN there should be a plan to increase mobility within 48 hours of admission.				X			X					I	I
8. IF a VE falls during hospitalization, THEN the following should be documented within 24 hours: <ul style="list-style-type: none"> • Presence or absence of prodromal symptoms • Review of medications or drugs potentially contributing to the fall. 				X			X			X symptoms	E (prodromal symptoms)	I	
9. IF a hospitalized VE is tube fed, THEN there should be documentation of a plan to reduce risk of aspiration.				X			X					I	I
10. IF a VE is mechanically ventilated, THEN the medical record should document a plan to reduce the risk of ventilator-associated pneumonia.				X			X					I	I
11. IF a VE is admitted to the hospital for pneumonia, THEN antibiotics should be administered within 4 hours of arrival.		X					X					I	I

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12. IF a VE is admitted to the hospital with community-acquired pneumonia with hypoxia (O ₂ sat <90%), THEN oxygen should be administered.		I					X					I	I
13. IF a VE hospitalized with community-acquired pneumonia is switched from parenteral to oral antimicrobial therapy, THEN the oral medication should have equivalent/ near-equivalent bioavailability OR there should be documentation of the following: <ul style="list-style-type: none"> • Signs of clinical improvement • Ability to tolerate other oral medications/food/fluids • Hemodynamic stability: Heart rate < 100, SBP > 90, Respiratory rate < 24, Temperature ≤ 37.8° C (100° F), O₂ sat > 90% on RA 		I					X				I	I	
14. IF a VE with community-acquired pneumonia is discharged home, THEN the patient should have been hemodynamically stable on the day before and the day of discharge.				X			X					I	I
15. IF a VE is discharged from the hospital, THEN the hospital record should contain an assessment of: <ul style="list-style-type: none"> • Level of independence • Need for home health services • Patient and caregiver readiness for discharge time and location. 	X						X					I	I
PREOPERATIVE CARE													
16. IF a VE is to have an inpatient or outpatient elective surgery, THEN there should be documentation of the patient's capacity to understand the risks/benefits of the proposed procedure before the operative consent form is presented for signature.				X			X					I	I

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<p>17. IF a VE is to have elective major surgery, THEN the following should be discussed preoperatively:</p> <ul style="list-style-type: none"> • Patient priorities/preferences regarding treatment options • Operative risks • Anticipated postoperative functional outcome • Advance directive and/or designated surrogate decision maker. 				X			X					I	I
<p>18. IF a VE is to have elective major surgery, THEN a pulmonary review of systems (i.e. history of smoking, baseline exercise tolerance, history of COPD/asthma) and chest auscultation should be performed preoperatively.</p>				X			X					I	I
<p>19. IF a VE is to have elective major surgery, THEN an assessment of cardiovascular risk should be performed preoperatively.</p>				X			X					I	I
<p>20. IF a VE is to have elective major surgery, THEN the presence/absence of diabetes should be documented preoperatively.</p>				X			X					I	I
<p>21. IF a diabetic VE is to have elective major surgery, THEN the diabetes regimen and adequacy of diabetes control should be documented preoperatively.</p>				X			X					I	I
<p>22. IF a VE is to have elective major surgery, THEN s/he should be screened for risk factors for the development of postoperative delirium within 8 weeks prior to surgery.</p>				X			X					I	I
<p>23. IF a VE has elective major surgery, THEN prophylactic antibiotics should be administered within 1 hour before incision (2 hours for vancomycin /fluoroquinolone) AND discontinued within 24 hours after the end of surgery.</p>				X			X					I	I

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24. IF a VE with coronary artery disease has elective major surgery, THEN pre-operative beta blockade should be considered and if initiated, it should be continued until discharge.				X			X					I	I
25. IF a VE has sustained a hip fracture, THEN an anticoagulant regimen should be started.				X			X					I	I
26. IF a VE is to have a total hip replacement, THEN an anticoagulation regimen should be started preoperatively or on the evening after surgery.				X			X					I	I
POSTOPERATIVE CARE													
27. IF a VE who was ambulatory as an outpatient has major surgery and is not in intensive care, THEN ambulation should be performed by postoperative day 2.				X			X					I	I
28. IF a diabetic VE has major surgery, THEN blood sugar should be kept below 200 on day of surgery and first 2 postoperative days (or the chart should reflect attempts to achieve this).				X			X					I	I
29. IF a VE has major surgery, THEN a daily screening exam for delirium should be performed for the first 3 days after surgery.				X			X					I	I
30. IF a VE has major surgery, THEN assessment of cognition and functional status prior to discharge, in comparison to preoperative levels, should be performed.				X			X			X		E	I
Hypertension													
1. IF an asymptomatic VE without the diagnosis of hypertension (HTN) has an elevated systolic blood pressure (BP) measurement, THEN a repeat BP measurement should occur as follows: <ul style="list-style-type: none"> 140-159mm Hg: Within 6 months 160-179mm Hg: Within 2 months ≥ 180mm Hg: Within 1 month 					X		X					E	E

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2. IF a VE without a diagnosis of HTN has a systolic BP of ≥ 140 mm Hg on 2 consecutive visits, THEN the diagnosis of HTN should be documented OR home/24-hour ambulatory blood pressure monitoring should be ordered within 2 months or documented as done in the past 2 years.						X	X					E	E
3. IF a VE is newly diagnosed with HTN, THEN cardiovascular disease/risk assessment should be performed within 3 months (if not done in the prior 3 months) including: <ul style="list-style-type: none"> History: Myocardial infarction, angina, cardiomyopathy, aortic aneurysm, peripheral arterial disease, stroke, transient ischemic disease, hypercholesterolemia, family history of early coronary artery disease, smoking Exam: Murmurs or gallops, peripheral arterial exam, peripheral edema, weight, BMI, waist circumference Review of systems: Chest pain, shortness of breath, transient vision/ neurologic symptoms, nocturnal dyspnea, leg pain Laboratory: Blood glucose and serum lipids ECG 					X		X					E	E
4. IF a VE is newly diagnosed with HTN, THEN an assessment of renal function should be performed within 3 months (if not done in the prior 3 months).					X		X					E	E
5. IF a VE is newly diagnosed with HTN, THEN the quantity and frequency of alcohol intake should be documented within 3 months (if not done in the prior 3 months).				X			X			X		E	E
6. IF a VE is newly diagnosed with HTN AND is taking an NSAID or COX-2 inhibitor, THEN there should be documentation within 6 months of dose reduction, an attempt to use an alternative medication, or justification for continued use.					X		X					E	E

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7. IF a VE is newly diagnosed with HTN, THEN a discussion of goal BP OR risks of prolonged HTN should be documented within 3 months.						X	X					E	E
8. IF a VE is newly diagnosed with HTN, THEN a non-pharmacologic intervention (e.g. diet, exercise, weight loss, reduced alcohol) should be recommended within 3 months (if not done in the prior 3 months).						X		X				E	E
9. IF a VE with HTN has persistent (on 2 consecutive visits) elevation of systolic BP above goal*, THEN an intervention (pharmacologic, lifestyle, compliance, etc.) should occur or there should be documentation of a reversible cause or other justification for the elevation. *Goal systolic BP (mm Hg): – Diabetes/chronic renal disease-130 – Home ambulatory monitoring-135 – All other patients-140 or other specified goal						X	X					E	E
10. IF a VE with HTN has persistent (on 2 consecutive visits) elevation of systolic BP above goal* continuously for > 6 months, THEN there should be documentation of the suspected reason why the target was not reached AND efforts to address the limitation *Goal systolic BP (mm Hg): – Diabetes/chronic renal disease-130 – Home ambulatory monitoring-135 – All other patients-140 or other specified goal						X	X					E	E
11. IF a VE without target organ damage has a diastolic BP \geq 120mm Hg, THEN immediate therapy and/or referral to emergency room/hospital should occur.		X						X				E	E

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12. IF a VE's HTN medication regimen is changed (new medication or dose change) AND within 1 week s/he reports dizziness, syncope/near syncope, near-fall or fall, THEN s/he should be evaluated for orthostatic hypotension at the time of the report (or within 1 week if outside the office) OR the medication regimen changed.		X					X					I	I
13. IF a VE with HTN has ischemic heart disease, THEN treatment with a beta-blocker should be recommended OR documentation why not.					X		X					E	E
14. IF a VE with HTN has a history of heart failure, left ventricular hypertrophy, ischemic heart disease, chronic kidney disease or CVA, THEN s/he should be treated with an ACEI or ARB OR documentation why not.					X		X					E	E
Ischemic Heart Disease													
1. IF a VE has a BMI ≥ 25 , THEN risk factors for cardiovascular disease should be assessed.						X	X					E	E
2. IF a VE has an acute coronary syndrome, THEN s/he should be given aspirin within 1 hour of presentation.		X					X					I	I
3. IF a VE has non-ST elevation acute coronary syndrome (unstable angina or non-ST elevation AMI), and CABG is not planned, THEN s/he should be treated with aspirin and clopidogrel for at least 3 months.		X					X					I	I
4. IF a VE has an acute coronary syndrome, THEN s/he should be given a beta-blocker within 12 hours.		X					X					I	I
5. IF a VE has a myocardial infarction (STEMI or NSTEMI) complicated by heart failure or LVEF $<40\%$, THEN s/he should be given an ACE inhibitor/ARB within 36 hours of presentation AND advised to continue this treatment for ≥ 4 weeks.			X				X					E	E
6. IF a VE is hospitalized with an acute myocardial infarction (STEMI or NSTEMI), THEN an assessment of left ventricular			X				X					E	E

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function (LVEF) should be performed in the hospital or within 7 days of discharge.													
7. IF a VE is hospitalized with acute coronary syndrome, did not undergo angiography, and does not have contraindications to revascularization, THEN s/he should be offered non-invasive stress testing before or within 2 weeks of discharge.		X						X				E	E
8. IF a VE has a diagnosis of acute myocardial infarction, THEN s/he should be screened for depression within 3 months.		X					X				X	E	I
9. IF a VE has an ST-segment elevation AMI, THEN s/he should be offered reperfusion therapy.		X						X				E	E
10. IF a VE has significant left main or 3-vessel coronary artery disease and LVEF <50%, THEN s/he should be offered revascularization.		X							X			E	E
11. ALL VEs with ischemic heart disease should have a fasting cholesterol evaluation (LDL, HDL and triglycerides) at least every 2 years.						X	X					E	E
12. IF a VE with ischemic heart disease has an LDL >100 mg/dl, THEN s/he should be offered cholesterol lowering medication.					X		X					E	E
13. IF a VE with ischemic heart disease is not taking warfarin, THEN s/he should be offered daily aspirin or other antiplatelet therapy.					X		X					I	E
14. IF a VE has had a myocardial infarction (STEMI or NSTEMI), THEN s/he should be offered a beta-blocker and advised to continue treatment for ≥ 2 years following infarction.					X		X					I	E
15. IF a VE has ischemic heart disease, THEN s/he should be offered ACE inhibitor/ARB therapy and advised to continue the treatment indefinitely.					X		X					I	E
16. IF a VE with ischemic heart disease smokes, THEN there should be documentation of smoking cessation counseling annually.					X		X					I	E
17. IF a VE has had a myocardial infarction					X			X			X	E	E

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(STEMI or NSTEMI) or CABG in the past year, THEN s/he should be offered cardiac rehabilitation (formal program or its components).													
18. IF a female VE with ischemic heart disease is currently taking combination estrogen/ progesterone therapy, THEN she should be counseled about possible increased cardiovascular risk OR this therapy should be discontinued.						X	X					E	E
Medication Use													
1. ALL VEs should have an up-to-date medication list readily available in the medical record, accessible by all healthcare providers, and including over-the-counter medications.				X			X					I	I
2. ALL VEs should have an annual drug regimen review.				X			X					I	I
3. IF a VE is prescribed a drug, THEN the prescribed drug should have a clearly defined indication.				X			X					I	I
4. IF a VE is prescribed a drug, THEN the VE (or a caregiver) should receive appropriate education about its use.				X			X					I	I
5. IF a VE is prescribed an ongoing medication for a chronic medical condition, THEN there should be a documentation of response to therapy.	X						X					I	I
6. IF a VE receives a new prescription for warfarin, THEN s/he should receive education about diet and drug interactions and the risk of bleeding complications OR referred to an anticoagulation clinic.				X			X					I	I
7. IF a VE is prescribed warfarin, THEN an international normalized ratio (INR) should be determined within 4 days after initiation of therapy and at least every 6 weeks thereafter.				X			X					I	I
8. IF a VE is prescribed an ACE inhibitor, THEN s/he should have serum creatinine and potassium monitored within 2 weeks after initiation of therapy and at least yearly thereafter.				X			X					I	I

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9. IF a VE is prescribed a loop diuretic, THEN s/he should have electrolytes checked within 2 weeks after initiation and at least yearly thereafter.				X			X					I	I
10. IF a VE requires a new analgesic, THEN s/he should not be prescribed propoxyphene.				X			X					I	I
11. IF a VE is taking a benzodiazepine (>1 month), THEN there should be annual documentation of discussion of risks and attempt to taper and discontinue the benzodiazepine.				X			X			X		I	E
12. ALL VEs should not be prescribed any medication with strong anticholinergic effects if alternatives are available.				X			X					I	I
13. IF a VE does not require seizure control, THEN barbiturates should not be used.				X			X			X		I	E
14. IF a VE requires analgesia, THEN meperidine should not be prescribed.				X			X					I	I
15. IF a VE receives ketorolac THEN it should not be prescribed for >5 days.				X			X					I	I
16. IF a VE receives prescription pharmacological treatment for back or neck pain, THEN cyclobenzaprine, methocarbamol, carisoprodol, chlorzoxasone, orphenadine, tizanidine, or metaxolone should not be prescribed for >1 week.				X			X			X		I	E
17. IF a VE has had a recent stroke or myocardial infarction, has peripheral arterial disease, or acute coronary syndrome that will be treated medically or with a percutaneous angioplasty, and the patient requires antiplatelet therapy, THEN clopidogrel should be prescribed rather than ticlopidine.				X			X					I	I
18. IF a VE has iron deficiency anemia, THEN no more than 1 tablet daily of low-dose oral iron should be prescribed				X			X					I	I
19. IF a VE is started on an antipsychotic drug, THEN there should be documentation of an assessment of response within 1 month.				X			X					I	I
20. IF a VE is prescribed chronic high-dose acetaminophen (≥ 3 grams/day) OR a VE with				X			X					I	I

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liver disease is prescribed chronic acetaminophen THEN s/he should be advised of the risk of liver toxicity.													
21. IF a VE is prescribed an NSAID (non-selective or selective), THEN gastrointestinal bleeding risks should be discussed and documented.				X			X					I	I
22. IF a VE is prescribed low-dose (≤ 325 mg/day) aspirin, THEN gastrointestinal bleeding risks should be discussed and documented.				X			X					I	I
23. IF a VE with a risk factor for gastrointestinal bleeding (age ≥ 75 , peptic ulcer disease, history GI bleeding, warfarin use, chronic glucocorticoid use) is treated with a non-selective NSAID, THEN s/he should be treated concomitantly with either misoprostol or a proton pump inhibitor.				X			X					I	I
24. IF a VE with ≥ 2 risk factors for gastrointestinal bleeding (age ≥ 75 , peptic ulcer disease, history GI bleeding, warfarin use, chronic glucocorticoid use) is treated with daily aspirin, THEN s/he should be treated concomitantly with either misoprostol or a proton pump inhibitor				X			X					I	I
Osteoarthritis													
1. IF a VE has symptomatic osteoarthritis of knee/hip, THEN pain should be assessed when new to a primary care or musculoskeletal disease practice and annually.				X			X					I	I
2. IF a VE has symptomatic osteoarthritis of the knee/hip, THEN functional status should be assessed when new to a primary care or musculoskeletal disease practice and annually.				X			X					I	I
3. IF an ambulatory VE has symptomatic osteoarthritis of the knee/hip for >3 months AND is able to exercise, THEN a directed/supervised muscle strengthening or aerobic exercise program should be recommended and activity reviewed annually.			X					X			X	E	E

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4. IF a VE has symptomatic osteoarthritis of the hip/knee and has difficulty walking that makes activities of daily living difficult for >3 months, THEN the need for ambulatory assistive devices should be assessed.				X			X				X	E	I
5. IF a VE has symptomatic osteoarthritis and has difficulty with non-ambulatory activities of daily living, THEN the need for activities of daily living assistive devices should be assessed.				X			X				X	E	I
6. IF a VE is started on pharmacologic therapy to treat OA, THEN acetaminophen should be tried first.				X			X					I	I
7. IF a VE has severe symptomatic osteoarthritis of the knee/hip despite nonsurgical therapy, THEN a referral to an orthopedic surgeon should be made.			X						X			E	E
Osteoporosis													
1. ALL VEs at an initial primary care visit should be counseled about intake of calcium and vitamin D, and weight-bearing exercises.						X	X					E	E
2. ALL female VEs without a diagnosis of osteoporosis should have documentation that they were offered a DXA scan.						X	X					E	E
3. IF a male VE without a diagnosis of osteoporosis has any of the following risk factors for osteoporosis, <ul style="list-style-type: none"> • > 3 months of systemic glucocorticoid treatment • Primary hyperparathyroidism • Osteoporosis in a first degree relative • Hypogonadism • GNRH antagonist use • Osteopenia on x ray THEN a DXA scan should be performed						X	X					E	E
4. IF a female VE has a new non-pathologic fracture, THEN she should be treated for osteoporosis OR a DXA scan should be performed.					X			X				E	E

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5. IF a VE has a new hip fracture or undergoes kyphoplasty or vertebroplasty, THEN a DXA scan should be performed OR pharmacologic therapy for osteoporosis should be prescribed within 6 months.				X			X					I	I
6. IF a VE without osteoporosis is taking ≥ 7.5 mg/day of prednisone (or equivalent) for ≥ 1 month, THEN s/he should be prescribed calcium and vitamin D supplements.				X			X					I	I
7. IF a VE without osteoporosis is taking ≥ 7.5 mg/day of prednisone (or equivalent) for ≥ 3 months, THEN s/he should be prescribed bisphosphonate therapy.				X			X					I	I
8. IF a female VE is newly diagnosed with osteoporosis, THEN she should receive a workup including the following: <ul style="list-style-type: none"> • Medication use • Alcohol use • CBC • Liver function tests • Renal function • Calcium • Phosphorus • Vitamin D 25-OH • TSH 					X		X					E	E
9. IF an ambulatory VE has a new diagnosis of osteoporosis, THEN there should be documentation of advice to exercise within 3 months.					X		X				X	E	E
10. IF a VE has osteoporosis, THEN s/he should be prescribed calcium and vitamin D supplements.					X		X					E	E
11. IF a female VE has osteoporosis, THEN she should be treated with bisphosphonates, raloxifene, calcitonin, hormone replacement therapy or teriparatide (if this is a new diagnosis, within 3 months).					X		X					E	E
12. IF a male VE has osteoporosis and is hypogonadal and has no history of prostate cancer, THEN he should be prescribed					X		X					E	E

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testosterone therapy.													
13. IF a male VE has osteoporosis, THEN he should be treated with bisphosphonates, calcitonin or PTH or, if hypogonadal, testosterone (if this is a new diagnosis, within 3 months).					X		X					E	E
Pain Management													
1. IF a VE presents for an initial evaluation THEN a qualitative and quantitative assessment for persistent pain should be documented (if cognitively impaired, a standardized pain scale, behavioral assessment or proxy report of pain should be used).		X					X					I	I
2. ALL VEs should be screened for persistent pain annually.				X			X					I	I
3. IF a VE presents for a cancer-related physician visit, including visits for chemotherapy or radiation, THEN pain should be assessed.		X					X					I	I
4. IF an outpatient VE with cancer presents with severe pain (score >5 on a 0-10 scale or similar quantifiable measurement), THEN an adjustment of pain treatment should occur.				X			X					I	I
5. IF a hospitalized VE has a new moderate/severe pain complaint THEN the medical record should indicate that an intervention and follow-up assessment of the pain occurred within 4 hours				X			X					I	I
6. IF a VE is new to a primary care practice and has persistent pain, THEN there should be documentation of patient education within 6 months that explains the likely cause of symptoms and how to use medication or other therapies.				X			X					I	I
7. IF a VE with persistent pain is treated with opioids, THEN 1 of the following should be prescribed/noted: <ul style="list-style-type: none"> • Stool softener or laxative • Increased fiber, stool-softening foods • Documentation of the potential for 				X			X					I	I

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constipation and/or why bowel treatment is not needed.													
8. IF a VE is started on new opioid therapy for persistent pain, THEN efficacy and side effects should be assessed within 1 month.				X			X					I	I
Pressure Ulcers													
1. IF a VE who is admitted to a hospital is unable to reposition him/herself or has limited ability to do so, THEN risk assessment for pressure ulcers using a standardized scale should be performed upon admission, and if “at risk,” assessment repeated at least every 48 hours thereafter.				X			X					I	I
2. IF a VE is admitted to a skilled nursing facility, THEN risk assessment for pressure ulcers using a standardized scale should be performed upon admission and every week during the first 4 weeks, and every 3 months thereafter.				X			X					I	I
3. IF a VE is admitted to a home health care organization, THEN risk assessment for pressure ulcers using a standardized scale should be performed upon admission, and if “at risk,” then weekly for 4 weeks, and every other week thereafter.				X			X					I	I
4. IF a VE is identified as “at risk” for pressure ulcer development OR presents with a pressure ulcer, THEN preventive interventions should be instituted that address pressure reduction (or management of tissue loads) AND repositioning needs				X			X					I	I
5. IF a VE who is “at risk” for pressure ulcer development or has a pressure ulcer also demonstrates malnutrition, THEN a nutritional assessment to identify nutritional deficiencies AND nutrition support should be provided				X			X					I	I

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<p>6. IF a VE presents with a pressure ulcer, THEN the pressure ulcer should be assessed for the following wound characteristics:</p> <ul style="list-style-type: none"> • Location • Depth and stage • Size • Wound bed (e.g., necrotic tissue, exudates, wound edges for undermining and tunneling, presence or absence of granulation and epithelialization) 	X						X					I	I
<p>7. IF a VE has a pressure ulcer, THEN s/he should be assessed for pressure ulcer pain daily in the hospital and at each outpatient visit, AND the pain treated, if present.</p>		X					X					I	I
<p>8. IF a VE presents with a full-thickness pressure ulcer covered with necrotic debris or eschar (UNLESS dry eschar presents on the heel), THEN debridement interventions using sharp, mechanical, enzymatic, biosurgery, or autolytic procedures should be instituted within 24 hours</p>		X						X				I	I
<p>9. IF a VE presents with a pressure ulcer that is clean or free of necrotic tissue, THEN wound cleansing with normal saline or a non-cytotoxic cleanser should be instituted at each dressing change.</p>		X					X					I	I
<p>10. IF a VE presents with a clean full-thickness or partial-thickness pressure ulcer, THEN a moisture retentive topical dressing such as thin film dressings, hydrocolloids, hydrogels, foams, or alginates, should be provided for treatment AND NOT dry gauze in any form.</p>		X					X					I	I

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11. IF a VE with a full-thickness stage III or IV pressure ulcer presents with systemic signs and symptoms of infection, such as elevated temperature, elevated white blood count, and/or confusion and agitation, AND it is likely the sepsis is due to the wound, THEN the pressure ulcer should be debrided to eliminate necrotic debris within 24 hours AND a tissue biopsy, needle aspiration, or quantitative swab after debridement should be obtained for bacterial culture and appropriate systemic antibiotics initiated.		X						X				I	I
12. IF a VE presents with a clean full-thickness stage III or IV pressure ulcer at 2 to 4 weeks post-treatment with no improvement in ulcer status (e.g., decrease in surface area, depth, or by standardized wound healing tool score), THEN the appropriateness of the treatment plan and/or presence of complications should be reassessed.	X						X					I	I
13. IF a VE presents with a partial-thickness stage II pressure ulcer at 1 to 2 weeks post-treatment with no improvement in ulcer status, THEN the appropriateness of the treatment plan and/or presence of complications should be reassessed.	X						X					I	I
Screening and Prevention													
1. IF a VE has not received a booster after age 49, THEN s/he should receive a Td booster.						X	X					E	E
2. All VEs should be offered an annual influenza vaccination.				X			X					I	I
3. ALL VEs should have documentation whether they have received a pneumococcal vaccination, and if so, at what age.				X			X					I	I
4. IF a VE has not received a pneumococcal vaccination or received it >5 years ago and prior to age 65, THEN s/he should be offered pneumococcal vaccination.				X			X					I	I
5. ALL VEs should be screened for alcohol misuse within 3 months of entering a new primary care practice.					X		X					I	E

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6. IF a VE misuses alcohol, THEN s/he should be counseled to decrease intake or be referred to an alcohol program within 3 months.					X		X					I	E
7. ALL VEs should be screened for tobacco use within 3 months of entering a new primary care practice.					X		X					I	E
8. IF a VE uses tobacco, THEN s/he should be counseled to quit within 3 months and annually.					X		X					I	E
9. IF a VE is ready to quit using tobacco, THEN there should be documentation of a quit date, discussion of therapies to aid cessation, and a follow-up visit within 1 month of the quit date.		X					X					I	I
10. ALL VEs should have an assessment of activity level (with encouragement to be active) annually.						X	X					E	E
11. IF a female VE is on hormone therapy, THEN there should be documentation that the risks and benefits were discussed since January 2003.						X	X					E	E
12. ALL non-wheelchair bound VEs should have their height, weight, and BMI documented within 3 months of the initial primary care visit.				X			X					I	I
13. IF a VE is obese (BMI \geq 30 kg/m ²), THEN s/he should be advised to lose weight annually.						X	X					E	E
14. IF a female VE has had a total hysterectomy and has a Pap smear, THEN the reason for the Pap smear should be documented.	X						X					I	I
15. IF a VE presents with contusions, burns, bite marks, genital or rectal trauma, pressure ulcers or BMI $<$ 17.5 with no clinical explanation, THEN s/he should be asked about possible mistreatment or referred to a social worker for assessment of mistreatment.				X			X					I	I

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16. ALL VEs new to a primary care practice should receive the elements of a comprehensive geriatric assessment (CGA) within 3 months.				X				X				E	E
17. IF a VE receives the elements of a CGA that identifies a problem, THEN the problem should be addressed within 3 months.				X				X				E	E
Sleep Disorders													
1. ALL VEs should be annually screened for sleep problems.				X			X					I	I
2. IF a VE reports a sleep problem, THEN a targeted sleep history should be documented within 6 months				X			X					I	I
3. IF a VE has a sleep problem, THEN a discussion of sleep hygiene should be documented within 6 months.				X			X			X		E	E
4. IF a VE has daytime sleepiness AND observed apneas or loud snoring, THEN s/he should be referred for sleep evaluation within 6 months.				X				X			X	E	E
5. IF a VE has sleep disordered breathing based on polysomnography, THEN a discussion of treatment options should be documented within 6 months.				X				X			X	E	E
6. IF a VE has nocturnal limb movements during sleep AND frequent awakenings or excessive daytime sleepiness, THEN treatment or referral to a sleep specialist should occur within 6 months.				X			X			X		E	E
7. IF a VE has sleep problems, THEN s/he should not be treated with sleep aids containing antihistamines.				X			X					I	I
8. IF a VE is new to a primary care practice and is chronically (> 3 months) taking an over-the-counter sleep aid containing antihistamine for sleep problems, THEN advice to discontinue the medication should be documented within 6 months.				X				X				I	E

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9. IF a VE is new to a primary care practice and is chronically (> 3 months) taking a benzodiazepine for sleep problems, THEN advice to taper off and discontinue the medication should be documented within 6 months.				X				X				I	E
10. IF a VE has pain that disturbs his/her ability to fall asleep or maintain sleep, THEN pharmacologic/nonpharmacologic pain management should be recommended		X					X					I	I
Stroke & A fib													
1. IF a VE has a new TIA or ischemic stroke in the vascular territory of the carotid artery, THEN a carotid artery imaging study should be done or documentation that the patient is not a carotid procedure candidate.				X				X				E	E
2. IF a VE has a symptomatic carotid stenosis >70%, THEN the medical record should document a discussion of risks and benefits of carotid procedures or that the patient is not a carotid procedure candidate or that a carotid endarterectomy cannot be done with <6% 30-day morbidity and mortality rate.				X				X				E	E
3. IF a VE has chronic atrial fibrillation and is medium to high-risk for stroke, THEN anticoagulation should be offered.				X				X				E	E
4. IF a VE has chronic atrial fibrillation, medium to high-risk for stroke, and has a contraindication to anticoagulation, THEN antiplatelet therapy should be prescribed.				X			X					I	I
5. IF a VE is prescribed anticoagulants for atrial fibrillation, THEN there should be documentation that the goal of international normalized ratios (INR) is 2.0-3.0 or reason for other goal.				X			X					I	I
6. IF a VE has had a TIA or ischemic stroke, THEN outpatient antiplatelet or anticoagulant therapy should be prescribed within 3 months after stroke/TIA or entering a new practice.				X			X					I	I

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7. IF a VE has a new TIA or ischemic stroke, THEN there should be documentation of a fasting low-density lipoprotein (LDL) level.					X		X					E	E
8. IF a VE has a new TIA or stroke, THEN smoking status should be documented.					X		X					E	E
9. IF a VE has a TIA or stroke and is a current smoker, THEN smoking cessation counseling should be documented annually.					X		X					I	E
10. IF an ambulatory VE has had a TIA or stroke and is not physically active, THEN counseling to increase physical activity should be documented annually.						X	X					E	E
11. IF a VE has a new TIA or stroke THEN assessment of alcohol intake should be documented, and if positive for alcohol intake, alcohol intake reassessed annually.					X		X					E	E
12. IF a VE has had a TIA or stroke AND consumes ≥ 5 drinks of alcohol per day, THEN s/he should be counseled to decrease consumption to <2 drinks per day, and this should be documented annually.					X		X					E	E
13. IF a female VE has had a TIA or stroke and is taking hormone replacement therapy, THEN hormone replacement therapy should be discontinued or a reason (other than stroke prevention) documented.						X	X					E	E
14. IF a VE presents with a new TIA or stroke, THEN education of the patient (or caregiver) about stroke symptoms and risk factors should be documented within 6 months.				X			X			X		I	E
15. IF a VE is hospitalized with a new acute ischemic stroke, THEN aspirin should be given within 48 hours (if not already on anticoagulant therapy).		X					X					I	I
16. IF a VE is hospitalized with an acute stroke and inclusion and exclusion criteria are met, THEN thrombolytic therapy should be offered.		X						X				E	E

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17. IF a VE with a new stroke is started on intravenous tPA for thrombolysis, THEN inclusion and exclusion criteria should be met.				X			X					I	I
18. IF a VE presents with a new stroke THEN presence or absence of depression should be documented within 3 months.		X					X				X	E	I
19. IF a VE presents with a new stroke and has resulting language difficulties, THEN a referral for speech therapy should be made within 1 month.		X						X			X	E	E
20. IF a VE presents with a new stroke, THEN presence or absence of dysphagia should be documented in the hospital record.	X						X					I	I
21. IF a VE presents with a new stroke, THEN on discharge the patient should have a rehabilitation plan or documentation of no residual functional deficit from the new stroke.		X						X				E	E
Undernutrition													
1. ALL VEs should be weighed at each primary care visit and weights documented in the medical record.				X			X					I	I
2. ALL VEs in stable health states should take 800 IU (or equivalent) of vitamin D supplementation daily.						X	X					E	E
3. IF a VE is hospitalized, THEN evaluation of oral intake should be documented during the hospitalization.				X			X			X for PP		I	I
4. IF a VE has involuntary weight loss of ≥ 10% of body weight in ≤1 year, THEN weight loss (or a related disorder) should be documented in the medical record as recognition of undernutrition as a potential problem.				X			X					I	I

Description of QI	Cont & Coord	Improve Short	Improve Intermed	Prevent Short	Prevent Intermed	Prevent Long	Burden Low	Burden Mod	Burden High	Low Priority	Impract for AD	AD Exclude	PP Exclude
<ul style="list-style-type: none"> 5. IF a VE has involuntary weight loss of $\geq 10\%$ in ≤ 1 year or hypoalbuminemia (< 3.5 g/dL), THEN s/he should be evaluated for potentially reversible causes of poor nutritional intake including assessment of: <ul style="list-style-type: none"> Dental status (e.g., reference to dentition, gum health, dental referral) Food security (e.g., financial status, social work referral) Food-related functional status (e.g., ability to feed, prepare meals) Appetite and intake (e.g., 72-hour calorie count, dietitian referral) Swallowing ability (e.g., bedside swallowing study, swallowing study referral) Dietary restrictions (e.g., low salt or low protein diet). 				X			X					I	I
<ul style="list-style-type: none"> 6. IF a VE has involuntary weight loss of $\geq 10\%$ in ≤ 1 year or hypoalbuminemia (< 3.5 g/dL), THEN s/he should be evaluated for potentially relevant comorbid conditions, including assessment of: <ul style="list-style-type: none"> Medications associated with decreased appetite Depression Cognitive impairment Thyroid function Screen for cancer Diabetes Malabsorption 		X					X					I	I
<ul style="list-style-type: none"> 7. IF a hospitalized VE is unable to take food orally for > 48 hours, THEN alternative alimentation (e.g., enteral or parenteral) should be implemented or documented why not. 				X			X					I	I

Description of QI	Cont & Coord	Improve Short	Improve Intermed	Prevent Short	Prevent Intermed	Prevent Long	Burden Low	Burden Mod	Burden High	Low Priority	Impract for AD	AD Exclude	PP Exclude
8. IF a VE has a new stroke and fails a swallowing screen for dysphagia, THEN s/he should be offered swallowing training.				X				X			X	E	E
9. IF a hospitalized VE is malnourished or at risk, THEN s/he should receive oral protein and energy supplementation of ≥400 kcal/day for ≥35 days.		X						X		X for PP		E	E
Urinary Incontinence													
1. ALL VEs should have documentation of the presence or absence of urinary incontinence (UI) during the initial evaluation.				X			X					I	I
2. ALL VEs should have documentation of the presence or absence of UI every 2 years.				X			X					I	I
3. IF a VE has UI, THEN there should be documentation annually of whether the UI is bothersome to the patient and/or caregiver.		X					X					I	I
4. IF a VE has new UI or established UI with bothersome symptoms, THEN a targeted history should be documented.		X					X					I	I
5. IF a VE has new UI, THEN a targeted physical examination should be documented.		X						X				E	E
6. IF a VE has new UI or established UI with bothersome symptoms, THEN a urinalysis (or dipstick UA) AND a urine culture, if the urinalysis demonstrates pyuria or hematuria, should be obtained.		X					X for PP	X for AD				I	I
7. IF a vulnerable elder has a post-void residual > 300 cc, THEN s/he should have a serum creatinine within 72 hours and (if no reversible causes found) referred to a clinician with urological expertise within 2 months.				X				X				E	E
8. IF a VE with UI has a PVR of between 200cc and 300cc, THEN renal function should be assessed within 3 months.		X										I	I
9. IF a VE has new UI or established UI with bothersome symptoms AND the UI is treated with medication or surgery, THEN classification of the type of/suspected reason(s) for UI should be documented.		X										I	I
10. IF a VE has new UI or established UI		X					X					I	I

Description of QI	Cont & Coord	Improve Short	Improve Intermed	Prevent Short	Prevent Intermed	Prevent Long	Burden Low	Burden Mod	Burden High	Low Priority	Impract for AD	AD Exclude	PP Exclude
with bothersome symptoms, THEN treatment options should be discussed within 3 months.													
11. IF a VE is treated for UI, THEN response to treatment should be documented within 3 months.	X						X					I	I
12. IF a cognitively intact, ambulatory VE has stress, urge, or mixed UI, THEN behavioral/lifestyle treatment should be offered.		X						X			X	E	E
13. IF a female VE undergoes surgery for stress UI, THEN urodynamic investigations should be performed prior to surgery.				X				X				I	I
14. IF a female VE has stress UI and undergoes a procedure or surgery for UI, THEN one of the following should be performed or offered: (1) surgical correction with either of the following: open retrograde suspension or a sling procedure (including tension-free vaginal tape or TVT), or (2) periurethral bulking agent.				X			X					I	I
15. IF a VE has clinically significant urinary retention and a long-term (>1 month) urethral catheter is placed, THEN there should be documentation of justification for its use.	X						X					I	I
Vision													
1. ALL VEs should have a comprehensive eye exam every 2 years.					X		X for PP	X for AD				E	E
2. IF a VE has sudden-onset severe visual changes, THEN s/he should be seen by an eye care professional within 24 hours.		X					X					I	I
3. IF a VE has new onset eye pain, grossly visible corneal lesions, or severe purulent discharge, THEN s/he should undergo a basic eye examination within 72 hours.		X					X					I	I

Description of QI	Cont & Coord	Improve Short	Improve Intermed	Prevent Short	Prevent Intermed	Prevent Long	Burden Low	Burden Mod	Burden High	Low Priority	Impract for AD	AD Exclude	PP Exclude
4. IF a VE has primary open-angle glaucoma, THEN s/he should have an eye exam annually that includes measurements of visual acuity and intraocular pressure, documentation of optic nerve examination, slit lamp evaluation, visual field testing, and documentation of target intraocular pressure.					X		X for PP	X for AD				E	E
5. IF a VE with age-related macular degeneration has an eye examination, THEN the degree of maculopathy (number and size of macular drusen, presence of geographic atrophy or choroidal neovascular membranes) should be documented.					X		X for PP	X for AD				E	E
6. IF a VE is diagnosed with a cataract that limits his/her ability to carry out needed/desired activities, THEN cataract extraction should be offered.		X						X				E	E
7. IF a VE has cataract surgery, THEN there should be a follow-up ocular examination within 48 hours.	X						X					I	I
8. IF a VE who has been prescribed an ocular therapeutic regime (e.g. topical ophthalmologic medications) is hospitalized or in a nursing home, THEN there should be documentation that the therapeutic regime was administered as prescribed.	X						X					I	I
9. IF a VE with functional visual deficits has subjective improvement on refraction, THEN s/he should receive a primary or an updated prescription for corrective lenses.		X					X					I	I
10. IF a VE who uses corrective lenses for any activities of daily living (for either near or distance vision) is hospitalized or in a nursing home AND the corrective lenses are at the hospital or nursing home, THEN the corrective lenses should be accessible.		X					X					I	I

Continuity and coordination means that the intervention aims to maintain continuity across time or providers.

Improvement means that the intervention aims to improve the patient's condition or treat symptoms; Short < 6 mos, Intermediate 6-24 months.

Prevention care aims to avoid adverse events, including enhancing safety and preventing functional decline; Short < 6 mos, Intermediate 6-24 months, Long >24 months.

Burdens refer to patient and caregiver, not to the healthcare system or providers. Examples of burdens:

Low Burden – history, most exams, simple testing, blood drawing, medications

Moderate Burden – complex testing (CT, MRI, PET), colonoscopy, referrals that entail complex testing, warfarin therapy, pelvic exam

High Burden – major surgery, chemotherapy, radiation therapy

Priority – Care process may not apply to PP or AD because the expected benefit is small or the expected benefit is low probability or other possible approaches to the problem are available, making the priority of the care process low given the burdens of PP or AD.

PP=poor prognosis (life expectancy of 6 months or less), AD=advanced dementia.

I=include the quality indicator for patient with this condition, E=exclude the quality indicator for patient with this condition.

Appendix 2: Excluded ACOVE-3 Quality Indicators for Patients with Advanced Dementia, Poor Prognosis, or Decisions for No Hospitalization or No Surgery

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
BPH				
5. IF a male VE presenting with new or worsening LUTS has a history of lower tract urologic surgery or urethral trauma (including traumatic catheterizations), THEN he should be referred to a urologist within 2 months	E	E	E	E
6. IF a male VE has new microhematuria (>3 RBCs/hpf) and a negative urine culture (or has 1 positive and 1 negative urinalysis), THEN a repeat urinalysis should be performed within 1 month.	E	E	E	E
7. IF a male VE has unexplained gross hematuria or microhematuria (>3 RBCs/hpf on 2 of 3 urinalyses) and a negative urine culture, THEN he should have the following within 3 months: serum creatinine, upper urologic tract imaging, and referral to a urologist or nephrologist.	E	E	E	E
9. IF a male VE with presumed BPH has bladder stones, urinary retention (>1 episode), urinary tract infection or renal failure with hydronephrosis, THEN the patient should be referred to a urologist.	E [†] (except urinary retention)	E [†] (except urinary retention)	E [†] (except urinary retention)	E [†] (except urinary retention)
Breast Cancer				
1. IF a female VE is less than age 70, THEN she should be offered mammographic screening for breast cancer every 2 years.	E	E	I	I
4. IF a female VE has a new diagnosis of breast cancer,	I	I	E [†]	E [†]

Description of QI	AD Exclude	PP Exclude	No Hospital- ization*	No Surgery*
THEN there should be documentation of a discussion regarding: surgical options and goals of therapy; post-treatment quality of life; functional outcomes; risk and benefits of adjuvant therapy.			(surgical options)	(surgical options)
5. IF a female VE is diagnosed with locally invasive breast cancer, THEN tumor size, grade, and margins should be recorded after surgery.	I	I	I	---
7. IF a female VE is diagnosed with locally invasive breast cancer and chemotherapy is planned, THEN at the time of diagnosis HER-2/neu receptor status should be evaluated.	E	E	I	I
8. IF a female VE is diagnosed with locally invasive breast cancer, chemotherapy is planned, and she has a score of 2+ for HER-2/neu over-expression by immunohistochemistry testing, THEN HER-2/neu receptor status should be confirmed by fluorescence in-situ hybridization (FISH).	E	E	I	I
9. IF a female VE with locally invasive breast cancer has any of the following: (a) symptoms of bone pain, (b) elevated serum alkaline phosphatase, (c) tumor size >5cm, or (d) positive lymph nodes, THEN radiographic bone imaging should be performed during the staging work-up.	E [†] (except bone pain)	E [†] (except bone pain)	I	I
10. IF a female VE is diagnosed with early stage locally invasive breast cancer (Stage I-III) and chemotherapy is planned, THEN the patient should undergo axillary staging with either a sentinel lymph node biopsy or a complete axillary lymph node dissection at the time of	E	E	E	E

Description of QI	AD Exclude	PP Exclude	No Hospital-ization*	No Surgery*
surgery.				
12. IF a female VE is diagnosed with ductal carcinoma in-situ or early stage invasive breast cancer, THEN breast-conserving surgery should be offered.	E	E	E	E
13. IF a female VE with locally invasive breast cancer is treated with a mastectomy, THEN she should be offered breast reconstruction.	E	E	E	E
14. IF a female VE is diagnosed with early stage invasive breast cancer and undergoes a lumpectomy, THEN breast radiation therapy should be discussed.	E	E	I	I
15. IF a female VE is diagnosed with invasive breast cancer with a tumor >5cm OR ≥ 4 positive lymph nodes and undergoes mastectomy, THEN postoperative radiation therapy should be discussed within 2 months after surgery or after chemotherapy.	E	E	I	I
16. IF a female VE is diagnosed with estrogen receptor-positive locally invasive breast cancer of >1 cm size, THEN adjuvant hormonal therapy should be offered.	E	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospital-ization*	No Surgery*
17. IF a female VE with a life expectancy >5 years is diagnosed with locally invasive breast cancer with ≥ 4 positive lymph nodes, THEN adjuvant chemotherapy should be offered.	E	E	I	I
18. IF a female VE with normal cardiovascular function and a life expectancy >5 years is diagnosed with locally invasive breast cancer with positive lymph nodes and HER-2/neu receptor over-expression, THEN adjuvant chemotherapy with trastuzumab should be offered.	E	E	I	I
22. IF a female VE has symptomatic multifocal metastatic hormone-refractory breast cancer OR symptomatic hormone receptor-negative breast cancer with extensive visceral metastasis, THEN treatment with systemic chemotherapy should be offered.	E	E	I	I
23. IF a female VE with normal cardiac function with HER-2/neu-positive metastatic breast cancer is treated with systemic chemotherapy, THEN trastuzumab should be offered.	E	E	I	I
COPD				
1. IF a VE presents with noncardiac exertional dyspnea, chronic cough (≥ 6 months), wheeze or ≥ 2 episodes/year of bronchitis, THEN s/he should have spirometry.	E	E	I	I
Colorectal Cancer Care				
1. IF a VE is less than age 70, THEN there should be documentation that the option of colorectal cancer screening was discussed.	E	E	E	E
4. IF a VE has a new diagnosis of colorectal cancer and	E	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospital- ization*	No Surgery*
is a candidate for therapy, THEN s/he should have a pre-treatment CEA level.				
5. IF a VE with a new diagnosis of colon or rectal cancer is a candidate for elective resection of the primary tumor and has an elevated (or unknown) CEA, THEN pre-treatment imaging with a CT scan (or similar imaging) of the abdomen and pelvis should be done.	E	E	E	E
6. IF a VE has a new diagnosis of rectal cancer with a normal CEA and is a candidate for elective resection of the primary tumor, THEN pelvic imaging should be performed by ultrasound (EUS or TRUS), MRI or CT.	E	E	E	E
7. IF a VE has a new diagnosis of colorectal cancer and is a candidate for potential cure, THEN s/he should have a total colonic exam prior to surgery.	E	E	E	E
8. IF a VE underwent colorectal cancer resection for cure and total colonic examination was not performed preoperatively (e.g. due to an obstructing lesion), THEN total colonic examination should be performed within 6 months after surgery.	E	E	I	I
9. IF a VE has a new diagnosis of colorectal cancer, THEN there should be documentation of a discussion regarding: surgical options and goals of surgery; post treatment quality of life; functional outcomes; risks and benefits of adjuvant therapy (if colon cancer) or neoadjuvant therapy (if rectal cancer)	I	I	E [†] (surgical options)	E [†] (surgical options)
10. IF a VE undergoes surgery for colorectal cancer, THEN a qualified physician (e.g. surgeon, oncologist, radiation oncologist) should discuss with the	I	I	---	---

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
patient/caregiver final pathology (e.g., stage, status of lymph nodes, margins), and indications for further treatment (e.g., chemotherapy, radiation therapy).				
13. IF a VE with a new diagnosis of rectal cancer is to be treated surgically, THEN the surgeon should preoperatively (or pre-neoadjuvant therapy) assess the mass (e.g., digital rectal exam or flexible sigmoidoscopy).	I	I	---	---
14. IF a VE with a new diagnosis of colorectal cancer is to have elective abdominal perineal resection or other procedure with planned creation of an ostomy, THEN the ostomy should be sited preoperatively and documented in the medical record (e.g. enterostomal therapy note or operative note).	I	I	---	---
15. IF a VE has stage III colon cancer, THEN adjuvant chemotherapy should be given within 4 months of surgery.	E	E	I	I
16. IF a VE is thought to have stage II or III mid-low rectal cancer and is a candidate for surgery, THEN preoperative neoadjuvant chemotherapy and radiation therapy should be given.	E	E	I	I
17. IF a VE had surgical resection for stage II or III rectal cancer and did not receive neoadjuvant radiation and/or chemotherapy, THEN postoperative adjuvant chemotherapy and/or radiation therapy should be provided within 4 months of surgery.	E	E	I	I
18. IF a VE with > stage I colorectal cancer underwent resection for cure, THEN a history and physical	E	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
examination should be performed every 6 months for the first 2 years after surgery and annually during years 3 to 5.				
19. IF a VE with > stage I colorectal cancer underwent resection for cure, THEN a CEA level should be performed every 3 months for the first 2 years after surgery and annually during years 3 to 5.	E	E	I	I
20. IF a VE underwent colorectal cancer resection for cure, THEN a colonoscopy should be performed within 3 years after surgery.	E	E	I	I
21. IF a VE had prior colorectal cancer resection for cure and has an elevated CEA > 7.5 (confirmed by retesting if <10), THEN further workup should be initiated (e.g. colonoscopy, radiological imaging).	E	E	I	I
Continuity and Coordination of Care				
16. IF a VE is deaf or does not speak English, THEN an interpreter or translated materials should be utilized to facilitate communication	E	I	I	I
Dementia				
2. ALL VEs should be evaluated annually for changes in memory and function.	E [†] (memory only)	I	I	I
3. IF a VE screens positive for dementia, THEN the physician should document an objective cognitive evaluation that tests ≥ 2 cognitive domains.	E	I	I	I
10. IF a VE has been diagnosed with mild to moderate Alzheimer's disease, mild to moderate vascular dementia, or Lewy body dementia, THEN there should	E	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
be a documented discussion with the patient and/or caregiver about cholinesterase inhibitor treatment				
11. IF a VE has mild to moderate vascular or mixed dementia, THEN s/he should receive stroke prophylaxis.	E	E	I	I
Depression				
1. ALL VEs should have documentation of a screen for depression during the initial evaluation and annually.	E	I	I	I
2. IF a VE is admitted to a nursing home, THEN the patient should be screened for depression within 2 weeks of admission and annually.	E	I	I	I
3. IF a VE presents with 1 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 \geq 5% in the past month or \geq 10% in the past year; OR unexplained fatigue or low energy THEN the patient should be asked about depression, treated for depression, or referred to a mental health professional within 2 weeks of presentation.	E	I	I	I
4. IF a VE receives a diagnosis of a new depression episode, THEN the medical record should document at least 3 of the 9 Diagnostic and Statistical Manual (DSM-IV) target symptoms for major depression within 2 weeks of diagnosis.	E	I	I	I
5. IF a VE 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	E	I	I	I

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
ideation and psychosis.				
<p>15. IF a VE is newly treated for depression, THEN the following should be documented at the first follow-up visit to the same physician or to a mental health provider within 4 weeks of treatment initiation: degree of response to at least 2 of the 9 DSM-IV target symptoms for major depression AND medication side effects, if he or she is taking antidepressant medications</p>	E	I	I	I
<p>16. IF a VE is newly treated for depression and has suicidal ideation at an outpatient visit, THEN at the next follow-up visit, which must occur within 1 week, documentation should reflect asking about suicide risk.</p>	E	I	I	I
Diabetes Mellitus				
<p>1. IF a VE has diabetes, THEN glycated hemoglobin should be measured annually.</p>	E	E	I	I
<p>2. IF a VE has an elevated HgbA1c, THEN a therapeutic intervention should occur:</p> <ul style="list-style-type: none"> • HgbA1c 9-10.9%: Within 3 months • HgbA1c \geq11%: Within 1 month 	E	E	I	I
<p>3. IF a diabetic VE does not have established renal disease and is not receiving an ACE inhibitor or ARB, THEN a test for proteinuria should be done annually.</p>	E	E	I	I
<p>4. IF a diabetic VE has proteinuria, THEN an ACE inhibitor or ARB should be prescribed.</p>	E	E	I	I
<p>5. IF a VE has diabetes, THEN a foot exam should be performed annually.</p>	E	E	I	I
<p>7. IF a diabetic VE is not blind, and did not have</p>	E	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
retinopathy on a previous examination, THEN s/he should have a retinal eye examination performed by a specialist every 2 years.				
8. IF a VE has diabetes, THEN blood pressure should be measured at each primary care visit.	E	E	I	I
9. IF a diabetic VE has a persistent (on 2 consecutive visits) elevation of systolic BP >130 mm Hg, THEN an intervention (pharmacologic, lifestyle, compliance, etc.) should occur or there should be documentation of a reversible cause/other justification for the elevation.	E	E	I	I
10. IF a diabetic VE is not on anticoagulant/antiplatelet therapy, THEN daily aspirin should be prescribed.	E	E	I	I
11. IF a diabetic VE has fasting LDL >130 mg/dl, THEN a pharmacologic or lifestyle intervention should be offered within 3 months.	E	E	I	I
End of life Care				
6. IF a VE with severe dementia is admitted to the hospital and survives 48 hours, THEN within 48 hours of admission, the medical record should document that the patient's preferences for care have been considered OR an attempt was made to identify them.	I	I	---	I
7. IF a VE is admitted to the intensive care unit and survives 48 hours, THEN within 48 hours of intensive care unit admission, the medical record should document that the patient's preferences for care have been considered OR an attempt was made to identify them.	I	I	---	I
8. IF a hospitalized VE requires mechanical ventilation	I	I	---	I

Description of QI	AD Exclude	PP Exclude	No Hospital- ization*	No Surgery*
(for > 48 hours), THEN within 48 hours of the initiation of mechanical ventilation, the medical record should document the goals of care and the patient’s preference for mechanical ventilation or why this information is unavailable.				
20. IF a VE is a caregiver for a spouse/significant other/dependent that is terminally ill or has very limited function, THEN the VE should be assessed for caregiver financial, physical, and/or emotional stress.	E	I	I	I
21. IF a VE's spouse/significant other dies, THEN the VE should be assessed for depression or thoughts of suicidality within 6 months	E	I	I	I
Falls and Mobility Problems				
4. IF a VE reports a history of ≥ 2 falls (or 1 fall with injury) in the past year, THEN there should be documentation of receipt of an eye exam in the past year, or evidence of visual acuity testing within 3 months of the report.	E	I	I	I
7. IF a VE reports a history of ≥ 2 falls (or 1 fall with injury) in the past year, THEN there should be documentation of an assessment of cognitive status in the past 6 months or within 3 months of the report (or within 4 weeks of the report, if the most recent fall occurred in the past 4 weeks).	E	I	I	I
12. IF a VE is found to have a problem with gait, balance, strength, or endurance, THEN there should be documentation of a structured/supervised exercise	E	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospital- ization*	No Surgery*
program offered in the past 6 months or within 3 months of the report.				
Hearing Loss				
1. ALL VEs should have an annual evaluation of hearing status.	E	E	I	I
2. ALL VEs should have an evaluation of hearing status as part of the initial evaluation.	E	E	I	I
3. IF a VE has a self-reported hearing problem or fails a hearing screening, THEN s/he should be referred for formal evaluation by an otolaryngologist/audiologist within 3 months.	E	E	I	I
4. IF a VE is a hearing aid candidate (by audiometry), THEN s/he should be offered rehabilitation with a hearing aid.	E	E	I	I
5. IF a VE has a conductive hearing loss (by audiometry), THEN the patient should be offered a referral to an otolaryngologist.	E	E	E	E
6. IF a VE has profound bilateral sensorineural hearing loss that has not responded to hearing aid rehabilitation, THEN s/he should be offered referral for cochlear implantation.	E	E	E	E
7. IF audiometry and formal evaluation reveal that a VE's hearing loss would not benefit from a hearing aid (or cannot afford it) or treatment from an otolaryngologist OR has persistent hearing handicap, THEN s/he should be offered hearing rehabilitation or an assistive listening device (telephone amplifiers,	E	I	I	I

Description of QI	AD Exclude	PP Exclude	No Hospital- ization*	No Surgery*
TTY/TDD devices, television headphones, infrared systems, lighted telephones, door knock alert systems, vibrating clocks, or smoke detectors with strobe lights).				
Heart Failure				
1. IF a VE has a left ventricular ejection fraction (LVEF) <40%, THEN s/he should receive an ACE inhibitor (or an ARB if ACEI intolerant).	E	E	I	I
5. IF a VE is newly diagnosed with heart failure or has known heart failure with an unexplained clinical deterioration, THEN s/he should have an evaluation of left ventricular function.	E	E	I	I
6. IF a VE is hospitalized with heart failure, THEN s/he should have the following performed within 1 day: serum electrolytes; serum creatinine; blood urea nitrogen	I	I	---	I
7. IF a VE has heart failure and LVEF <40%, THEN s/he should be treated with a beta-blocker known to prolong survival (carvedilol, metoprolol or bisoprolol).	E	E	I	I
Hospital Care & Surgery				
1. IF a hospitalized VE is at very high risk for venous thrombosis, THEN s/he should be on DVT prophylaxis (pharmacologic or sequential/intermittent compression).	I	I	---	I
3. IF a hospitalized VE has a new temporary central venous catheter placed, THEN the medical record should document that maximal barrier precautions were used.	I	I	---	I
4. IF a hospitalized VE has a temporary central venous catheter placed, THEN there should be daily documentation of examination of line site for signs of	I	I	---	I

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
infection and continued need for the central line.				
5. IF a hospitalized VE has an indwelling bladder catheter placed, THEN the indication or continued need for the catheter should be documented at least every 3 days until its removal.	I	I	---	I
6. IF a hospitalized VE has a suspected/definite diagnosis of delirium, acute confusional state, or reduced level of consciousness, THEN there should be a documented attempt to attribute the altered mental state to a potential etiology.	I	I	---	I
7. IF a VE who is ambulatory as an outpatient is hospitalized for >48 hours AND is not receiving intensive or palliative care, THEN there should be a plan to increase mobility within 48 hours of admission.	I	I	---	I
8. IF a VE falls during hospitalization, THEN the following should be documented within 24 hours: presence or absence of prodromal symptoms AND review of medications for drugs potentially contributing to the fall.	E ⁺ (prodromal symptoms)	I	---	I
9. IF a hospitalized VE is tube fed, THEN there should be documentation of a plan to reduce risk of aspiration.	I	I	---	I
11. IF a VE is admitted to the hospital for pneumonia, THEN antibiotics should be administered within 4 hours of arrival.	I	I	---	I
12. IF a VE is admitted to the hospital with community-acquired pneumonia with hypoxia (O ₂ sat <90%), THEN oxygen should be administered.	I	I	---	I

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
<p>13. IF a VE hospitalized with community-acquired pneumonia is switched from parenteral to oral antimicrobial therapy, THEN the oral medication should have equivalent/ near-equivalent bioavailability OR there should be documentation of the following: signs of clinical improvement; ability to tolerate other oral medications/food/fluids; and hemodynamic stability: Heart rate <100, SBP>90, Respiratory rate <24, Temperature ≤37.8° C (100° F), O₂ sat >90% on RA</p>	I	I	---	I
<p>16. IF a VE is to have an inpatient or outpatient elective surgery, THEN there should be documentation of the patient’s capacity to understand the risks/benefits of the proposed procedure before the operative consent form is presented for signature.</p>	I	I	I	---
<p>17. IF a VE is to have elective major surgery, THEN the following should be discussed preoperatively: patient priorities/preferences regarding treatment options; operative risks; anticipated post-operative functional outcome; AND advance directive and/or designated surrogate decision maker.</p>	I	I	---	---
<p>18. IF a VE is to have elective major surgery, THEN a pulmonary review of systems (i.e. history of smoking, baseline exercise tolerance, history of COPD/asthma) and chest auscultation should be performed preoperatively.</p>	I	I	---	---
<p>19. IF a VE is to have elective major surgery, THEN an assessment of cardiovascular risk should be performed preoperatively.</p>	I	I	---	---

Description of QI	AD Exclude	PP Exclude	No Hospital-ization*	No Surgery*
20. IF a VE is to have elective major surgery, THEN the presence/absence of diabetes should be documented preoperatively.	I	I	---	---
21. IF a diabetic VE is to have elective major surgery, THEN the diabetes regimen and adequacy of diabetes control should be documented preoperatively.	I	I	---	---
22. IF a VE is to have elective major surgery, THEN s/he should be screened for risk factors for the development of postoperative delirium within 8 weeks prior to surgery.	I	I	---	---
23. IF a VE has elective major surgery, THEN prophylactic antibiotics should be administered within 1 hour before incision (2 hours for vancomycin /fluoroquinolone) AND discontinued within 24 hours after the end of surgery.	I	I	---	---
24. IF a VE with coronary artery disease has elective major surgery, THEN pre-operative beta blockade should be considered and if initiated, it should be continued until discharge.	I	I	---	---
26. IF a VE is to have a total hip replacement, THEN an anticoagulation regimen should be started preoperatively or on the evening after surgery.	I	I	---	---
27. IF a VE who was ambulatory as an outpatient has major surgery and is not in intensive care, THEN ambulation should be performed by postop day 2.	I	I	---	---
28. IF a diabetic VE has major surgery, THEN blood sugar should be kept below 200 on day of surgery and first 2 postoperative days (or the chart should reflect	I	I	---	---

Description of QI	AD Exclude	PP Exclude	No Hospital- ization*	No Surgery*
attempts to achieve this).				
29 IF a VE has major surgery, THEN a daily screening exam for delirium should be performed for the first 3 days after surgery.	I	I	---	---
30. IF a VE has major surgery, THEN assessment of cognition and functional status prior to discharge, in comparison to preoperative levels, should be performed.	E	I	---	---
Hypertension				
1. IF an asymptomatic VE without the diagnosis of hypertension has an elevated systolic blood pressure (BP) measurement, THEN a repeat BP measurement should occur as follows: <ul style="list-style-type: none"> • 140-159mm Hg: Within 6 months • 160-179mm Hg: Within 2 months • ≥180mm Hg: Within 1 month 	E	E	I	I
2. IF a VE without a diagnosis of hypertension has a systolic BP of ≥140mm Hg on 2 consecutive visits, THEN the diagnosis of hypertension should be documented OR home/24-hour ambulatory blood pressure monitoring should be ordered within 2 months or documented as done in the past 2 years.	E	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
<p>3. IF a VE is newly diagnosed with hypertension, THEN cardiovascular disease/risk assessment should be performed within 3 months (if not done in the prior 3 months) including:</p> <ul style="list-style-type: none"> • History (>3 elements): Myocardial infarction, angina, cardiomyopathy, aortic aneurysm, peripheral arterial disease, stroke, transient ischemic disease, hypercholesterolemia, family history of early coronary artery disease, smoking, alcohol use • Exam (>3 elements): Murmurs or gallops, peripheral arterial exam, peripheral edema, weight, BMI, waist circumference • Review of systems (>3 elements): Chest pain, shortness of breath, transient vision/ neurologic symptoms, nocturnal dyspnea, leg pain • Laboratory: Blood glucose and serum lipids • ECG 	E	E	I	I
<p>4. IF a VE is newly diagnosed with hypertension, THEN an assessment of renal function should be performed within 3 months (if not done in the prior 3 months).</p>	E	E	I	I
<p>5. IF a VE is newly diagnosed with hypertension, THEN the quantity and frequency of alcohol intake should be documented within 3 months (if not done in the prior 3 months).</p>	E	E	I	I
<p>6. IF a VE is newly diagnosed with hypertension AND is taking an NSAID or COX-2 inhibitor, THEN there should be documentation within 6 months of dose</p>	E	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
reduction, an attempt to use an alternative medication, or justification for continued use.				
7. IF a VE is newly diagnosed with hypertension, THEN a discussion of goal BP OR risks of prolonged hypertension should be documented within 3 months.	E	E	I	I
8. IF a VE is newly diagnosed with hypertension, THEN a non-pharmacologic intervention (e.g. diet, exercise, weight loss, reduced alcohol) should be recommended within 3 months (if not done in the prior 3 months).	E	E	I	I
9. IF a VE with HTN has persistent (on 2 consecutive visits) elevation of systolic BP above goal*, THEN an intervention (pharmacologic, lifestyle, compliance, etc.) should occur or there should be documentation of a reversible cause or other justification for the elevation. *Goal systolic BP: Diabetes or chronic renal disease – 130mm Hg Home ambulatory monitoring – 135mm Hg All other patients – 140mm Hg or other specified goal	E	E	I	I
10. IF a VE with HTN has persistent (on 2 consecutive visits) elevation of systolic BP above goal* continuously for > 6 months, THEN there should be documentation of the suspected reason why the target was not reached AND efforts to address the limitation *Goal systolic BP: Diabetes or chronic renal disease – 130mm Hg Home ambulatory monitoring – 135mm Hg All other patients – 140mm Hg or other specified goal	E	E	I	I
11. IF a VE without target organ damage has a diastolic	E	E	E	E

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
BP \geq 120mm Hg, THEN immediate therapy and/or referral to emergency room/hospital should occur.				
13. IF a VE with hypertension has ischemic heart disease, THEN treatment with a beta-blocker should be recommended OR documentation why not.	E	E	I	I
14. IF a VE with hypertension has a history of heart failure, left ventricular hypertrophy, ischemic heart disease, chronic kidney disease or CVA, THEN s/he should be treated with an ACE inhibitor or ARB OR documentation why not.	E	E	I	I
Ischemic Heart Disease				
1. IF a VE has a BMI \geq 25, THEN risk factors for cardiovascular disease should be assessed.	E	E	I	I
5. IF a VE has a myocardial infarction (STEMI or NSTEMI) complicated by heart failure or LVEF <40%, THEN s/he should be given an ACE inhibitor/ARB within 36 hours of presentation AND advised to continue this treatment for \geq 4 weeks.	E	E	I	I
6. IF a VE is hospitalized with an acute myocardial infarction (STEMI or NSTEMI), THEN an assessment of left ventricular function (LVEF) should be performed before or within 7 days of discharge.	E	E	---	I
7. IF a VE has acute coronary syndrome, did not undergo angiography, and does not have contraindications to revascularization, THEN s/he should be offered non-invasive stress testing before or within 2 weeks of discharge.	E	E	---	E

Description of QI	AD Exclude	PP Exclude	No Hospital- ization*	No Surgery*
8. IF a VE has a diagnosis of acute myocardial infarction, THEN s/he should be screened for depression within 3 months.	E	I	I	I
9. IF a VE has an ST-segment elevation AMI, THEN s/he should be offered reperfusion therapy.	E	E	E	E
10. IF a VE has significant left main or 3-vessel coronary artery disease and LVEF <50%, THEN s/he should be offered revascularization.	E	E	E	E
11. ALL VEs with ischemic heart disease should have a fasting cholesterol evaluation (LDL, HDL and triglycerides) at least every 2 years.	E	E	I	I
12. IF a VE with ischemic heart disease has an LDL >100 mg/dl, THEN s/he should be offered cholesterol lowering medication.	E	E	I	I
13. IF a VE with ischemic heart disease is not taking warfarin, THEN s/he should be offered daily aspirin or other antiplatelet therapy.	I	E	I	I
14. IF a VE has had a myocardial infarction (STEMI or NSTEMI), THEN s/he should be offered a beta-blocker and advised to continue treatment for ≥ 2 years following infarction.	I	E	I	I
15. IF a VE has ischemic heart disease, THEN s/he should be offered ACE inhibitor/ARB therapy and advised to continue the treatment indefinitely.	I	E	I	I
16. IF a VE with ischemic heart disease smokes, THEN there should be documentation of smoking cessation counseling annually.	I	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
<p>17. IF a VE has had a myocardial infarction (STEMI or NSTEMI) or CABG in the past year, THEN s/he should be offered cardiac rehabilitation (formal program or its components).</p>	E	E	I	I
<p>18. IF a female VE with ischemic heart disease is currently taking combination estrogen/ progesterone therapy, THEN she should be counseled about possible increased cardiovascular risk OR this therapy should be discontinued.</p>	E	E	I	I
<p>Medication Use</p>				
<p>11. IF a VE is taking a benzodiazepine (>1 month), THEN there should be annual documentation of discussion of risks and attempt to taper and discontinue the benzodiazepine.</p>	I	E	I	I
<p>13. IF a VE does not require seizure control, THEN barbiturates should not be used.</p>	I	E	I	I
<p>16. IF a VE receives prescription pharmacological treatment for back or neck pain, THEN cyclobenzaprine, methocarbamol, carisoprodol, chlorzoxasone, orphenadine, tizanidine, or metaxolone should not be prescribed for >1 week.</p>	I	E	I	I
<p>Osteoarthritis</p>				
<p>3. IF an ambulatory VE has symptomatic osteoarthritis of the knee/hip for >3 months AND is able to exercise, THEN a directed/supervised muscle strengthening or aerobic exercise program should be recommended and activity reviewed annually.</p>	E	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospital-ization*	No Surgery*
<p>4. IF a VE has symptomatic osteoarthritis of the hip/knee and has difficulty walking that makes activities of daily living difficult for >3 months, THEN the need for ambulatory assistive devices should be assessed.</p>	E	I	I	I
<p>5. IF a VE has symptomatic osteoarthritis and has difficulty with non-ambulatory activities of daily living, THEN the need for non-ambulatory assistive devices should be assessed.</p>	E	I	I	I
<p>7. IF a VE has severe symptomatic osteoarthritis of the knee/hip despite nonsurgical therapy, THEN a referral to an orthopedic surgeon should be made.</p>	E	E	E	E
<p>Osteoporosis</p>				
<p>1. ALL VEs at an initial primary care visit should be counseled about intake of calcium and vitamin D, and weight-bearing exercises.</p>	E	E	I	I
<p>2. ALL female VEs without a diagnosis of osteoporosis should have documentation that they were offered a DXA scan.</p>	E	E	I	I
<p>3. IF a male VE without a diagnosis of osteoporosis has any of the following risk factors for osteoporosis, THEN a DXA scan should be performed: >3 months of systemic glucocorticoid treatment; primary hyperparathyroidism; osteoporosis in a 1st-degree relative; hypogonadism; GNRH antagonist use; OR osteopenia on x ray</p>	E	E	I	I
<p>4. IF a female VE has a new non-pathologic fracture, THEN the patient should be treated for osteoporosis or a DXA scan should be performed.</p>	E	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospital- ization*	No Surgery*
<p>8. IF a female VE is newly diagnosed with osteoporosis, THEN she should receive a workup including the following: medication use, alcohol use, CBC, liver function tests, renal function, calcium, phosphorus, vit D 25 OH and TSH.</p>	E	E	I	I
<p>9. IF an ambulatory VE has a new diagnosis of osteoporosis, THEN there should be documentation of advice to exercise within 3 months.</p>	E	E	I	I
<p>10. IF a VE has osteoporosis, THEN s/he should be prescribed calcium and vitamin D supplements.</p>	E	E	I	I
<p>11. IF a female VE has osteoporosis, THEN she should be treated with bisphosphonates, raloxifene, calcitonin, hormone replacement therapy or PTH (if this is a new diagnosis, within 3 months).</p>	E	E	I	I
<p>12. IF a male VE has osteoporosis and is hypogonadal and has no history of prostate cancer, THEN he should be prescribed testosterone therapy.</p>	E	E	I	I
<p>13. IF a male VE has osteoporosis, THEN he should be treated with bisphosphonates, calcitonin or PTH or, if hypogonadal, testosterone (if this is a new diagnosis, within 3 months).</p>	E	E	I	I
<p>Pressure Ulcers</p>				
<p>1. IF a VE who is admitted to a hospital is unable to reposition him/herself or has limited ability to do so, THEN risk assessment for pressure ulcers using a standardized scale should be performed upon admission, and if “at risk,” assessment repeated at least every 48 hours thereafter..</p>	I	I	---	I

Description of QI	AD Exclude	PP Exclude	No Hospital-ization*	No Surgery*
<p>8. IF a VE presents with a full-thickness pressure ulcer covered with necrotic debris or eschar (UNLESS dry eschar presents on the heel), THEN debridement interventions using sharp, mechanical, enzymatic, biosurgery, or autolytic procedures should be instituted within 24 hours.</p>	I	I	E	E
<p>11. IF a VE with a full-thickness stage III or IV pressure ulcer presents with systemic signs and symptoms of infection, such as elevated temperature, elevated white blood count, and/or confusion and agitation, AND it is likely the sepsis is due to the wound, THEN the pressure ulcer should be debrided to eliminate necrotic debris within 24 hours AND a tissue biopsy, needle aspiration, or quantitative swab after debridement should be obtained for bacterial culture and appropriate systemic antibiotics initiated.</p>	I	I	E	E
Screening and Prevention				
<p>1. IF a VE has not received a booster after age 49, THEN s/he should receive a Td booster.</p>	E	E	I	I
<p>5. ALL VEs should be screened for alcohol misuse within 3 months of entering a new primary care practice.</p>	I	E	I	I
<p>6. IF a VE misuses alcohol, THEN s/he should be counseled to decrease intake or be referred to an alcohol program within 3 months.</p>	I	E	I	I
<p>7. ALL VEs should be screened for tobacco use within 3 months of entering a new primary care practice.</p>	I	E	I	I
<p>8. IF a VE uses tobacco, THEN s/he should be counseled to quit within 3 months and annually.</p>	I	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
10. ALL VEs should have an assessment of activity level (with encouragement to be active) annually.	E	E	I	I
11. IF a female VE is on hormone therapy, THEN there should be documentation that the risks and benefits were discussed since January 2003.	E	E	I	I
13. IF a VE is obese (BMI \geq 30 kg/m ²), THEN s/he should be advised to lose weight annually.	E	E	I	I
16. ALL VEs new to a primary care practice should receive the elements of a comprehensive geriatric assessment (CGA) within 3 months.	E	E	I	I
17. IF a VE receives the elements of a CGA that identifies a problem, THEN the problem should be addressed within 3 months.	E	E	I	I
Sleep Disorders				
3. IF a VE has a sleep problem, THEN a discussion of sleep hygiene should be documented within 6 months (e.g., bedtime avoidance of caffeine, nicotine and alcohol; exercise near bedtime; light, noise and temperature in sleep environment; avoidance of heavy meals within 1 hour of bedtime; bedtime fluid intake; daytime naps; time in bed; and regular sleep schedule).	E	E	I	I
4. IF a VE has daytime sleepiness AND observed apneas or loud snoring, THEN s/he should be referred for sleep evaluation within 6 months.	E	E	E	I
5. IF a VE has sleep disordered breathing based on polysomnography, THEN a discussion of treatment options should be documented within 6 months.	E	E	E	E

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
<p>6. IF a VE has nocturnal limb movements during sleep AND frequent awakenings or excessive daytime sleepiness, THEN treatment or referral to a sleep specialist should occur within 6 months.</p>	E	E	E	E
<p>8. IF a VE is new to a primary care practice and is chronically (> 3 months) taking an over-the-counter sleep aid containing antihistamine for sleep problems, THEN advice to discontinue the medication should be documented within 6 months.</p>	I	E	I	I
<p>9. IF a VE is new to a primary care practice and is chronically (> 3 months) taking a benzodiazepine for sleep problems, THEN advice to taper off and discontinue the medication should be documented within 6 months.</p>	I	E	I	I
Stroke & A Fib				
<p>1. IF a VE has a new TIA or ischemic stroke attributable to the carotid artery, THEN a carotid artery imaging study should be done or documentation that the patient is not a carotid procedure candidate.</p>	E	E	E	E
<p>2. IF a VE has a symptomatic carotid stenosis >70%, THEN the medical record should document a discussion of risks and benefits of carotid procedures OR the patient is not a carotid procedure candidate or a carotid endarterectomy cannot be done with <6% 30-day morbidity and mortality rate.</p>	E	E	E	E
<p>3. IF a VE has chronic atrial fibrillation and is medium to high-risk for stroke, THEN anticoagulation should be offered.</p>	E	E	I	I

Description of QI	AD Exclude	PP Exclude	No Hospital- ization*	No Surgery*
7. IF a VE has had a TIA or ischemic stroke, THEN there should be documentation of a fasting low-density lipoprotein (LDL) level.	E	E	I	I
8. IF a VE has a new TIA or stroke, THEN smoking status should be documented.	E	E	I	I
9. IF a VE has a TIA or stroke and is a current smoker, THEN smoking cessation counseling should be documented annually.	I	E	I	I
10. IF an ambulatory VE has had a TIA or stroke and is not physically active, THEN counseling to increase physical activity should be documented annually.	E	E	I	I
11. IF a VE has a new TIA or stroke THEN assessment of alcohol intake should be documented, and if positive for alcohol intake, alcohol intake reassessed annually.	E	E	I	I
12. IF a VE has had a TIA or stroke AND consumes ≥ 5 drinks of alcohol per day, THEN s/he should be counseled to decrease consumption to <2 drinks per day, and this should be documented annually.	E	E	I	I
13. IF a female VE has had a TIA or stroke and is taking hormone replacement therapy, THEN hormone replacement therapy should be discontinued or a reason (other than stroke prevention) documented.	E	E	I	I
14. IF a VE presents with a new TIA or stroke, THEN education of the patient (or caregiver) about stroke symptoms and risk factors should be documented within 6 months.	I	E	I	I
15. IF a VE is hospitalized with a new acute ischemic	I	I	---	I

Description of QI	AD Exclude	PP Exclude	No Hospital- ization*	No Surgery*
stroke, THEN aspirin should be given within 48 hours (if not already on anticoagulant therapy).				
16. IF a VE is hospitalized with an acute stroke and inclusion and exclusion criteria are met, THEN thrombolytic therapy should be offered.	E	E	---	---
17. IF a VE with a new stroke is started on intravenous tPA for thrombolysis, THEN inclusion and exclusion criteria should be met.	I	I	---	I
18. IF a VE presents with a new stroke THEN presence or absence of depression should be documented within 3 months.	E	I	I	I
19. IF a VE presents with a new stroke and has resulting language difficulties, THEN a referral for speech therapy should be made within 1 month.	E	E	I	I
21. IF a VE presents with a new stroke, THEN on discharge the patient should have a rehabilitation plan or documentation of no residual functional deficit from the new stroke.	E	E	I	I
Undernutrition				
2. ALL VEs in stable health states should take 800 IU of vitamin D supplementation daily.	E	E	I	I
3. IF a VE is hospitalized, THEN evaluation of oral intake should be documented during the hospitalization.	I	I	---	I

Description of QI	AD Exclude	PP Exclude	No Hospitalization*	No Surgery*
7. IF a hospitalized VE is unable to take food orally for >48 hours, THEN alternative alimentation (e.g., enteral or parenteral) should be implemented or documented why not.	I	I	---	I
8. IF a VE has a new stroke and fails a swallowing screen for dysphagia, THEN s/he should be offered swallowing training.	E	E	I	I
9. IF a hospitalized VE is malnourished or at risk, THEN s/he should receive oral protein and energy supplementation of ≥ 400 kcal/day for ≥ 35 days.	E	E	---	I
Urinary Incontinence				
5. IF a VE has new UI, THEN a physical exam of the following should be documented: mobility, abdominal exam, cognitive status exam, genital system exam (women: pelvic exam and estrogen status of vulvo-vaginal tissues; men: prostate), rectal for impaction/mass, assessment of volume status	E	E	I	I
7. IF a VE has a post-void residual >300 cc, THEN s/he should have a serum creatinine within 72 hours and (if no reversible causes found) referred to a urologist within 2 months.	E	E	E	E
12. IF a cognitively intact, ambulatory VE has stress, urge, or mixed UI, THEN behavioral/lifestyle treatment should be offered.	E	E	I	I
13. IF a vulnerable female elder undergoes surgery for stress UI, THEN urodynamic investigations should be performed prior to surgery.	I	I	---	---

Description of QI	AD Exclude	PP Exclude	No Hospital- ization*	No Surgery*
14. IF a female VE has stress UI and undergoes a procedure or surgery for UI, THEN one of the following should be performed or offered: (1) periurethral bulking agent, or (2) surgical correction with either of the following: open retrograde suspension or a sling procedure.	I	I	---	---
Vision				
1. ALL VEs should have a comprehensive eye exam every 2 years.	E	E	I	I
4. IF a VE has primary open-angle glaucoma, THEN s/he should have an eye exam annually that includes measurements of visual acuity and intraocular pressure, documentation of optic nerve examination, slit lamp evaluation, visual field testing, and documentation of target intraocular pressure.	E	E	I	I
5. IF a VE with age-related macular degeneration has an eye examination, THEN the degree of maculopathy (number and size of macular drusen, presence of geographic atrophy or choroidal neovascular membranes) should be documented.	E	E	I	I
6. IF a VE is diagnosed with a cataract that limits his/her ability to carry out needed/desired activities, THEN cataract extraction should be offered.	E	E	I	E

AD=advanced dementia, PP=poor prognosis (life expectancy of 6 months or less). I=include the quality indicator for patient with this condition, E=exclude the quality indicator for patient with this condition.

*For “No Hospitalization” and “No Surgery” decisions, “---” means that the quality indicator cannot apply because of the decision not to be hospitalized or have surgery.

† Only a portion of the quality indicator is excluded from application to patients with the specified condition or preference.

Figure 1.

Figure 1. Influence of Burden/Goals of Care Matrix on Percent of Quality Indicators Excluded in Patients with Advanced Dementia						
Burden	Continuity and Coordination of Care	Short-term Prevention	Short-term Improvement	Intermediate-term Prevention	Intermediate-term Improvement	Long-term Prevention
Light	5	11	16	71	80	100
Moderate		75	80	100	100	100
Heavy	—	—	100	100	100	100

Figure 2.

Figure 2. Influence of Burden/Goals of Care Matrix on Percent of Quality Indicators Excluded in Patients with Poor Prognosis						
Burden	Continuity and Coordination of Care	Short-term Prevention	Short-term Improvement	Intermediate-term Prevention	Intermediate-term Improvement	Long-term Prevention
Light	0	7	5	100	80	100
Moderate	—	92	85	100	100	100
Heavy	—	—	100	100	100	100