

The “Day 3 Bundle”: Tailoring Empiric Antimicrobial Therapy for Inpatients on Day 3

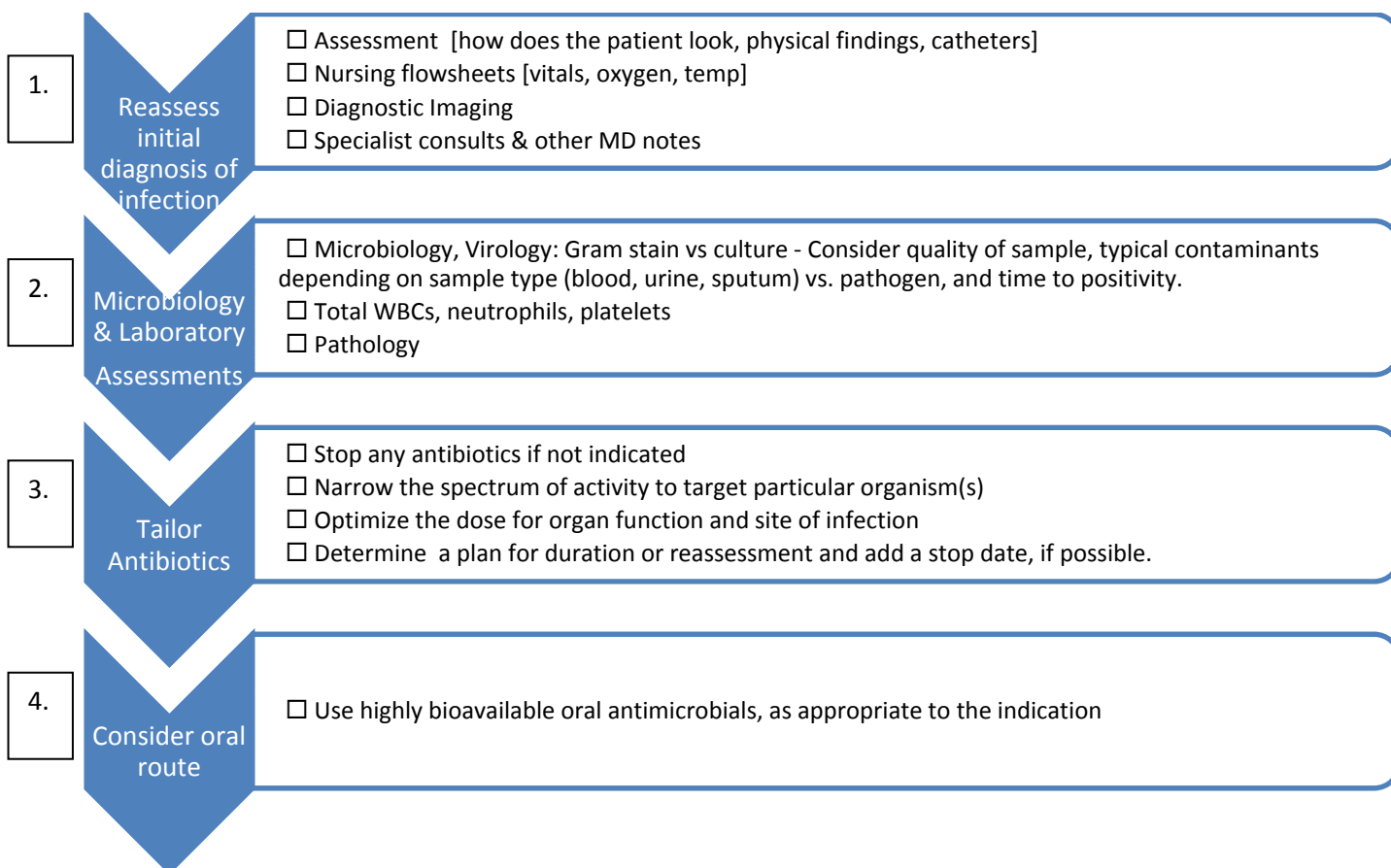
BOTTOM LINE: An early review of empiric antimicrobial therapy is essential

In a study of six US hospitals, 66% of empiric antimicrobials were not modified within the first few days of therapy. In cases with negative urine or blood cultures, only 37% and 50%, respectively, had their regimens discontinued/narrowed.¹

Stabilization of the overall medical condition often occurs on the third to fourth day after the initiation of antimicrobials. A formal reassessment of empiric antimicrobial therapy on Day 3 is an effective method of antimicrobial stewardship.²

If we can reduce unnecessary antimicrobial use, we can reduce collateral damage including drug reactions, allergic responses, antibiotic associated diarrhea, *C. difficile* colitis, the selection of drug resistant microbes and, more of our patients will be alive, less ill and will have shorter hospital stays.³

Incorporate the “Day 3 Bundle” into your practice. Prescribers and pharmacists need to make it a habit. Use a systematic approach early, and every time: The four key steps are as follows:



References:

1. Braykov NP, Morgan DJ, Schweizer ML, *et al.* Assessment of empirical antibiotic therapy optimisation in six hospitals: an observational cohort study. *Lancet Infect Dis* 2014; **14**:1220-27.
2. Pulcini C, Defres S, Davey P, *et al.* Design of a “day 3 bundle” to improve the reassessment of inpatient empirical antibiotic prescriptions. *JAC* 2008; **61**:1384-1388.
3. Dellit TH, Owens RC, McGowan JE, *et al.* IDSA and the SHEA Guidelines for Developing an Institutional Program to Enhance Antimicrobial Stewardship. *CID* 2007; **44**:159-77.