2022
UPDATE

IV to Oral Switch

Quick Reference Guide

AMR&S
WORKING GROUP

IV to Oral Switch

AIM

Optimize antimicrobial therapy while limiting toxicity and resistance[1]

Types of IV to oral switch[2,3]

Sequential

Replace IV medication with oral version of the same compound

e.g. IV levofloxacin 500 mg q24h to oral levofloxacin 500 mg q24h

Switch

Replace IV medication with oral equivalent within the same class and level of potency, but of a different compound

e.g. IV levofloxacin 500 mg q24h to oral ciprofloxacin 500 mg q12h

Step down

Replace IV medication with oral agent in a different class or another medication within the same class where the frequency, dose and spectrum of activity may not be exactly the same

e.g. IV ampicillin-sulbactam 1.5 g q6h to oral amoxicillin-clavulanic acid 875 mg/125 mg q12h

Benefits of IV to oral switch[1,2,4]

For the patient:

- Increased comfort and mobility
- Reduced risk of adverse effects related to IV administration (eg, catheter-related infections and bacteremia; infiltration or extravasation, phlebitis)
- Earlier discharge from hospital
- Reduced risk of hospital-acquired infection

For the provider:

- Lower drug acquisition costs
- Shorter preparation and administration time
- Fewer ancillary costs of administration (cannulas, tubing, syringes, diluent, etc)
- Reduced hospital length of stay

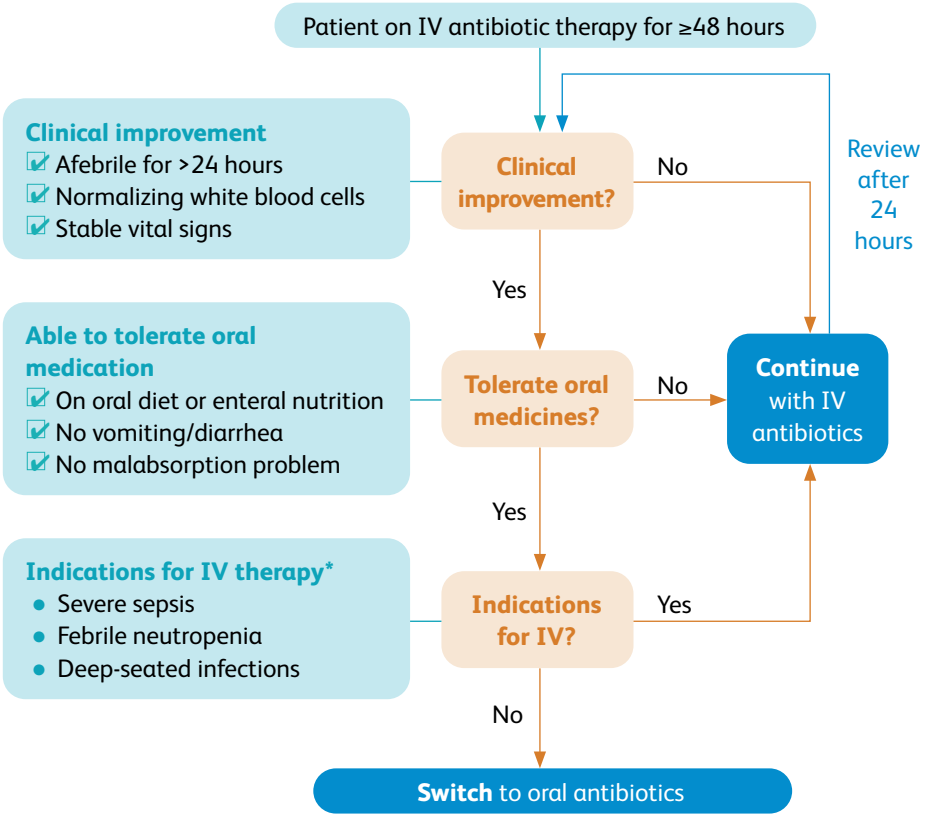
IV, intravenous

Timely IV to oral switch[1]

Review all antimicrobial therapy as soon as microbiology results become available

Consider switching to oral therapy **2 to 4 days after** initiation of IV therapy

Evaluate the following throughout the course of IV therapy:



*List is not exhaustive

Adapted from Nathwani et al. 2015[1] and Teo et al. 2012[5]

"Each physician prescribing antibiotics should be challenged for the quality of her/his prescription on a daily basis"[6]

Recommending IV to oral switch to prescribers

TEMPLATE[7]

[Patient name] has been on IV [antibiotic name, dose, frequency] for treatment of [infection syndrome] since [date].

This patient is clinically improving, hemodynamically stable, [on other oral medications and tolerating diet/enteral feed].

Because he/she is on an antibiotic with good bioavailability and his/her GI tract is functioning well, I would suggest changing his/her antibiotic regimen to oral [antibiotic name, dose, frequency] to complete the course of therapy.

References:

1. Nathwani D, et al. Implementing criteria-based early switch/early discharge programmes: A European perspective. *Clin Microbiol Infect* 2015;21 Suppl 2:S47-55.
2. Bëïque L, Zvonar R. Addressing concerns about changing the route of antimicrobial administration from intravenous to oral in adult inpatients. *Can J Hosp Pharm* 2015;68:318-326.
3. Cyriac JM, James E. Switch over from intravenous to oral therapy: A concise overview. *J Pharmacol Pharmacother* 2014;5:83-87.
4. Barlow GD, Nathwani D. Sequential antibiotic therapy. *Curr Opin Infect Dis* 2000;13:599-607.
5. Teo J, et al. The effect of a whole-system approach in an antimicrobial stewardship programme at the Singapore General Hospital. *Eur J Clin Microbiol Infect Dis* 2012;31:947-955.
6. Mathieu C, et al. Efficacy and safety of antimicrobial de-escalation as a clinical strategy. *Expert Rev Anti Infect Ther* 2019;17:79-88.
7. Nebraska ASAP. Pharmacist guide to making antibiotic therapy recommendations. July 2017. Available at: https://asap.nebraskamed.com/wp-content/uploads/sites/3/2017/07/Pharmacist-Guide-to-Making-Antibiotic-Therapy-Recommendations.pdf. Accessed June 2022..

The Antimicrobial Resistance & Stewardship Working Group would like to acknowledge the support from Pfizer that has made this material possible.

AMR&S WORKING GROUP

EM-HKG-HOS-0010