

Antimicrobial Stewardship Strategy:

Intravenous to oral conversion

Promoting the use of oral antimicrobial agents instead of intravenous administration when clinically indicated.

Antimicrobial Stewardship Group, Chelsea & Westminster Hospitals. (February 2020)



A 48-72 hour review of all patients on IV Antimicrobials is a key priority for CW Trust

Patient Benefits:

- Improve patient outcomes, earlier discharge, reduce ABX harm

Antimicrobial Stewardship Benefits:

- Reduce Antimicrobial resistance (AMR), less *C. difficile* infection (CDI)

Trust Benefits:

- Promote earlier discharge, reduces ABX costs, reduced line related complications & saves nursing time

Rationale:

Early IV-to-PO switch of antimicrobials has clear patient benefits. Despite strong evidence to support IV-PO switch in patients responding to empiric IV ABX, approximately 20% of all patients @CW on IV ABX >72 hours could have been changed to PO earlier.

Two categories of antimicrobial IV-PO conversion:

- 1. Switch therapy:** Antimicrobial with excellent oral bioavailability, systemic exposure is comparable for both IV and PO formulations (e.g. fluoroquinolones, linezolid, cotrimoxazole, metronidazole, fluconazole).
→ Use oral therapy unless patient has absorption issues
- 2. Step down therapy:** Patient responding to initial IV ABX therapy, clinically stable and source of infection controlled; step down from IV to equivalent PO ABX therapy.
→ Convert to appropriate PO therapy using local guidelines or microbiology / pharmacy advice
→ Use available microbiology sensitivities to guide step-down options

Conditions that may result in impaired PO absorption:

- Shock
- Severe or persistent nausea/vomiting/diarrhoea
- Active gastrointestinal bleeding
- Ileus or GI obstruction
- Shortened GI transit time (malabsorption, short-gut)
- High nasogastric output

IV to PO SWITCH OPTIONS – Get your patient home early

- H** Haemodynamically stable (BP / HR normalising), Apyrexial >36hrs
- O** Oral (PO) route available, eating/drinking, no malabsorption
- M** Infection markers improving (CRP / WCC trending to normal)
- E** Exclude deep-seated infection source (requires prolonged IV ABX)

Does your patient meet the HOME criteria for IV-PO switch?

YES: convert to appropriate PO ABX to reduce risk of CDI, AMR and line-related infection

NO: review again in 24-48 hours