10 WAYS TO REDUCE FQ PRESCRIBING IN THE HOSPITAL

1. **Always take a good allergy history. Document and update antibiotics allergy histories in detail, especially penicillin and cephalosporin allergies.** In the absence of beta-lactam allergy, FQ are seldom a preferred agent for hospitalized patients (See Chart 1).
2. **Define the infectious disease problem at admission**. At the time patient presents with a suspected infectious process, **attempt to define (a) the infectious disease syndrome and (b) the microbiologic etiology** by obtaining the appropriate history, physical, clinical specimens and studies. Consider non-infectious etiologies as well as non-bacterial infections.
3. **For an empiric indication**, before prescribing FQ, stop and re-evaluate. There is likely a preferred agent with a less-severe toxicity profile. (See Chart 1 for recommended antibiotics for empiric use in place of FQ.)
4. **For empiric therapy for Community-acquired Pneumonia (CAP) admitted to the floor,** prescribe ceftriaxone + azithromycin as standard therapy.
    - Exception: for serious beta-lactam allergy, **levofloxacin** is recommended.
5. **For CAP,** avoid "de-escalation" from ceftriaxone + azithromycin to oral levofloxacin.
    - At asp.nm.org, the CAP Guideline recommends appropriate oral de-escalation antibiotic options.
6. **For asymptomatic bacteriuria,** do not administer antibiotics.
7. **For empiric therapy of UTI,** prescribe cephalexin, nitrofurantoin, or IV cefazolin. **For pyelonephritis**, IV cefazolin is the recommended empiric treatment.
8. **For empiric therapy of diverticulitis**, prescribe cefazolin or ceftriaxone + metronidazole for severe cases and po cefuroxime/metronidazole or amoxicillin-clavulanate or hydration with observation for mild cases.
9. **Reserve directed FQ use (when a patient's microbiologic data documents FQ susceptibility)** for those indications in which no appropriate alternatives are available; this restriction is particularly true for patients with identified higher relative risk of FQ toxicity.
10. **If a FQ is prescribed, document a FQ-specific daily Antibiotic Time Out**:
    a. The patient's risk assessment for toxicity associated with FQ use, including advanced age, kidney damage, aortic vascular disease, CNS disease.
    b. Outline the evidence that the indication requires a highly bioavailable drug, the spectrum of activity indicated, and lack of appropriate alternative agents.
    c. Is the antibiotic still indicated? Is an alternative to fluoroquinolone available? What is the necessary treatment duration?

Chart 1. Recommended Inpatient Antibiotics for Empiric Use in Place of Fluoroquinolones (adapted from asp.nm.org)
***In case <u>of stated</u> allergy, consider performing an intensified allergy investigation and possible allergy consultation.**

Indication	Standard antibiotic therapy	Alternative Antibiotic Option	FQ for limited clinical situation*	Potential additional tests
CAP	Ceftriaxone + azithromycin		Allergy to ceftriaxone or severe allergy to PCN	Rapid Respiratory Pathogen Panel, sputum culture, *S. pneumoniae* urine ag; *Legionella pneumophila* urine ag.
Osteomyelitis for patient with hemoglobinopathy	Ceftriaxone +/- vancomycin	Aztreonam + vancomycin	PO therapy desired and FQ susceptible organism	Biopsy prior to antibiotics.
Vertebral osteomyelitis	(Ceftriaxone or cefepime) + vancomycin	Aztreonam + vancomycin	PO therapy desired and FQ susceptible organism	Bone, disc, or soft tissue biopsy prior to antibiotics.
Cholecystitis	Ceftriaxone or cefazolin		Allergy to ceftriaxone or severe allergy to PCN	
Diverticulitis, peritonitis, perirectal abscess – community-acquired	Ceftriaxone or cefazolin + metronidazole	Aztreonam + metronidazole + vancomcyin		
Necrotizing pancreatitis; infected pseudocyst or abscess(es)	Piperacillin/tazobactam	Meropenem		If CT abdomen with iv contrast shows minimal or no necrosis, antibiotics are not indicated. If infection is suspected, drain and culture abscesses or pseudocysts.
UTI or pyelonephritis	Cefazolin		Empiric FQ should be reserved for the rare situation of allergies to multiple antibiotics, including cefazolin and PCNs.	See alternatives listed on Empiric Prescribing Guidelines-GU on asp.nm.org
Bite injury	Po amoxicillin-clavulanate or IV ampicillin-sulbactam		Allergy to PCNs	
Diabetic foot ulcer-severe	Piperacillin-tazobactam +/- vancomycin	Cefepime + metronidazole OR		Biopsy prior to antibiotics.

		Aztreonam + vancomycin + metronidazole		
Septic shock-post-splenectomy	Stat dose of Ceftriaxone +vancomycin		Allergy to PCNs: Stat dose of Levofloxacin + vancomycin	