Pearls & Protocols
A guide to primary care for older adults
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Introduction

The Colorado M.E.S.A. (“Medicare Experts/Senior Access”) Initiative is a collaboration between Senior Care of Colorado, PC, a Medicare-only private geriatric practice based in the Denver area, and the Alzheimer’s Association Colorado Chapter, the premier source of information and support for the more than 72,000 Coloradoans with Alzheimer’s disease, their families and caregivers. Made possible through a grant from the Colorado Health Foundation, our mission is to reach out to primary care providers who see older adults throughout the state, especially those working in underserved and rural areas. Our hope and intention is to teach others how to become more adept and comfortable treating seniors, from both administrative and clinical perspectives.

You may have been among the hundreds of providers and office staff members who participated in our face-to-face workshops or on our website during 2008-2010. If so, you know we focused primarily on dementia as an example of a complex disease state that frequently challenges providers who care for seniors. We also offered “clinical guidelines” for a dozen other common disease states confronting geriatric patients.

Pearls & Protocols

A guide to primary care for older adults

Now, we are pleased to share with you this compilation of clinical Pearls & Protocols for taking care of older adult patients. To create the information in this document, we gathered 20 geriatric experts, with an average of 20 years’ experience each working with seniors, around the same table to distill the most valuable nuggets of information that we know. Each of these clinicians, including board-certified geriatricians as well as nurse practitioners and physician assistants who have dedicated their careers to caring for older adults, has his or her own unique style, philosophy, and approach to practicing medicine. And each clinician brought to the table his own day-to-day experience melded with the very latest information from clinical journals, professional organizations, and research literature.

The Pearls & Protocols herein cover the conditions and disease states most frequently presented by seniors. They were selected for one of two reasons:

1. This is among the most important information with which to be familiar when caring for seniors.
2. We believe these topics deserve more focus than we’ve seen widely presented in current literature.

As physicians ourselves, we understand what it’s like for you as a primary care provider. We’re cognizant of the dynamics that drive clinicians. And we believe that the Pearls & Protocols offered here represent a reasonable compromise within the balancing act that we must confront day in and day out. We’ve weighed what the literature tells us against our own practical experience. For example:

- **Diagnostic certainty.** Is it realistic to be absolutely sure what’s going on with your patient, or is the better choice to say, “let’s give this a try and see?”
- **Defensive medicine.** Are you concerned about being sued? And, if so, how does that impact your clinical decisions?
- **Follow-up frequency.** Will you see this patient again soon, or is it likely to be 3-4 months before you know the impact of the changes you’re making?
- **Cost of treatment.** Money is almost always an issue for senior patients. How do you balance the cost of medications and treatments with the clinical need and the patient’s pocketbook?
We’ve deliberately excluded the kind of textbook background information that is readily available in journals and online. Instead, we’ve hit the most helpful highlights and emphasized the kind of practical information that can best be gleaned through years of working directly with senior patients.

Now some conditions, such as pain management, are so vast and complex that they can’t be practically covered in detail or reduced to bullet points. In those cases, what we’ve included here are the high-level generalizations and perspectives gleaned through our geriatricians’ years of experience. You’ll probably notice that we sometimes use brand names for medications and sometimes generic names. We’re not trying to promote any particular pharmaceuticals; rather, for clarity in each case, we’ve selected the nomenclature with which we presume you’ll be most familiar. Please refer to the Glossary of Abbreviations at the end of the book for any acronyms you may not know.

This document is divided into two types of information:

1. **Pearls of Geriatric Wisdom** contain the clinical information we believe will be most helpful to you as a provider who sees senior patients.

2. **Clinical Geriatric Protocols** are intended for use by your office staff (e.g., medical assistants, triage nurses, office managers) who may address patient concerns over the telephone.

Please note that the Medical Practice Act of Colorado requires a physician to sign triage nurse phone orders. If these protocols are employed outside the state of Colorado, you’ll need to contact your local authorities to determine the rules in your state.

We hope you’ll find this information valuable and practical as you serve Colorado seniors in your practice. Please share these booklets with your clinical colleagues and the support staff in your office. We’d love to hear your feedback— you can send us a message through the website at www.ColoradoMESA.org.

Wishing you the very best in your endeavors,

Donald Murphy, MD

Michael Wasserman, MD
Principles of Geriatric Medicine

In our opinion, regardless of whether your training is in family medicine, internal medicine, or another specialty, the common denominator among those who choose to provide primary care to older adults is an underlying compassion and concern for seniors that transcends all other factors.

It takes a special person to work effectively with older adults: a gifted scientist who is intrigued by the medical complexities often presented by older adults melded with a big-hearted humanitarian who will take the time to really slow down and listen to what the patient has to say. Patience, intellect, intuition, a sense of humor, the ability to deftly multi-task and the skills to communicate effectively are all required in equal measure. Geriatric medicine is a unique approach to primary healthcare focused on the needs of older adults. How is it different from other healthcare?

1. Our primary focus is to maximize our patient’s function and quality of life.
2. Second, we seek to balance quality of life issues with the risks of any possible tests or treatments. Many tests can be quite uncomfortable and pose their own risks.
3. Third, we try to keep people in their home environment as much as possible. This includes avoiding unnecessary hospitalizations.

Our duty is to recognize our patients’ unique needs. We must listen to all of our patient’s complaints, because even a subtle one can indicate a greater problem. This means that patient visits should not be rushed. The older population, more than any other group of patients, needs to know that we, their doctors, are there for them at all times. We also have a responsibility to ensure that our staff appreciates and takes into account the specialized needs of older individuals.

Much of what we Americans typically consider “normal aging” is really not normal at all. There are very few complaints from older adults that actually warrant a response of “it’s just because you’re aging” from a physician. In fact, even when a problem is a part of the normal aging process, it should be discussed in a constructive fashion with the intention of seeking alternatives to maximize function and quality of life.

We sincerely hope that these Pearls & Protocols will help further your own personal dedication to caring for Colorado seniors.
Hello, Colorado Primary Care Providers.

The Colorado M.E.S.A. Initiative addresses one of the longstanding needs that have been identified by our family members throughout the years: limited access to primary care for individuals with dementia. This happens both in rural parts of Colorado as well as the metro areas. Our families often struggle to find a physician to monitor a person’s care once a diagnosis of Alzheimer’s is made. We are proud to be a part of this program supporting primary care providers throughout Colorado.

Our organization has been in existence for almost 30 years now. Our mission is to provide information, education, and support to families dealing with Alzheimer’s disease and to educate the public about the epidemic of Alzheimer’s that’s coming our way in the next 10 to 20 years. There is also an arm of the association providing extensive training to healthcare professionals throughout the state.

Because Alzheimer’s is such a long term disease, lasting typically from 8 to 12 years, we also focus a great deal on the care and health of caregivers--those individuals who are providing the bulk of care at home for a loved one with Alzheimer’s or another form of dementia (did you know that 70% of all Alzheimer’s care is provided in the home?). In most cases, these caregivers are older themselves and have health challenges of their own; the strain of caregiving is extensive. We provide a variety of programs and services that are designed to support patients as well as their caregivers throughout the duration of the disease.

The earlier we can work with an individual with Alzheimer’s disease and their family and caregivers, the better job we can do of helping them plan for what’s ahead. It’s our goal always to have referrals to the organization as early as possible after a diagnosis is made.

We know that your patients with Alzheimer’s disease and other dementias can place a great demand of time and attention on your busy practice. That’s why we’re here to help alleviate your burden. We encourage you to notify us with a brief (1-page) Rapid Referral Form each time you diagnose one of these patients. Our skilled and compassionate regional coordinators will make contact with the patient and their family members to help them through the shock and confusion they are likely to be experiencing. We will give them the tools and resources they need to make good decisions and face the day-to-day challenges of living with Alzheimer’s and related dementias, so your practice won’t have to worry about those aspects of care.

Please keep us top of mind; we are certain we’ll be able to make treating Alzheimer’s patients easier on you and your practice.

Visit our website at www.alz.org/co or phone our 24/7 Helpline at 800.272.3900 for more information.

Cordially,

Linda Mitchell
President and CEO
Pearls of Geriatric Medical Wisdom
ADVANCED DIRECTIVES

- Focus on patient preferences regarding CPR, elective mechanical ventilation, and tube feeding.
- Sharing the outcomes of CPR might provide clarity about DNR decisions.
- Although many seniors will opt for short term mechanical ventilation, the vast majority would not want prolonged aggressive care.
- If the patient is emphatic about not wanting CPR (and lives in the community), he/she should consider a DNR bracelet or necklace.
- The patient who would not want tube feeding in advanced stages of dementia might opt for tube feeding for conditions that would leave him/her cognitively intact.
- Consider a dysphagia waiver when the quality of life means more to the patient than survival with an altered texture diet.
- Ask your patient what they think of the phrase, “No aggressive treatments if a poor quality of life is expected.”
- Encourage patients to talk with family members about their preferences.

ANEMIA

- Iron replacement can be augmented with increased acidity provided by Vitamin C tablets.
- Unless there is ongoing blood loss, marrow iron stores should be replaced with a 90-day course of iron.
- Seniors should be dosed at 325 mg daily. More frequent dosing is generally not warranted.
- Vitamin B12 should be given for levels less than 350.
- Oral replacement of Vitamin B12 suffices for most seniors.
- Patients with ESRD on dialysis (and some with cancer on chemotherapy) routinely receive erythropoietin. Erythropoietin should also be considered for some seniors with H/H less than 10/30% and no other definite cause of anemia beyond “anemia of chronic disease.”
ANTIPSYCHOTIC DRUGS IN NURSING HOMES

• Before prescribing an antipsychotic, consider two important interventions:
  - instruct the social service provider, activities provider, and nursing representative to devise non-pharmacological interventions, (e.g., distractions such as redirection, music, walking, and engaging interactions such as puzzles, television and tasks); and
  - consider a medical evaluation for possible causes of delirium.

• Characterize the behaviors (depressive, anxiety, psychotic).

• Determine if the behavior is an isolated event or a pattern.

• Identify triggers for the behavior.

• If anxiety is prominent, consider that while anxiolytics are important as rescue medications the chronic management of anxiety is best done with an SSRI.

• Manage depression with anti-depressants.

• The new atypical antipsychotics have been favored in management of the elderly because the anticholinergic, parkinsonian, and tardive dyskinesia side effects are much less common than those experienced with the traditional antipsychotics.

• The older antipsychotics have fallen from favor in many facilities but still have usefulness in some residents.

• The healthcare provider must begin the choice of medication with preparation of a risk vs. benefit statement such as, “despite the risks of vascular death and of development of the metabolic syndrome, the benefit of treating the psychotic symptoms will allow this resident to remain in this facility, will allow the caregivers to provide the necessary care, and will reduce the patient’s psychological pain.”

• Consider starting patients on a daily aspirin when an atypical antipsychotic is started.

• Monitor for the development of diabetes.

• Consider a fasting lipid panel every 6 months.

• If the medication is prescribed for a major mental illness, such as schizophrenia or bipolar disorder, the appropriate guidelines for management of those diseases are followed and gradual dose reductions are not performed.

• If the medication is prescribed for behaviors complicating dementia (because dementia progresses and there is probable change of behaviors), dose reduction is done to determine whether the behavior still exists and to determine whether the behaviors are controlled at the lowest effective dose.

• The dose reduction should be done in increments of 10 to 25%, with an interval of 3 to 6 months to determine whether the behaviors will recur.

• Two failed titrations allow the clinician to document that there is a medical contraindication for further titrations.

• This establishes the dose as the lowest effective dose for the management of symptoms.

• Dose reductions can be reconsidered after failed titrations if the patient has had further significant functional and cognitive decline.
**ATRIAL FIBRILLATION (A-FIB)**

- Rhythm control with antiarrhythmics offers no advantage in outcomes over rate control and anticoagulation.
- Most seniors will benefit (i.e., reduce their risk of stroke) from anticoagulation. The potential benefits of anticoagulation will outweigh the potential risks (serious bleeding) even in a population of old and frail seniors, including those in long term care. Falls, in and of themselves, should not be considered a contraindication to anticoagulation; the benefits of stroke prophylaxis outweigh the risk of head bleed from falls in the average older adult on Warfarin.
- Rate control is best achieved with a beta blocker or CaCB. Digoxin should not be used as a first line medication.
- Amiodarone is useful for rate control and rhythm maintenance in selected patients. For most seniors, this medication has greater risks than benefits.
- Transient A-fib occurring with pneumonia, PE, and hyperthyroidism may not require long term treatment, but may require documentation that it is truly transient and not paroxysmal.
- The absolute risk reduction associated with Warfarin anticoagulation is approximately 6 to 9% for seniors. The absolute risk reduction for aspirin is approximately 1 to 2%.
- We recommend the Dosage Adjustment Algorithm found in the “Outpatient Anticoagulation Flowsheet” at the American Academy of Family Physicians’ website: www.aafp.org. Search for “Outpatient Anticoagulation Flowsheet” and follow the links.

**BENIGN PROSTATIC HYPERTROPHY**

- Clarify the patient’s symptoms and the impact on quality of life.
- Consider using alpha blockers, 5 alpha reductase inhibitors, and anticholinergic medications alone or in combination to control symptoms.
- A post-void residual may be done to exclude atonic bladder in patients with diabetes and other conditions.
- While there is no supportive literature at present, consider a trial of saw palmetto.
- Surgical treatment should be reserved for patients who request it or fail medication management.
CANCER ASSESSMENT IN THE NURSING HOME

- **Weight loss:** See Pearls of Geriatric Medical Wisdom on Weight Loss. Generally, the CEA, alpha fetoprotein, and other tumor markers are not useful. Ordering MRIs and CTs without symptoms guiding the evaluation is not useful.

- **Anemia:** If a microcytic anemia is found with low iron saturation, with positive stool occult blood, and with suggestive symptoms, a presumptive diagnosis of colon cancer may be made. A family conference should be held outlining this possibility and deciding how aggressively to pursue the diagnosis and treatment.

- **Chest X-ray with nodule:** Although the radiologist will likely suggest “further studies” (and risk management often compels us to comply with the radiologist’s recommendation), one should consider realistic outcomes. A family conference should be held outlining the possibilities and deciding how aggressively to pursue the diagnosis and treatment.

- **Skin cancers:** The medical provider should be attentive to the skin examination of the admission history & physical and on annual evaluations (with particular attention to sun-exposed areas). Most providers are capable of performing cryotherapy or surgical excision of minor lesions. Selected residents may require dermatological referral.

- **Postmenopausal bleeding:** Postmenopausal bleeding in the absence of progestational agents is uterine cancer until proved otherwise. Referral to a gynecologist should be made if the resident is a surgical candidate or if requested by the patient or family. If the family wishes more information, an ultrasound may be helpful as it may demonstrate fluid within the uterus. Empiric treatment with vaginal estrogens may be useful should the bleeding be from atrophic vaginitis.

CANCER SCREENING

- **Prostate Specific Antigen (PSA):** Discuss the pros and cons of PSA testing with relatively young, robust senior men. Discourage PSA testing for the older, frailer men.

- **Mammograms:** Nursing home residents under age 65 who do not have a reduced life expectancy should be offered mammography in keeping with current guidelines. Discourage mammograms for very old, frail women who have short life expectancies.

- **PAP smears:** Senior women with two negative PAP smears in the previous decade no longer need PAP smears.

- **Colonoscopy:** For younger seniors, encourage colonoscopy every 10 years (more frequently if there is a need to monitor colon polyps). If the patient refuses colonoscopy, encourage periodic checking of FOBT.
CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

- The history, physical exam, and chest x-ray usually suffice to make a diagnosis of COPD.
- Pulmonary function tests (or hand-held spirometry) and chest CAT scans can help confirm the diagnosis and determine the severity of disease.
- Pulse oximetry should be done with the patient at rest and after exertion. Patients with COPD should have their nocturnal pulse oximetry checked.
- Routine exercise or cardiopulmonary rehabilitation should be suggested.
- Most seniors with moderate hypoxemia (e.g., frequent desaturations to 85% or less) will agree to oxygen treatment (both to reduce symptoms and to protect the heart).
- Many seniors with mild hypoxemia (pulse oximetry of 86-89%) will agree to oxygen treatment; some will not.
- Seniors with COPD should be offered short acting inhalers to see if these treatments relieve their symptoms.
- Patients who get relief from short acting inhalers should use these on a prn basis. Those who do not get relief should not continue using them, particularly on a regular basis.
- A trial of a steroid/beta-agonist (e.g., Advair) and/or a trial of a long acting anticholinergic (e.g., Spiriva) should be considered regardless of the patient’s response to short acting inhalers.
- If the patient has not improved (relief of symptoms or improved functioning) with a trial of either of these medications, then the patient and clinician should discuss whether either of these medications is worth continuing. The discussion should focus on the potential long term benefits (e.g., reduction of exacerbations, mild improvement in lung function) and the cost of medications.
- Smoking cessation should be considered at all ages and certainly supported when a patient expresses a desire to stop smoking.

CLOSTRIDIUM DIFFICILE (C. DIFF)

- Clostridium Difficile (C. Diff) is often endemic in nursing facilities.
- All antibiotics create a risk.
- Stop the offending antibiotic.
- Testing for the toxin is indicated only if the stool is very loose, if not watery.
- Replace fluid and electrolytes; consider sending the patient to the ER if the nursing facility cannot provide IV fluids or the patient appears toxic.
- Treat with either oral Flagyl or Vancomycin.
- Consider adding probiotics and/or Questran.
- If using Questran, be cautious regarding binding to other medications.
- Isolation can be discontinued when diarrhea resolves, or when the stool can be controlled in either a device or the toilet, and the patient demonstrates good hand hygiene.
CONGESTIVE HEART FAILURE (CHF)

- The history, physical exam and chest x-ray are usually sufficient to establish a diagnosis of CHF.
- A BNP may be helpful to establish the diagnosis (in patients with normal renal function) but rarely necessary for ongoing management.
- Echocardiograms are indicated when valvular disease is suspected; differentiating diastolic from systolic dysfunction may be of some benefit but is not essential.
- Pulse Oximetry should be done at rest and with exertion. Nocturnal pulse oximetry should be considered for many seniors with CHF.
- Diuretics (particularly loop diuretics such as furosemide) should be used for patients whose fluid overload is causing bothersome symptoms. Diuretics are not needed simply because one has a diagnosis of CHF.
- When using diuretics to treat peripheral edema, be careful not to eliminate all of the edema, particularly in the very old and frail. The lowest effective of diuretics should be used to improve bothersome symptoms, not just edema.
- Beta blockers and ACE inhibitors or ARBs should be considered for most seniors with CHF.
- Nitrates and hydralazine can be used in refractory cases.
- Digitalis is seldom useful for seniors with CHF; beta blockers are a much better choice for patients with CHF and/or atrial fibrillation.
- Most seniors should be able to monitor their weights at home.
- In some settings and in some patients, doses of furosemide may need to be adjusted frequently.
- In nursing homes, chest x-rays are typically taken in the anterior-posterior (AP) view rather than in the posterior-anterior (PA) view. This can result in an apparent increase in the heart size. Additionally, many nursing home patients are not able to “take a big breath and hold it,” resulting in an artificial appearance of pulmonary congestion. Thus, x-rays reports of “probably congestive heart failure” are suspicious.
- Lifestyle issues should be addressed, even in the nursing home.
DEMENTIA

• The history obtained from family members or significant others is the key to making a diagnosis of dementia.
• Make sure that medications, depression, alcohol abuse, and underlying medical conditions (e.g., Vitamin B12 deficiency) are not contributing to the cognitive deficits.
• Imaging studies are not necessary unless:
  - the family insists upon them;
  - the history is unusual (e.g., history of trauma, relatively rapid onset); or
  - the neurological exam has focal findings.
• Helping patients and their families understand the difference between the generic term “dementia” and the specific etiology (or perhaps overlapping etiologies) is important.
• Use available resources, particularly the Alzheimer’s Association, to help educate patients and families about dementia.
• At some point, the clinician should carve out enough time to educate the patient and family about the causes of the dementia, the expected course, and the treatment options. It is not necessary to clarify the type of dementia before offering treatment options. In essence, we use the same medications regardless of the underlying cause of the dementia.
• Encourage routine physical activity.
• Offer treatment options early.
• You should have experience using Namenda and all three of the cholinesterase inhibitors (Exelon, Razadyne, Aricept).
• Judgments about response to medications should be based upon reports from the patient and family. It is not necessary to monitor formal mental status exams outside of research settings (or perhaps some authorizations).
• If, after the patient has been treated for approximately four months with a particular medication, there is no improvement reported, then consider changing to another medication. If the patient shows no improvement on any of the medications, then you should discuss the pros and cons of continuing the medication with the assumption that it is slowing the progression of the dementia.
• If the patient and family want to do everything possible to slow the progression, then the patient should probably be on one of the cholinesterase inhibitors and Namenda. Other treatment options that might be available (e.g. cognitive stimulation) should also be discussed.
• Given that new classes of medications will be out within the next few years, we have to anticipate that the medication costs will continue to rise. We should always be sensitive to the burden this puts on patients and their families.
• As patients reach more advanced stages of dementia (particularly for those in long term care), we should occasionally reassess the benefits and burdens of continuing medication. Families’ feelings about continuing or discontinuing is an important issue. Clinicians should be aware but cautious of claim that “patients will decline rapidly after withdrawal of medications.”
• Consider timely use of hospice or palliative care for patients with advanced dementia who are clearly declining.
• It is important for patients to establish their advance directives as early as possible after dementia has been diagnosed.
DEPRESSION

- Clinicians familiar with 2 SSRIs, an SNRI, and bupropion are equipped to treat most cases of depression.
- If vegetative symptoms are predominant, consider Ritalin or Effexor XR.
- If sexual inappropriateness is predominant, consider SSRI and be willing to try higher doses.
- Remeron is a sedating antidepressant and may be useful if there is an associated sleep disturbance or if the use of an SSRI/SNRI is associated with significant hyponatremia.
- If psychotic features (hallucinations, delusions, paranoia) are present, consider adding a low dose of an antipsychotic medication.
- For depressed mood without other symptoms, use antidepressant of choice.
- Be aware that tricyclic antidepressants can help when other, more commonly used antidepressants (such as SSRI’s or SNRI’s), have failed.
- For depression refractory to various combinations of antidepressants, consider adding an atypical neuroleptic.
- Consider adding counseling (e.g., psychotherapy) to medications. In eligible patients, counseling can be just as effective as medications. The combination of counseling and medications is often more effective than either alone.
DIABETES

- Type II diabetes is diagnosed with two fasting blood sugars greater than 125 or an elevated hemoglobin A1c greater than 6.0%. Making this diagnosis early and managing it with agent(s) that control basal glucose levels may play a role in preventing or delaying microvascular complications.
- For prevention of death, heart attack, stroke and peripheral vascular disease, blood pressure control is more important than glucose control.
- Some seniors with mild to moderate elevations of blood sugars (in the 200s or 300s) may have specific or vague symptoms from the hyperglycemia. Some with the same blood sugar levels may have no symptoms. Targets for blood sugar levels (and corresponding A1c levels) will depend on symptoms and the patient’s desire for risk reduction.
- Primary care clinicians should feel comfortable using all classes of medications (e.g., insulin, metformin, sulfonylureas, TZDs, and meglitinides). When introducing a new medication, start low and go slow.
- Sliding scales are acute interventions most important with controlling newly diagnosed diabetes, controlling erratic blood sugars in the face of acute illness, and management of the occasional brittle patient.
- Sliding scales are not part of routine diabetes management except when patients are adjusting preprandial insulin doses based on anticipated carbohydrate intake. These regimens usually involve preprandial, ultra-short acting insulin, self-administered by cognitively intact patients in the ambulatory setting.
- The nursing facility should notify the usual provider during working hours to make adjustments to the diabetic management for better long term results.
- Do not use rapid onset insulin at bedtime or other times when food is unavailable.
- The nursing facility must contact the on-call and the regular provider for any episode of hypoglycemia (BG less than 60), regardless of symptoms.
- If a patient in subacute care is regulated on insulin, then he/she must be able to self-administer the insulin on discharge.
- For nursing home patients with unexpectedly high blood sugars, consider underlying infections.
- Encourage annual eye exams and routine foot care.
DIZZINESS

- Consider discontinuing suspicious medications, especially newer ones added before the onset of dizziness.
- In addition to a good history and physical (focus on orthostatics, cardiac, and neurological exams), consider the Dix-Hallpike test.
- Be familiar with therapists who are proficient with the Dix-Hallpike test and with Epley's maneuver for BPV.
- Testing beyond this simple evaluation is rarely fruitful.
- Most dizziness resolves within weeks to months.
- Meclezine is overprescribed, though some seniors insist that it helps.
- Consider supplemental Vitamin D for disequilibrium.

ELDER ABUSE

- Consider various types of abuse: physical, emotional, neglect, financial and abandonment.
- Question the patient and caregiver separately.
- If abuse is known or suspected, it must be reported to law enforcement officials.

ESSENTIAL TREMORS

- Essential tremor is often annotated as benign, but it is not benign when it affects balance, contributes to falls, or makes eating/drinking or socialization difficult.
- Treatment is best accomplished with a beta blocker.
- If there is an insufficient response to a beta blocker (or the patient has side effects), consider other options such as Primidone, Gabapentin, or Topiramate.
FALLS

- Minimize hypotension.
- Critically review medications that impair cognition, impair balance, or cause hypotension.
- Minimize the risk of injury by reducing restraints.
- Treat underlying medical problems that may contribute to falls (e.g., anemia, hyponatremia).
- Consider adding Vitamin D.
- Consider protecting some individuals against injuries by using helmets or hip protectors.
- The practice of Tai-Chi has been known to increase balance and prevent falls and injuries.
- Lower extremity strengthening is associated with fewer falls.

GASTROESOPHAGEAL REFLUX DISEASE (GERD)

- Heartburn, dyspepsia, change in appetite, mild nausea and other symptoms may suggest GERD or peptic ulcer disease (PUD).
- Encourage lifestyle modifications (e.g., weight loss, elevate head of bed, avoid exacerbating foods, avoid eating before lying down).
- If the symptoms are relatively mild and not associated with more serious symptoms (e.g., significant weight loss), the patient should be treated empirically with a proton-pump inhibitor (PPI).
- If the symptoms improve on a PPI, then further GI evaluation is probably not needed; if symptoms do not improve on an adequate trial of a PPI, then a GI consultation is probably warranted, provided the senior is a candidate for an invasive procedure.
- For patients with established GERD or PUD and whose symptoms are well controlled on a PPI, a dose reduction of a PPI should be considered.
- Some seniors may require higher doses of PPIs indefinitely. Some may do fine on lower doses, including every-other-day dosing. Some will be fine with a change to a H2-blocker. Some may be satisfied with prn antacids.
- Patients with a long history of symptomatic GERD should consider further GI evaluation (e.g., EGD) to rule out Barrett’s Esophagus.
- Hospitalists regularly start a PPI for patients with severe illness to prevent stress ulceration. Providers who later admit these patients to nursing homes must determine whether there is an indication for continuing the PPI. Nursing homes are required to give a diagnosis for each medication on the MAR. The diagnosis of GERD regularly finds its way onto the chart. The provider must review the hospital records and ask the patient whether any symptoms are present and, if not, discontinue the PPI.
HYPERLIPIDEMIA

• For healthy ambulatory seniors, the approach to hyperlipidemia should mirror that in middle-aged populations.
• Consider less aggressive targets when hyperlipidemia is the only cardiovascular risk factor.
• Consider more aggressive targets for seniors with multiple cardiovascular risk factors.
• For assisted living or nursing home residents, consider treating if the patient is at higher risk of cardiovascular events and has a life expectancy of greater than 5 years.
• Consider that myositis can occur without rhabdomyositis and not have associated enzyme abnormalities. The appearance of muscle weakness, increasing falls and increasing frailty may be indications to discontinue the statin and fibrate. Document the rationale in a risk vs. benefit statement.

HYPERNATREMIA

• Hypernatremia is generally a result of dehydration and responds to replenishing fluids, either orally or intravenously.
• Prevention is key, including strategies such as:
  - removal of physical barriers to obtain fluid;
  - monitoring daily fluid intake for immobilized patients;
  - recognizing that older patients have a blunted thirst response;
  - providing adequate air conditioning in hot weather;
  - decreased dose of diuretics during hot weather.
HYPERTENSION

- Diagnostic tests are seldom needed to rule out secondary causes in seniors. Consider a renal ultrasound if the patient’s hypertension is not controlled by three medications.
- Target blood pressures should depend on:
  - patient’s understanding of risk reduction and his/her preferences;
  - how robust or frail the patient is and his/her life expectancy;
  - other cardiovascular risk factors;
  - the cost of medications.
- Aim for tighter control (e.g., lower blood pressures that do not cause symptoms) in robust seniors who strongly favor risk reduction.
- Aim for moderate control in most seniors with multiple medical problems (including the high cost of medications) and those who might have symptoms from tighter control of blood pressure.
- As the patient’s condition changes (e.g., additional medical problems and symptoms, greater frailty, nearing the end of life) be willing to modify the medical regimen.
- Consider using medications that can treat other conditions beside the hypertension:
  - beta blockers for coronary artery disease, atrial fibrillation, or essential tremor;
  - ACE or ARB for diabetes and renal protection;
  - alpha blockers for symptomatic BPH.
- Consider cutting down the doses and number of medications, particularly for seniors in nursing homes. A minority of patients, particularly some who are very old and frail, will do better with higher blood pressures (e.g., systolics ranging from 150 to 180)
- In the absence of target organ symptoms, assessment of an isolated elevated blood pressure is not an emergency.
- Use prn blood pressure medications infrequently, if at all; prn blood pressure medication use is not indicated in the the outpatient setting.

HYPERTHYROIDISM

- Patients with TSH levels of 0.1 to 0.5 and no suspicious symptoms usually do fine with no treatment.
- Very low TSH levels can be evaluated by free T3 and free T4 levels which, if elevated, may indicate a hyperthyroid state.
- Anti-thyroid medications, Tapazol and Propylthiouracil, are reasonably safe and can be managed by most providers.
HYponatremia

- Discontinue or decrease diuretics, particularly thiazides.
- Hydrate if the patient is volume depleted.
- Consider fluid restriction (though many nursing home residents restrict themselves). The restrictions may be gentle; you do not need to aim for sodium levels in the normal range.
- Re-evaluate the continued need of medications that might contribute to hyponatremia (e.g., SSRIs and antiepileptics).
- Demeclocycline 600 to 1200 mg may be used for refractory cases. Generally, the use of sodium tablets is not recommended, though these too may be considered in refractory cases.

HyPothyroidism

- With a sensitive TSH, obtaining a T3, T4, and FTI is of limited value
- The decision to treat or monitor subclinical hypothyroidism (TSH 5 to 10) depends on the patient’s preference and clinical presentation.
- Adjust levothyroxine dose by increments of 0.025 mg.
INCONTINENCE

- It is important to ask all seniors about urinary tract symptoms such as frequency, nocturia, and incontinence.
- It is just as important to know how much the symptoms, if present, bother the patient. The degree to which the symptoms trouble the patient should guide your recommendations.
- A urinary tract infection should be ruled out in all cases of recent onset of incontinence.
- In patients with diabetes, stroke residual or neurological disease, a post void residual (PVR) is useful in the diagnosis of atonic bladder.
- Instructing patients about Kegel exercises may be helpful for some, particularly if they are inclined to do the exercises. These exercises can be helpful whether the problem is from stress incontinence, an overactive bladder, or a combination of the two.
- Instructing the patient about timed voiding can also be helpful.
- Most seniors will not need further studies before they have an empiric trial of an anticholinergic medication. This assumes the patient does not have overflow incontinence.
- A month-long trial should be sufficient to determine benefit of the medication.
- If a trial of one medication does not lead to improvement, it is worth considering a trial of another medication.
- If trials of two medications do not benefit the patient, then consider referral to a urologist.
- Consider topical estrogen for women with atrophic vaginitis.
- Consider alpha-blockers for men with BPH.
- Men with lower urinary tract symptoms do not need to have a urology consult before they have a trial of a anticholinergic medication (or an alpha-blocker). If feasible, a primary care physician can check a PVR before starting an anticholinergic medication.
INSOMNIA

- Sleeping medications are not the solution for a sleep inversion. If a senior achieves sufficient sleep in a 24-hour period, but not at the desired time, behavioral interventions are necessary to correct the pattern to what the senior desires.

- Counsel about non-pharmacological interventions. Encourage seniors to follow a plan (e.g., read, watch TV, write letters) when they awaken in the middle of the night and cannot immediately get back to sleep.

- Be careful not to buy into the expectation of a nursing home resident who wishes to sleep much of the day and also sleep through the night. This is a formula for functional decline because of missed meals, missed activities, and missed social interaction.

- Provide good treatment for pain and depression.

- If a sleeping aid is needed, consider the following:
  - Long-acting benzodiazepines and zolpidem are associated with falls and hip fractures--be careful prescribing these to patients naive to either drug.
  - Lunesta or Rozerem work in many benzo-naive patients.
  - When dose reductions are ill advised, provide a risk vs benefit statement.
  - Trazodone or Mirtazapine are reasonable alternatives.
  - Benzodiazepines should be reserved for those residents who have taken them for years and who refuse to be detoxified from them.

- Counsel the patient about sleep hygiene:
  - Avoid stimulants and caffeine before sleep.
  - Adjust temperature and light to a level suitable for sleep.
  - Reduce noise.
  - Use bed only for sleep, not for reading, watching TV, etc.
OSTEOARTHRITIS

- Osteoarthritis should be the presumed cause of typical joint pain in most seniors.
- X-rays are not necessary but may be obtained to:
  - support the suspicion of osteoarthritis and perhaps rule out other causes;
  - determine the degree of arthritis if surgery is being considered as an option; or
  - evaluate pain in an atypical joint or location.
- Rheumatological studies are seldom needed to rule out rheumatoid arthritis.
- Clinicians should have a low threshold for checking an ESR to rule out polymyalgia rheumatica in patients with suspicious symptoms.
- CAT scans or MRIs of the lumbar-sacral spine should be obtained when surgery is being considered as an option to treat lumbar stenosis or disc disease. Imaging studies are not needed simply to monitor symptoms.
- Joint aspiration should be considered to confirm the diagnosis of gout or pseudo-gout.
- Patients with symptomatic osteoarthritis should be treated with adequate doses of acetaminophen before considering other options such as Celebrex, Ultram, and mild narcotics.
- Consider injecting trigger points and/or bursae if point tenderness exists.
- Some patients who have significant pain—and refuse surgical options—may need stronger narcotics for an indefinite period.

OSTEOPOROSIS

- Most senior women (and many men) should be screened with some type of bone density measurement.
- Although DEXA scans may be the most accurate measurements, they may not be necessary for screening or monitoring of treatments. That is, other measurements, though not quite as accurate, may be sufficient for screening and monitoring. The FRAX is a useful tool with or without DEXA data.
- X-ray evidence of osteopenia can be used as a surrogate for a bone density test in patients for whom bone density tests may be difficult (e.g., nursing home residents).
- Seniors who have already had fragility fractures, particularly vertebral compression fractures or hip fractures, should be encouraged to treat the osteoporosis regardless of the findings on the bone density measurement. They meet criteria for a diagnosis of osteoporosis and are at high risk of recurrent fractures.
- Most seniors with either osteopenia or osteoporosis should have their Vitamin D levels checked.
- Encourage weight bearing exercise and judicious sunlight exposure.
- Discussion of pharmacologic options should focus on calcium supplements, Vitamin D supplements, and bisphosphonates.
- Seniors should understand that the risk reduction associated with bisphosphonates is significantly greater than the risk reduction associated with other treatments.
- Teriparatide may play a significant role in secondary prevention of osteoporotic fractures. It may be used for primary prevention in patients with GERD that precludes the use of bisphosphonates and in patients with glucocorticoid osteoporosis.
PARKINSON’S DISEASE

- Consider Parkinson’s disease in seniors with a typical tremor, bradykinesia, rigidity, or any combination of these.
- Early symptoms of Parkinson’s disease may benefit from physical therapy, which can lead to confidence in ambulation and teach methods to compensate for loss of balance and posture.
- Empiric treatment with Sinemet is indicated if any of these symptoms bother the patient (e.g., difficulty eating or writing, long delays getting from one place to another).
- Adequate doses of Sinemet should be tried before concluding that it is not helping.
- Once benefit with Sinemet is established, other medications can be considered to supplement the Sinemet (and help modify the dose of Sinemet needed). Clinicians should repeatedly review the simplicity and cost of the medical regimen.
- Many patients with advanced dementia in nursing homes will have significant rigidity. Although the rigidity may be from the advanced dementia, it is worth considering an empiric trial of Sinemet to treat the rigidity.
- An empiric trial of Sinemet in the nursing home requires close monitoring for side effects.
- Minimize hypotension: consider compression stockings, liberalizing salt intake, or adding Florinef or Proamatine when hypotension contributes to functional decline.

PAIN MANAGEMENT

- Reduce pain to a level that improves the patient’s function, satisfaction and sense of well-being.
- Allow the patient to determine the appropriate level of pain reduction.
- Clinicians should be familiar with and comfortable using all classes of analgesics.
- Clinicians should be aware of the characteristics of somatic, bone, and neuropathic pain, recognizing that chronic pain may have characteristics of each.
- When using opiates, combining a long-acting opiate with a shorter-acting one for breakthrough pain often makes sense.
PNEUMONIA

- When a provider is on-call and a pneumonia is reported, he/she should:
  - ask why the chest x-ray (CXR) was obtained;
  - ask if the patient has symptoms and a fever;
  - listen closely to the radiologist’s description;
  - ask for a description of previous CXRs; and
  - consider requesting a CBC.

- If pneumonia is probable, decide if the patient can be treated in the nursing home or if he/she needs transfer to the hospital (consider advance directives, family’s desires, and likelihood of adequate oxygenation and hydration).

- Use **one of the following** antibiotics to cover typical bacteria:
  - Ceftriaxone 2 g intramuscular daily for 7 days;
  - Levofloxacin 750 mg orally daily for 7 days, making adjustment if the GFR is less than 50;
  - Amoxicillin-clavulanate 875/125 mg orally twice daily for 7 days;
  - Cefuroxime axetil 500 mg orally twice daily for 7 days; **or**
  - Etrapenem 1 g intramuscular daily for 7 days.

- Plus **one of the following** to cover atypical bacteria:
  - Doxycycline 100 mg orally twice daily for 7 days; **or**
  - Azithromycin 500 mg orally day 1, then 250 mg orally daily for 4 days.

- If the patient is not improving after 72 hours or you suspect aspiration pneumonia, then add (or start with, if you suspect aspiration early on) **one of the following** to cover anaerobes:
  - Clindamycin 600 mg intramuscular twice daily for 7 days; **or**
  - Metronidazole 500 mg orally three times daily for 7 days.

- If the patient is critical or MRSA is suspected, then add (or start with):
  - Linezolid 600 mg IV or orally twice daily for 7 days; **or**
  - Vancomycin 15 to 20 mg/kg IV or orally for 7 days (if seriously ill, may use a loading dose of 25 to 30 mg/kg to attain target trough concentration).
POLYMYALGIA RHEUMATICA (PMR)

- Typically, polymyalgia rheumatica (PMR) responds to small doses of prednisone.
- A biopsy to rule out temporal arteritis is not needed to begin empiric treatment with prednisone. Higher doses of prednisone should be considered if temporal arteritis is suspected.
- Prednisone should be adjusted based on the patient’s symptoms more than on the ESR level.
- Consider treating if the patient has suggestive symptoms and the ESR is normal (10% of patients with PMR have normal ESRs).

PERI-OPERATIVE ASSESSMENT OF A NURSING HOME PATIENT

- The American Society of Anesthesiology Assessment is most useful.
- There is little benefit of cardiac stress testing or invasive cardiac procedures to reduce cardiac events peri-operatively.
- For appropriate patients, consider beta blockers, statins, and prophylactic antibiotics.
- After major joint surgery, use heparinoids or Warfarin for 5 weeks post operatively.

PERIPHERAL VASCULAR DISEASE (PVD)

- Peripheral Vascular Disease (PVD) should be considered, if not actively screened for, in all seniors with disease from athrosclerosis (e.g., CAD, cerebral vascular disease, AAA) or if the patient has metabolic syndrome (hypertension, diabetes, and hypercholesterolemia).
- If the patient has classic claudication, an ankle-brachial index (ABI) should be checked even if the patient has palpable pedal pulses.
- If the patient has atypical leg pain (i.e., not classic claudication) and has clearly palpable pulses, an ABI is not needed.
- Counseling about the importance of exercise (i.e., walking up to the point of tolerable pain) and smoking cessation is very important.
- A trial of Pletal may alleviate symptoms.
- Surgical consultation should be recommended when symptoms cannot be adequately controlled with conservative measures.
- Patients with a diagnosis of PVD should be regarded as high risk for cardiovascular disease even if they have no history of CAD or stroke.
SENSORY IMPAIRMENT

- Consider visual screening and replacement of glasses.
- Facilitate management of macular degeneration, including access to high intensity lighting, magnification, and bold print reading materials.
- Consider cataract extraction for appropriate patients.
- Screen for hearing loss and consider supplying “pocket talkers”—inexpensive sound amplifiers with headsets.
- Screen for and treat cerumen impaction.
- Screen for neuropathy in patients with diabetes.

SYNCOPE

- Expensive diagnostic procedures (e.g., MRI, carotid ultrasound, echocardiogram, and tilt-table testing) have a low yield unless one of the following factors from the history & physical suggest a cause:
  - Arrhythmia
  - Aortic stenosis
  - Carotid sinus hypersensitivity
  - Hypoglycemia
  - Orthostatic hypotension
  - Postprandial hypotension
  - Psychogenic causes
  - Pulmonary embolism
  - Vasovagal faint
- The absence of cardiac disease from the history suggests that the cause of the syncope is not cardiac disease.
- Bradycardia is the most common cause of cardiac syncope.

TRANSITION TO ASSISTED LIVING/NURSING HOME

- Activities of daily living (ADLs) can be provided by services for the home patient, such as Meals on Wheels, maid services for cleaning, nursing assistant services for bathing, shaving, dressing, and adaptive devises for mobility and toileting. The one exception is transferring.
- If the patient cannot transfer, then toileting is not usually possible, and certainly safety is impaired in the event of an emergency. In this case, assisted living or nursing home placement is necessary.
URINARY TRACT INFECTION (UTI)

- The urine culture does not define a Urinary Tract Infection (UTI), but is a useful guide to treatment.
- Do not treat asymptomatic bacteruria.
- To have a UTI, one must have:
  - symptoms (and these may be vague, such as altered mental status or falls); and
  - pyuria with >10 WBCs per HPF.
- If a UA or C & S are to be done, do so after a catheter change.
- In a catheterized patient, a urine culture showing MRSA most likely represents catheter colonization and will resolve with changing the catheter.
- Since bladder colonization is often polymicrobial, and one cannot discern which organism(s) may be causing the infection, consider empiric coverage for Group D enteroccus and gram negative organisms.
- In patients with recurring UTIs, consider structural abnormalities of the genitourinary tract.
- If the same organism is cultured in a patient with recurring UTIs, consider a prolonged treatment course (such as 21 days).
- If different organisms are cultured in a patient with recurring UTIs, consider the following:
  - Acidification of the urine (vitamin C, cranberry, UTI-stat)
  - Urinary antimicrobials (Urex, Hiprex, Mandelamine)
  - Double voiding
- Consider hospitalization if a patient has a highly resistant organism and has serious symptoms, consider hospitalization.
- A patient should be sick (not just have an abnormal UA or C & S) to justify intravenous antibiotics.

VITAMIN D DEFICIENCY

- Vitamin D is important for bone integrity and for improving muscle and balance integrity.
- Providers may choose to begin all nursing home residents on Vitamin D or to screen for Vitamin D levels and treat those with low levels.
- All agree that seniors should have levels higher than 30; some aim for even higher levels.
- Dose more frequently when low levels are first discovered.
- 50,000 IU monthly should be a sufficient maintenance dose for most seniors.
- Exposure to sunlight is also important. Aim for exposure of arms and legs for 20 minutes, three times a week. Encourage nursing home activity directors to incorporate this goal into their plans.
WEIGHT LOSS

- In the face of marked, life-threatening weight loss, the patient's medication list should be reduced to essential minimums.
- If the patient has a mechanical barrier, such as dysphagia, direct efforts at the mechanical barrier and not at appetite.
- If the weight loss is a consequence of organ failure that is end-stage, and no further medical intervention will be beneficial, hold a conference with the patient and significant others to review course and focus on end-of-life care.
- If reversible causes of failure to thrive can be identified, and the patient and family concur, initiate aggressive care.
- If the patient has no end-stage organ failure and no discernible cause for the failure to thrive can be determined, a trial of an appetite stimulant may be appropriate. These should be used for a scheduled period of time, generally not to exceed 90 days.
- At the end of the trial period, two endpoints should be considered: weight gain and improvement in appetite. Success does not necessarily mean regaining weight to the previous baseline, but may represent gaining a new stable baseline weight.

WOUND CARE

- A shallow wound with slough or eschar is likely not stage II but stage III or IV.
- For stage III ulcers, treatment should include all of the goals for stage I or II but may also require debridement (mechanical, autolytic, enzymatic, sharp, or surgical) of non-viable tissue. An exception is the heel ulcer, which should be debrided only if fluctuance exists below the eschar.
- Use products that allow for prolonged wear when daily dressing changes are not possible.
- Wound care is expensive; determine cost and affordability to the patient before ordering.
- Addition of multivitamins or zinc supplements have not been shown to improve wound healing. Improvement of serum albumin may improve wound healing.
- If healing is stalled, consider obtaining a wound culture and sensitivity.
- For diabetic ulcers, consider a podiatry consult due to the high risk of limb loss.
- For lymphedema, compression therapy is standard but the application requires special training in lymphedema management.
- Healing of venous stasis ulcers, first and foremost, requires control of edema. Compression with Aces bandages or other techniques is a standard of care.
Geriatric Clinical Protocols
CONSIDER TRANSFER TO EMERGENCY ROOM (ER)

- **Elder patients in nursing facilities present a unique challenge when determining the aggressiveness of treatment options. The following factors must be taken into account:**
  - Does the patient have a do not resuscitate (DNR) order in the chart?
  - Does the patient have a do not hospitalize (DNH) order in the chart?
  - Does the patient have an order for comfort care or hospice?
  - Does the patient have significant dementia?
  - What is the patient’s functional status?
  - Does the patient have a Durable Power of Attorney (DPOA) for Health Care?

- If the patient does not have a DNR order, “Consider Transfer to ER” in the following protocols should lead to sending the patient to the ER unless the patient refuses.

- If the patient does not have a DNR order, refuses to be transferred to the ER, and is felt not to be competent by nursing staff, the patient’s DPOA for Health Care must be notified to determine whether the patient should be transferred.

- If the patient has a DNR order and is unable to consent to transfer to the ER due to dementia or delirium, the DPOA for Health Care should be identified and contacted regarding the possible transfer to the ER.

- If the patient has a DNR order and a DNH order, hospitalization should only be considered under the following circumstances:
  - The patient or his/her DPOA for Health Care desires transfer to the ER.
  - The patient has an injury that can only be managed in the ER or hospital.
BITE, ANIMAL/HUMAN

- Clean the area well with soap and water.
- Apply antibiotic ointment (Mycitracin, Neosporin, Polysporin).
- Leave wound open to air unless it is oozing blood.
- Apply ice pack for swelling during the first 24 hours. Apply heat to area after 24 hours.
- Give a tetanus immunization if needed.
- Check wound daily for signs of infection. Cat and human bites are easily infected.
- If possible, observe the animal for 2 weeks for signs of rabies or illness.
- Due to concern about rabies, report animal bites--especially bat or skunk bites--to local animal control or other appropriate authority.

- Report dog and cat bites if any of the following occur:
  - The animal is sick
  - The bite is unprovoked
  - The animal is a stray
  - There is no indication of rabies vaccinations
  - Circumstances surrounding the injury are suspicious or unclear/uncertain

- Page out to provider to assess.
BITE, INSECT/BEE

Consider Transfer to ER Protocol if history of any anaphylaxis or if patient appears to be developing shock (low blood pressure, breathing difficulty, cold clammy skin, cyanosis).

- Emergency instructions:
  - Use Epi pen if available for resident with an allergy to bee stings.
  - Take Benadryl 25 to 50 mg every 6 to 8 hours as needed to relieve itching.
  - Remove all jewelry on the affected extremity.
  - If hands or feet swell because of a local sting, keep the extremities elevated to help decrease swelling.
- If stinger is still present, instruct staff to remove stinger by gently scraping the site until all of it is removed. Never pluck or squeeze the stinger.
- Carefully wash the site with soap and water.
- Make a paste of water and meat tenderizer and apply to the wound for 10 minutes. Avoid application of meat tenderizer paste near eyes.
- Apply cold or ice pack to the sting site for the first 24 to 48 hours, then apply warm soaks as swelling may be worse on the second day.
- Order pain medication.
- Underarm deodorant or witch hazel are good alternatives to apply to the site to help reduce itching.
- Watch for signs of infection during the next few days.
- Page out to provider to assess.

BLOOD/BODY FLUID EXPOSURE

- If wound is present, wash with povidone-iodine (Betadine) if available, or soap and water, and watch for signs of infection: increased redness, pain, drainage, fever, warmth, or streaks.
- Rinse exposed eyes or mouth with running water for 5 minutes.
- Consult with the provider or health department for:
  - HIV testing on self and contact person
  - Hepatitis B vaccine (if not previously vaccinated)
- Check with provider; tetanus booster may be needed in the event of a needle stick.
CAST/SPLINT PROBLEMS

- If a cast feels too tight, elevate the body part higher than the heart and apply an ice pack to the cast for 20 minutes every 2 hours for the first 24 to 48 hours.
- If a splint feels too tight, loosen the bandage, elevate the part and apply ice pack to the area for 20 minutes every 2 hours for the first 24 to 48 hours.
- If a cast or splint is damaged, provide support with wide adhesive tape or elastic bandage, and see provider the next day for repairs.
- If a cast or splint is wet, dry with a towel and blow dryer as needed.
- If itching is present, apply a light dusting of talc powder or use blow dryer set on cold setting.
- Instruct the patient and caretakers to avoid sticking anything inside the cast to scratch the area as scratched skin is easily infected.

BURNS/THERMAL

Estimate the percentage of the patient’s body affected. 1% body surface area is about the size of the palm of the hand. Or, use the “Rule of nines:” head = 9%; arms = 9% each; legs = 18% each; chest = 18%; back = 18%; groin = 1%. 

If over 30% of the patient’s body surface is burned, page the provider STAT.

Treatment considerations:

- Use over-the-counter NSAIDs for 48 hours if no contraindication or renal impairment.
- Use acetaminophen for pain control if no liver damage.
- Apply cool packs to area until pain is relieved when cool packs are removed (this may take several hours). May also submerge in cool water.
- Do not apply ice directly to the burned area.
- Avoid application of any greasy ointments to the area.
- Milk of Magnesia or aloe vera may be applied to soothe the skin.
- Keep area clean and cover with clean, dry, nonstick dressing.
- Watch for signs of infection.
- Use antibiotic ointment (Mycitracin, Neosporin, Polysporin) after burn begins to heal to help prevent infections.
- Do not puncture and drain blisters.
- Page to provider to assess.
CHEST PAIN

Assessment

Are any of the following present?

- Continuous or intermittent chest pain with:
  - Shortness of breath
  - Dizziness or weakness
  - Cool moist skin
  - Nausea or vomiting
  - Blue or gray face, lips, ear lobes, nails
  - Palpitations
  - Unrelieved by rest or sublingual nitroglycerine every 5 minutes x 3

Are any of the following present?

- Change in pattern of pain in a known cardiac patient
- Chest pain at rest or that awakens patient
- History of heart disease or stroke
- History of congestive heart failure
- History of prior deep vein thrombosis (DVT)
- Heavy smoker
- Pain swelling, warmth, or redness of legs
- Sudden onset of swollen ankles
- Coughing up blood

Are any of the following present?

- Recent injury or pain with movement
- Pain with deep breathing
- Discomfort with deep coughing

Action

- STAT page to provider
- Consider Transfer to ER Protocol
- Oxygen by nasal cannula or mask
- Chewable aspirin, 162 mg, OR Plavix, 300 mg, if allergic to aspirin or antacids

- Call or STAT page to provider
- Response from provider required within 30 to 60 minutes

- Page to provider to assess at next visit
CONSTIPATION/HEMORRHOIDS

Assessment

Are any of the following present?
- Severe abdominal pain or tenderness
- Absence of or high pitched bowel sounds

Action

- STAT page to provider
- Consider Transfer to ER Protocol

Relevant history to obtain for provider:
- Findings of digital exam by nurse
- Recent change in medications
- Use of pain medications
- Timing of and amount of last bowel movement
- The patient’s normal pattern of bowel movements
- Presence of small frequent liquid stools or hard stools
- Presence of blood on surface of stool or wipes

Treatment considerations for constipation:
- Increase fluid intake.
- Give Miralax 17 grams orally daily.
- Use Dulcolax suppository if Miralax not effective in 12 to 24 hours.
- Administer a Fleet enema once if Dulcolax has not been effective in 12 hours (do not use if patient has renal impairment or on dialysis).
- If no response in 3 days to the above regimen, obtain an abdominal x-ray (flat plate and lateral decubitus).
- If constipation resolves then order Miralax 17 grams orally daily.
- Use Anusol-HC rectally after bowel movements twice daily for 1 week for hemorrhoids or pain on defecation.
- Page provider to address at next visit.

Treatment considerations for hemorrhoids:
- Soak in a warm saline bath for 20 minutes a day. (Add 2 tablespoons of salt or baking soda to the water.)
- Keep rectal area clean. May use medicated pads (Tucks) to cleanse and soothe area.
- If rectal area is irritated, apply over-the-counter hydrocortisone ointment (Anusol-HC, Cortaid) or zinc oxide paste or powder.
- If hemorrhoids persist, try over-the-counter preparations (Anusol, Nepercainal, Preparation H) to help soothe and shrink hemorrhoids.
- Increase fluid intake and eat a diet high in fiber, fruits, vegetables and bran.
- Add stool softener to regimen.
- Have team reassess need for medications that worsen constipation, such as narcotic pain medications.
- If taking iron preparations or bismuth subsalicylate (Pepto-Bismol) consider ordering stool for guaiac.
**DIARRHEA**

**Assessment**

*Are any of the following present?*

- Severe weakness, lethargy
- Severe abdominal pain
- Fever >101º F
- Rapid or labored breathing
- Lightheadedness or orthostasis

**Action**

- STAT page provider
- Consider Transfer to ER Protocol

**Relevant history to obtain for provider:**

- Recent prescriptions with antibiotics
- Recent change in medications
- Food intolerances or allergies
- Any other cases among close contacts

**Diagnostic tests:**

- CBC, BMP, stool for clostridium difficile (C. diff) toxins (if history of recent antibiotics in 30 days)

**Treatment considerations:**

- After the first bout of loose stools, take Kaopectate 2 tablespoons orally every 30 to 60 minutes, up to a maximum of 8 doses per day, for no longer than 2 days.
- After 6 hours of diarrhea and cramping, or if pain persists, use over-the-counter antidiarrheal medication such as Immodium.
- Take only a clear liquid diet for the first 12 to 24 hours (sips of water, flat soda, clear broth, gelatin).
- During the next 12 hours, progress to eating soup (avoiding cream soups), dry toast, soda crackers, white rice, pretzels, bananas, applesauce, and potatoes.
- Progress to regular diet after soft formed stools occur.
- Avoid dairy products, citrus juices, raw fruits and vegetables, and fried or spicy foods for 2 to 5 days.
- Acetaminophen can be given for fever. Do not order aspirin.
- **Avoid Immodium if there is a recent C. diff.**
- **Avoid Questran as there is potential for drug interaction problems.**
- If the patient is C. diff positive:
  - Flagyl 500 mg orally three times daily for 10 days.
  - Vancomycin liquid (less expensive) 250 mg orally four times daily for 10 days if recent treatment with flagyl, recurrence, or non-response to flagyl in 24 to 48 hours.
**EAR ISSUES**

**Assessment**

*Are any of the following present?*
- Severe ear ache and temperature >101º, stiff neck

*Are any of the following present?*
- Swelling, pain, redness on one side of face
- Tympanic membrane bulging
- Bloody or clear drainage different from ear wax
- Foreign body

**Action**

- STAT page to provider
- Consider Transfer to ER Protocol
- Page provider for orders
- Need response within 1 hour

**Treatment considerations:**

- **Insect or foreign body in ear**
  - If patient complains of buzzing sound in ear and an insect is seen, fill ear with mineral oil until buzzing stops, then flush insect from ear with warm water.
  - Point the ear toward the light and pull up on the ear to encourage an insect to crawl out of the ear toward the light.
  - Do not try to remove a foreign object if unable to remove it by pointing ear down toward the ground and gently shaking the head while pulling up on the ear.
  - Apply an ice pack to the affected ear 20 minutes, 3 to 4 times a day for 1 to 2 days, to relieve discomfort if insect or object has been removed.
  - May order over-the-counter pain medications for relief.

- **Ear wax/ear ache/drainage**
  - Sudden hearing loss or visible ear wax:
    - Do not instill liquid drops in the ear if pain is related to an injury or a ruptured eardrum is suspected (sudden pain, hearing loss, bleeding or discharge, ringing in the ears, dizziness).
    - To remove excessive ear wax, use Debrox (carbamide peroxide) or Colace as directed for as long as 3 days, or use 2 drops of mineral oil in the affected ear twice a day for 2 days.
    - Relieve ear congestion by frequent swallowing, chewing gum, and swallowing with the nose pinched closed.
    - Take acetaminophen for ear ache or fever.
**EDEMA**

### Assessment

**Are any of the following present?**

- Unilateral edema
  - History of recent injury
  - History of malignancy (most likely to be deep vein thrombosis)
  - Calf pain or calf tenderness on exam
- Bilateral edema
  - History of chronic heart disease
  - If no recent lab data

### Action

- Order ultrasound
- Notify provider
- Order x-ray, BNP
- Order CBC, CMP, hemoglobin, albumin and sodium (renal function)

### Relevant history to obtain for provider:

- Medication list and allergies
- Any history of peripheral arterial disease/ulcerations

### Treatment considerations:

- If on diuretics, double the current diuretics for 2 days and recheck BMP on 3rd day.
- May order acetaminophen for pain.
- Use compression garments (thigh hi/knee hi) if no history of peripheral arterial disease.
- Elevate the extremity.
- Monitor skin closely for signs of infection.
- Page provider to assess at next visit or sooner.
**EYE ISSUES**

**Assessment**

*Are any of the following present?*

- Penetrating injury to eye or eyelid
- Blow to eye with loss of vision
- Clear jelly-like discharge from injured eye
- Blood in the colored part of eye
- Persistent, severe pain
- Object embedded in eyeball
- Sudden loss of vision
- Sudden increase in number of floaters, light flashes, or curtain over field of vision
- Ulcer or gray white sore on eyeball

*Are any of the following present?*

- Swelling, pain, tearing for more than 30 minutes
- Blurred or double vision
- Pain with pressure to the eye or with movement
- Lesion on eyeball or corner of eye

**Action**

- STAT page to provider
- Consider Transfer to ER Protocol
- Page provider for orders

**Treatment considerations:**

- **Dry eye**
  - Verify that patient is not having vision loss or pain, natural tears to both eyes twice daily as needed. As needed tears four times daily.

- **Conjunctivitis**
  - If conjunctiva is red, drainage and/or local itching present, order sodium sulamyd 10% ophthalmic drops, 1 drop in each eye three times daily for 10 days.
  - If allergic to sulfa, use garamycin ophthalmic drops, 2 drops in each eye three times daily for 10 days.

- **Stye on eye**
  - Page provider for oral antibiotics; may order moist warm compress for comfort and acetaminophen for pain.

*Please continue to the next page for additional information on Eye Issues.*
EYE ISSUES (Continued)

Treatment considerations (continued):

- **Foreign body**
  - Chemicals in the eye:
    - Immediately flush eye with cold running water for 20 to 30 minutes. Tilt head under running water with the injured eye down. While holding eyelids apart, allow water to run across the inner eye to the outer part of the eye.
  - Do not try to remove:
    - a foreign body embedded in the eye; or
    - a foreign body over the colored part of the eye.
  - Foreign body removal (lint, specks of dirt, eyelashes):
    - Pull down the lower lid and remove the particle with the corner of a moistened towelette, tissue, or cotton-tipped swab.
    - Pull down the upper lid over the lower lid and hold in place for a moment. Release and look to see if object is visible; if so, remove it.
  - Instruct the patient not to rub his/her eyes.
  - Apply an ice pack or cool compresses to reduce discomfort.
  - Use over-the-counter pain medication if indicated

- **Pink eye**
  - Rinse eyes frequently with warm water, every 1 to 2 hours when awake. Use a soft warm moist cloth to remove crusting and drainage.
  - If exposed to chemical irritants, rinse eyes with warm water for 5 minutes.
  - Apply alternating warm and cold compresses to eyes for 10 minutes every 2 hours for 24 hours.
  - To control itching, try Benadryl 25 to 50 mg orally every 6 to 8 hours for 24 to 48 hours.
  - A mild solution (1 part baby shampoo to 20 parts water) may also be used to remove crusts.
## FALLS

### Assessment

**Are any of the following present?**
- Confusion, decreased level of consciousness
- Lack of coordination
- Slurred speech
- Severe headache
- Weakness on one side of body
- Blurred or double vision
- Seizures
- Unable to balance or stand
- Severe pain in hip or thigh with deformity
- Difficult with moving joint closest to injury
- Fingers or toes of the affected limb are cold, blue, or numb
- Bone protruding
- New or sudden bladder or bowl incontinence
- Blood or body fluid draining from nose or ear with no known injury

**Are any of the following present?**
- Repeat falls--2nd fall in 1 month

### Action

- STAT page to provider
- Consider Transfer to ER Protocol
- Provider to assess in 1 - 2 days
- Order:
  - CBC, BMP
  - UA if symptoms of UTI
  - Pharmacy consult and physical therapy consult
  - Vitamin D if not already on it
- Notify provider of actions

### Treatment considerations:

- Apply ice pack to injured area.
- Elevate affected area.
- For severe injuries: splint limb with pillows or magazines above and below injury.
- Use Motrin 600mg every 8 hours with meals/food for 2 days or Tylenol 650mg every 6 hours (do not exceed 4 doses per 24 hours).
- Clean open areas with saline and cover with sterile dressing.
- Consider tetanus toxoid if no history of immunization in >10 years.
- If patient is a nursing home resident, order x-rays if facility requests.
- For residents of a facility, follow facility’s protocol for vitals and neuro checks.
FINGER AND TOE INJURIES

- Apply ice intermittently and elevate the digit for 24 to 48 hours after injury. Place a small cloth between the ice and the skin.
- Remove jewelry immediately, before swelling occurs. Use soap, lotion, petroleum jelly (Vaseline), or another lubricant to remove any object that may cause vascular compromise.
- Immobilize the injured digit by taping it to the next digit.
- Order over-the-counter pain medications for relief.
- For swelling or pain with no known injury, or if signs of infection are present, elevate the digit and apply warm soaks to the area for 20 minutes, 4 times a day.
- If the nail was involved monitor closely for infection.
- Use warm compress several times a day to combat soreness and to promote healing.

FEEDING TUBE PROBLEMS

To unclog feeding tube:
- Raise the head of bed to at least 45 degrees.
- Connect the tip of a large syringe into the tube and pull back to remove as much debris from the tube as possible.
- Fill the syringe with 30 ml (1 oz) of water.
- Connect syringe to tube and irrigate.
- Remove as much debris as possible.
- Push 5 ml of tea or cola into the tube and clamp for a few minutes and redraw the clogged matter.
- Repeat the process until the tube is cleared.

Flush tube with 50 ml of water after feeding, medications, or supplements are inserted into the tube.

To check placement of feeding tube:
- Turn off pump.
- Using large syringe, insert tip into feeding tube and gently pull back.
- If there is concern the tube is displaced, do not use the tube until tube placement is verified.
- This is usually done by listening over the epigastric area with a stethoscope while pushing air through a large syringe connected to the tube.
HYPERGLYCEMIA

Assessment

Are any of the following present?

• Greater than 500
  - Change in mental state or toxic patient

• 450 to 500
  - Any change in mental state or toxic patient
  - Patient appears stable

• Less than 450
  Obtain relevant history for provider:
  - Recent change in medications
  - Recent signs or symptoms suggestive of infection

Action

• Consider Transfer to ER Protocol
• STAT page to provider for orders
• Need response within 30 minutes
• 10u regular insulin

• Consider Transfer to ER Protocol

• Order finger stick blood sugars before meals and before bedtime for 3 days
• Page provider for further orders

• Notify provider
• Needs assessment in 1 to 2 days
HYPOGLYCEMIA

Assessment

If patient is a nursing home resident, follow facility protocols.

If no protocol is available/applicable:

• Change in mentation/seizures

• Asymptomatic patients who can take oral supplements

Relevant history to obtain for provider:

• Name and dosage of all diabetic medications
• Any recent change in diabetic medications

Action

• Glucagon, 1mg
• Start IV line
• Dextrose
• Consider “Transfer to ER Protocol” if blood sugar fails to increase after 15 minutes with Glucagon, given twice

• Glucose tabs
• Fruit juice
• Non-diet soda or juice

• Notify provider to assess at next visit
• Obtain order for any change in medications
## LAB ISSUES, COMMON

### Assessment

**Low calcium**
- If patient has symptoms of altered consciousness, seizures, severe muscle spasms
- Is there a lab value for protein or albumin?

**High calcium**
- Serum calcium 10.8 to 14
  - If patient has seizures, change in mentation, or appears dehydrated
  - Asymptomatic patient

**Low sodium**
- Sodium less than 124
  - Change in mental status or seizures
  - Asymptomatic patient
- Sodium between 124 and 128

### Action

- Consider Transfer to ER Protocol
- Order to be drawn at next lab draw
- Consider Transfer to ER Protocol
- Stop all calcium supplements
- Stop all thiazide diuretics
- Stop Vitamin D
- Provider to assess at next visit
- Consider Transfer to ER Protocol
- STAT page to physician
- Stop diuretic
- Obtain current medication list
- Notify provider to see patient in 1 to 2 days

---

*Please continue to the next page for additional information on Common Lab Issues.*
## LAB ISSUES, COMMON (Continued)

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Action</th>
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<tbody>
<tr>
<td><strong>High sodium</strong></td>
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<tr>
<td>• 148 to 152</td>
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<tr>
<td>- Any change in mental status</td>
<td></td>
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<tr>
<td>- Asymptomatic patient</td>
<td></td>
</tr>
<tr>
<td>• Greater than 152</td>
<td></td>
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<tr>
<td><strong>Low potassium</strong></td>
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<tr>
<td>• Less than 2.8</td>
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<tr>
<td>• 2.8 to 3.4, asymptomatic patient</td>
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</tr>
<tr>
<td><strong>Hyperkalemia</strong></td>
<td></td>
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<tr>
<td>• Greater than 6 and non-hemolyzed specimen</td>
<td></td>
</tr>
</tbody>
</table>

### Relevant information to obtain for provider:
- Verify medication list
- Verify serum creatinine and date done
- Verify whether there has been a doubling of the creatinine and the time span

<table>
<thead>
<tr>
<th>Action</th>
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</thead>
<tbody>
<tr>
<td>• Consider Transfer to ER Protocol</td>
</tr>
<tr>
<td>• Stop diuretics</td>
</tr>
<tr>
<td>• Increase fluid intake</td>
</tr>
<tr>
<td>• Page provider to assess in 1 to 2 days</td>
</tr>
<tr>
<td>• STAT page to provider for further orders</td>
</tr>
<tr>
<td>• STAT page to provider for further orders</td>
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<tr>
<td>• Replace 40 mg per day in addition to current dose</td>
</tr>
<tr>
<td>• Notify provider to follow up</td>
</tr>
<tr>
<td>• Order basic metabolic panel in 3 days</td>
</tr>
<tr>
<td>• STAT page or call to provider</td>
</tr>
<tr>
<td>• Stop potassium supplements, ACE inhibitors, and ARBs</td>
</tr>
<tr>
<td>• Call provider for further orders</td>
</tr>
<tr>
<td>• Need a response within 30 to 60 minutes</td>
</tr>
</tbody>
</table>
LACERATIONS

- If patient needs sutures or staples, transfer to urgent/acute care for repair of laceration.
- Suture/staple removal: if facility protocol permits, remove per surgeon request.
- Page provider with order given.

MOUTH PAIN

- *Iced fluids may soothe mouth sores but will worsen a toothache.*
- Rinse mouth with warm water and ½ teaspoon salt or baking soda 4 times a day, or rinse with an antiseptic mouthwash.
- Avoid spicy, citrus, or salty foods until sores are healed.
- Avoid touching sores.
- Brush, floss, and rinse teeth and mouth at least twice daily.
- Use over-the-counter pain medications for relief of discomfort.
- Use an over-the-counter product containing Orabase to provide protective coating and diminish discomfort.
- Page to provider to assess at next visit.
NAUSEA/VOMITING/ABDOMINAL PAIN

**Assessment**

*Are any of the following present?*
- Severe persistent pain
- Painful or tender area that does not disappear with pressure
- Fainting or lightheadedness
- Orthostasis, temperature >101° F
- Vomiting bright red blood or coffee grounds
- Large amount of bright red blood per rectum

**Action**

- STAT page provider
- Consider Transfer to ER Protocol

**Relevant history to obtain for provider:**
- A recent change in medication or antibiotic treatment
- Food or drug allergies/intolerance
- Time of last bowel movement
- Character of the vomitus: bile, recent meal, coffee ground, fecal matter
- Painful or difficult urination
- Blood in urine
- Any other close contacts with similar symptoms

**Diagnostic tests:**
- CBC, BMP, abdominal x-ray–flat plate and lateral decub
- Urinanalysis only if symptoms indicate urinary tract infection

**Treatment considerations:**
- Consume only clear liquids and/or BRAT diet for 12 to 24 hours.
- Use Compazine suppository 25 mg twice daily or 10 mg intramuscular.
- Provider must assess in 1 to 2 days.
OSTOMY PROBLEMS

**Ostomy care:**
- Check appliance and make sure parts are snapped securely together.
- If the ostomy is leaking, remove the appliance, clean the skin with mild soap and water, dry well, and prepare the skin as directed by a nurse or provider; apply the new appliance. Hold in place for 5 minutes to ensure pouch seals to the skin.

**Bleeding stoma:**
- A small amount of bleeding (3 to 5 cc), such as seen with bleeding gums, is normal and no treatment is needed.
- If bleeding seems excessive and the patient is stable then notify team to assess at next visit.
- It is important to verify if patient is on anticoagulants or blood thinners and pass that information to the team.

**Constipation:**
- Make sure the diet is adequate in volume, bulk (high fiber), and fluids (6 to 8 glasses a day, unless on a fluid-restricted diet).
- Drinking a hot beverage such as coffee, tea, hot water with lemon, or prune juice may help with initiation of the bowel movement
- Follow the prescribed plan for using stool softeners, laxatives, and irrigation.
- When taking medications with codeine or other medications that increase constipation, follow the constipation prevention plan prescribed by the provider.

PNEUMONIA

Please refer to the “Pearls of Geriatric Medical Wisdom” on Pneumonia, page 19.
RASHES

Try to identify cause and avoid irritant.

To control itching:
- Take a cool bath with baking soda, Aveeno, or oatmeal (1 cup in a tub of cool water) several times a day, or apply cold packs to localized rashes.
- For severe itching, apply 1% hydrocortisone cream.
- Apply baking soda paste, calamine lotion, or Aveeno to the affected area.
- Use Benadryl 25 to 50 mg every 6 to 8 hours for 3 to 4 days.
- If patient is cognitively impaired, advise caregivers to monitor to avoid scratching.
- Apply wet dressings soaked in Burow’s solution, 1 part solution to 10 to 40 parts water. Change frequently, as often as 8 times in 2 hours.
- Page provider with orders given and to assess at next visit.

For possible allergic reaction:
- If rash is related to a new medication, stop taking the medication.
- Use Benadryl 25 to 50 mg every 6 to 8 hours for 3 days.
- Advise staff to watch for signs of worsening reaction (swelling, difficulty swallowing or breathing) for at least 24 hours; if this happens, Consider Transfer to ER Protocol.
- Page provider with orders given and to assess at next visit.

For possible heat rash:
- Apply calamine lotion or hydrocortisone cream.
- Take a cool bath or shower without soap every 2 to 3 hours, as needed for relief, and air dry.
- Apply baby powder to the affected area.

For poison oak, ivy, or sumac exposure:
- Wash exposed area within 1 hour of exposure, if possible.
- Soak area with cool water or rub with ice for 20 minutes, as needed.
- Wash all clothes that may have been exposed to the plants.

Fungal/yeast rash:
- Apply Nystatin ointment or powder twice daily until rash is resolved.

Vesicular rash:
- Call or page provider for orders; need response in 1 to 2 hours.
- Obtain relevant history for provider.
- Linear area or unilateral involvement that does not cross the midline.
- Prior history of shingles.
- History of diabetes or immune compromise states including cancer or ongoing use of steroids.
- Review last renal function studies if available.

Page provider with all skin issues for assessment.
### RESPIRATORY INFECTION/BREATHING DIFFICULTY

#### Assessment

**Are any of the following present?**

- Severe chest pain
- Blue lips or tongue
- Clammy skin
- Feeling of suffocation
- Frothy pink or large amount of white sputum
- Decreased level of consciousness
- History of prior pulmonary embolism or blood clots
- Severe wheezing not relieved by nebulized bronchodilators
- Inability to speak
- Drooling or inability to swallow
- Difficulty breathing after exposure to smoke or fumes
- Inhalation of foreign body
- Temperature >101° F
- Severe pain with breathing
- Hypoxia not corrected by high flow O2

**Are any of the following present?**

- O2 saturation less than 88%

#### Action

- STAT page to provider
- Consider Transfer to ER Protocol

- Page provider to assess

#### Relevant history to obtain for provider:

- Duration of symptoms
- History of chronic respiratory illness
- Change in the amount or color of sputum
- Difficulty breathing when laying down or the need to sit up to breathe
- Inability to sleep due to cough
- Vital signs including O2 saturation level

#### Treatment considerations:

- Duonebs 4 times daily as needed
- Acetaminophen 650 mg every 6 hours as needed
- Mucinex 600 mg twice daily for 1 week
- Call provider for further orders
SCABIES

Assessment

*Are any of the following present?*

- Lines of small itchy blisters:
  - Between fingers or toes
  - On wrists, elbows, or armpits
  - On waist, buttocks creases, inner thighs or creases under breasts
- Blisters break easily when scratched
- Increased itching at night
- Signs of infection; increased discomfort, drainage, redness, red streaks from wound, or warmth
- Adult with scabies on face or scalp

Action

- Page provider STAT for immediate disposition at a facility as condition is highly contagious

Treatment considerations:

- Scabies is highly contagious, and all close contacts should be treated after exposure to diagnosed scabies. Symptoms can take 30 days to appear after exposure.
- Eruax - leave on for 24 hours, then apply a second coat. Do not wash off the first coat. After 48 hours, wash off the second coat. Repeat process in 1 week.
- Patient may have cool baths (without soap) to help relieve itching.
- Benadryl 25 to 50 mg every 6 to 8 hours to help relieve itching.
- Wash all clothes, linens, and undergarments in hot soapy water.
- Store all clothes and blankets used by patient away for 3 to 4 days as scabies cannot live without the host.
- If the patient is a facility resident, look for evidence of an outbreak: determine whether other residents have similar symptoms.
SKIN TEAR

- Clean area with saline or soap and water.
- Align skin and steri-strip in place.
- Apply TAO (triple antibiotic ointment).
- Page provider for followup.

SUNBURN

- Apply cold compresses to burn or take a cool bath for 10 minutes 4 times a day. May add Aveeno or ½ cup baking soda to water.
- Do not allow the affected area to become numb, as frostbite can occur. Do not apply ice to the skin.
- Order over-the-counter pain medications for at least 2 to 3 days with due consideration to renal and hepatic dosing.
- Advise against application of greasy substances to burn area.
- After cooling with water, and if no open blisters are present, apply topical antibiotic, aloe vera, or a mixture of Benadryl elixir and Milk of Magnesia in equal amounts to burned area up to 4 times a day.
- During the drying stage, apply moisturizing lotion to the skin. Peeling usually occurs in 3 to 10 days.
- For painful and swollen eyes, stay in a darkened room, apply cool compresses to the eyes, and rest.
- Increase fluid intake.
- Assess medication list for phototoxic medications such as sulfas, tetracycline, phenothiazines, or thiazides.
- Page provider with orders given and to assess in 1 to 2 days.

URINARY CATHER/NEPHROSTOMY TUBE PROBLEMS

- Check for kinks in tubing and that the patient is not lying on the catheter.
- The collection bag has to be lower than the pelvis.
- Check and secure all connections.
- Make sure nephrostomy (if present) stopcock is in the correct position.
- Change position of the patient.
- Clean the catheter with soap and water, then advance ½ inch or rotate 90 degrees.
- Irrigate the catheter.
- Order at least 8 to 10 glasses of fluid daily unless on a fluid-restricted regimen.
- Page provider for further orders and for followup.

URINARY TRACT INFECTION (UTI)

Please refer to the “Pearls of Geriatric Medical Wisdom” on Urinary Tract Infection, page 22.
# GLOSSARY OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
<th>Abbreviation</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>AAA</td>
<td>Abdominal Aortic Aneurysm</td>
<td>NSAID</td>
<td>Non-Steroidal Anti-Inflammatory Drug</td>
</tr>
<tr>
<td>ABI</td>
<td>Ankle-Brachial Index</td>
<td>MRI</td>
<td>Magnetic Resonance Imaging</td>
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<tr>
<td>ACE</td>
<td>Angiotensin-Converting Enzyme</td>
<td>MRSA</td>
<td>Methicillin Resistant Staph Aureus</td>
</tr>
<tr>
<td>ADL</td>
<td>Activities of Daily Living</td>
<td>PAP</td>
<td>Papanicolaou Test</td>
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<tr>
<td>ARB</td>
<td>Angiotensin Receptor Blocker</td>
<td>PE</td>
<td>Pulmonary Embolism</td>
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<tr>
<td>BMP</td>
<td>Basic Metabolic Panel</td>
<td>PRN</td>
<td>As Needed</td>
</tr>
<tr>
<td>BNP</td>
<td>Brain Natriuretic Peptide</td>
<td>PSA</td>
<td>Prostate Specific Antigen</td>
</tr>
<tr>
<td>BRAT</td>
<td>Banana, Rice, Applesauce, Toast</td>
<td>PT</td>
<td>Physical Therapy</td>
</tr>
<tr>
<td>C &amp; S</td>
<td>Culture and Sensitivity</td>
<td>PMR</td>
<td>Polymyalgia Rheumatica</td>
</tr>
<tr>
<td>C. Diff</td>
<td>Clostridium Difficile</td>
<td>PVD</td>
<td>Peripheral Vascular Disease</td>
</tr>
<tr>
<td>CaCB</td>
<td>Calcium Channel Blockers</td>
<td>O2</td>
<td>Oxygen</td>
</tr>
<tr>
<td>CAD</td>
<td>Coronary Artery Disease</td>
<td>Reg</td>
<td>Regular Insulin</td>
</tr>
<tr>
<td>CBC</td>
<td>Complete Blood Count</td>
<td>SNRI</td>
<td>Serotonin Noradrenaline Reuptake Inhibitor</td>
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<tr>
<td>CEA</td>
<td>Carcinoembryonic Antigen</td>
<td>SSI</td>
<td>Sliding Scale Insulin</td>
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<tr>
<td>CHF</td>
<td>Congestive Heart Failure</td>
<td>SSRI</td>
<td>Selective Serotonin Re-uptake Inhibitor</td>
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<tr>
<td>CMP</td>
<td>Comprehensive Metabolic Panel</td>
<td>STAT</td>
<td>Immediately</td>
</tr>
<tr>
<td>COPD</td>
<td>Chronic Obstructive Pulmonary Disease</td>
<td>TAO</td>
<td>Triple Antibiotic Ointment</td>
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