

Antimicrobial Stewardship J.W. Ruby Memorial Hospital

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Antimicrobial Stewardship WVU Medicine

Mission:

To ensure improved patient care through the appropriate utilization of antimicrobials with focused efforts to minimize antimicrobial resistance



NATIONAL ACTION PLAN FOR COMBATING ANTIBIOTIC-RESISTANT BACTERIA

MARCH 2015





Strategies

- Education and guidelines
- Formulary restriction
- De-escalation
- Optimizing duration
- Prolonged infusion of beta-lactams
- Antibiotic cycling
- IV to PO conversion

Education/Guidelines

- WVUM Antibiotic Guidance Website-Useful Links (EPIC)
- Comprehensive Antimicrobial Guide-Pocket card

Useful Links

Analgesic Guidelines

Drug Shortages

Pharmacy Dept Homepage

WVUH Antimicrobial Guidance Website

WVUH Hazardous Medication Policy

Ask A Drug Information Expert

Clinical Pharmacology

CONNECT

Controlled Substances Rx Database

The Journal of the American Medical Association (JAMA)

Medline / PubMed

MedSite

Micromedex

The New England Journal of Medicine

On-Call

Patient Safety Net

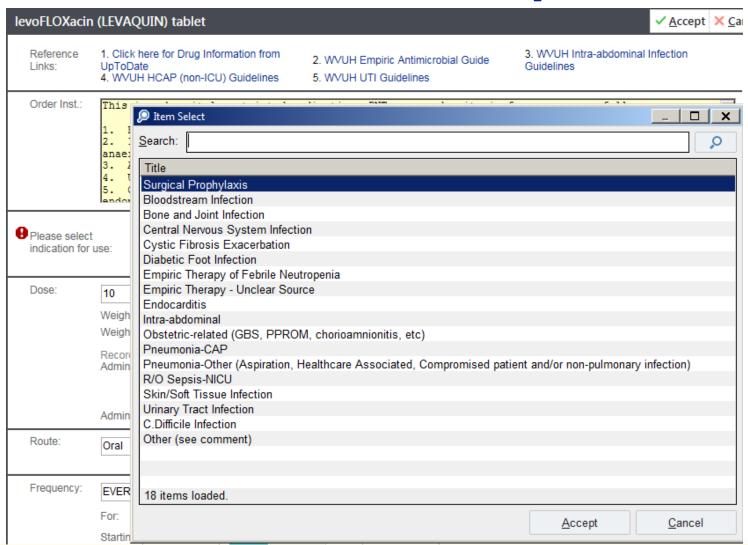
Up To Date Clinical Info

WVU Hospitals

Epic/Clarity Report Request Form



Indication for Use Requirement





Formulary Restriction

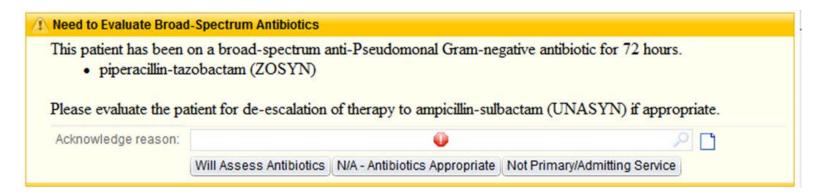
- Agents are restricted based on resistance, adverse effects, and/or high cost
- Restricted antimicrobials:
 - Ceftazidime/avibactam (Avycaz)
 - Ceftolozane/tazobactam (Zerbaxa)
 - Dalbavancin
 - Fidaxomicin
 - Ciprofloxacin
 - Levofloxacin
 - Meropenem

De-escalation

48-hour "Antibiotic Timeout"



72-hour alert reminder for de-escalation





Other Strategies

- Prolonged infusion of beta-lactams
 - Using PK/PD principles to dose and administer timedependent antibiotics
 - cefepime, ceftazidime, meropenem, and piperacillin/tazobactam
- Antibiotic cycling (Zosyn, Cefepime)
 - Scheduled rotation of antibiotics
 - ICU, BMT, and Pediatric Oncology patients
- IV to PO per protocol
- Pharmacist dosing per protocol of vancomycin and aminoglycosides



Potential Benefits

- Improved patient outcomes
- Reduced adverse events, including Clostridium difficile infections
- Improved antimicrobial susceptibilities
- Optimizing resource utilization

Measuring Outcomes

- Antimicrobial usage data
- Clostridium difficile rates

- Coming in near future:
 - Abx ordering feedback
 - individual physician data

Our Team

John Guilfoose, MD, Chair
 Infectious Diseases

Lisa Keller, Pharm.D., Vice Chair
 Pharmacy-Antimicrobial Stewardship

Aaron Cumpston, Pharm.D.
 Bone Marrow Transplant

Rachel Hudik, NP
 APPs/Med Hospitalists

Christine Kincaid, MD
 Outpatient/Pediatrics

P. Rocco LaSala, MD
 Microbiology/Pathology

Allison Lastinger, MD
 Infectious Diseases

Michelle Mitchell, MD
 Pediatric Infectious Diseases

Meera Mehta, Pharm.D.

Pharmacy-OPAT

Kathryn Moffett, MD

Pediatric Infectious Diseases

Kathy Nigh, RN
Infection Prevention

H. Carl Palmer, MD

Medicine

Karen Petros, Pharm.D.
Surgical ICU

Douglas Slain, Pharm.D.
Infectious Diseases

Michael Sweet, Pharm.D.
Quality Services



Our Team

All of you !!!

- Things you can do day to day as Residents:
 - Pay attention to the Pop-up alerts
 - Read ordering instructions (at least one ②)
 - Use the Antibiotic Guidance link on EPIC
 - Utilize Microbiology lab / Diagnostic tests
 - Clarify antibiotic allergies (esp. B-lactams)
 - CALL TRANSFERING HOSPITALS MICRO LAB



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