UW TASP tele-antimicrobial stewardship program | echo

Key Actions of an ASP Pharmacist

A day in the life of a stewardship pharmacist

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This presentation is intended for educational use only, and does not in any way constitute medical consultation or advice related to any specific patient.

Objectives

- Describe day to day actions of a stewardship pharmacist
- Discuss monthly and quarterly actions
- Apply principles discussed to your practice site

Program Overview

1. Education
   - Dosing cards
   - Occam.medicine.org
2. Guideline development
   - Ordersets for EMR
   - VAP, sepsis protocol
3. Prospective feedback
   - Carbapenems (restricted to ID after 72 hours)
   - Linezolid/ Daptomycin
4. Review antimicrobials for formulary consideration
5. Patient Safety

Stewardship Daily Work Flow

Report from Theradoc: Pts on Carbapenems, Linezolid, Daptomycin…

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ASP reviews microbiology , clinical status, etc

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Contact Clinical Pharmacist/ Infectious Diseases Team for further discussion

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provide verbal RECOMENDATIONS

Meropenem Restricted to ID After 72 hours…

80 yo M with hx of NSLCL s/p resection in 12/2016 with course complicated by E.coli PNA, sepsis, respiratory failure requiring tracheostomy, and VT arrest, who was d/c to SNF for ongoing rehabilitation on 12/23/16, presenting today for

a few days of increasing breath sounds and profound fatigue.

Meropenem start = 2/7/2017 (72 hours = 2/10/17)

2/7: sputum 3+ PMNs, 4+ GPR, 2+ GPC, 2+ serratia, 2+ enterobacter **4+ OPF**

Abx history cefepime x1, and vancomycin. Changed to meropenem due concern for resistant organisms

Stewardship assessment/plan (sent via email to ID team):

- Await culture results to tailor antibiotics. Meropenem is unlikely required based on initial sputum results.
- ID required after 2/10, if meropenem continued

Attend Microbiology Rounds

- Monday, Wednesday, Fridays: 11- 12
- All ID teams attend
  - Responsibility of the fellow: Present the clinical history
- Review all positive blood cultures and some cultures from other sterile sites (CSF, pleural fluid, etc)
- Goal: Ensure appropriate therapy, testing and appropriate consultation of Infectious Disease Service.

Wait, microbiology is off-site! How do I apply this my setting?

- **Approach lab about getting a list of patients with positive blood cultures**
- **Help providers interpret microbiology results**

Monthly Activities

- Review antimicrobials for formulary
  - Review medication utilization evaluations (MUE)
  - in collaboration with Harborview
- Mentor pharmacy students and residents

Dalbavancin Medication Use Evaluation

2016:

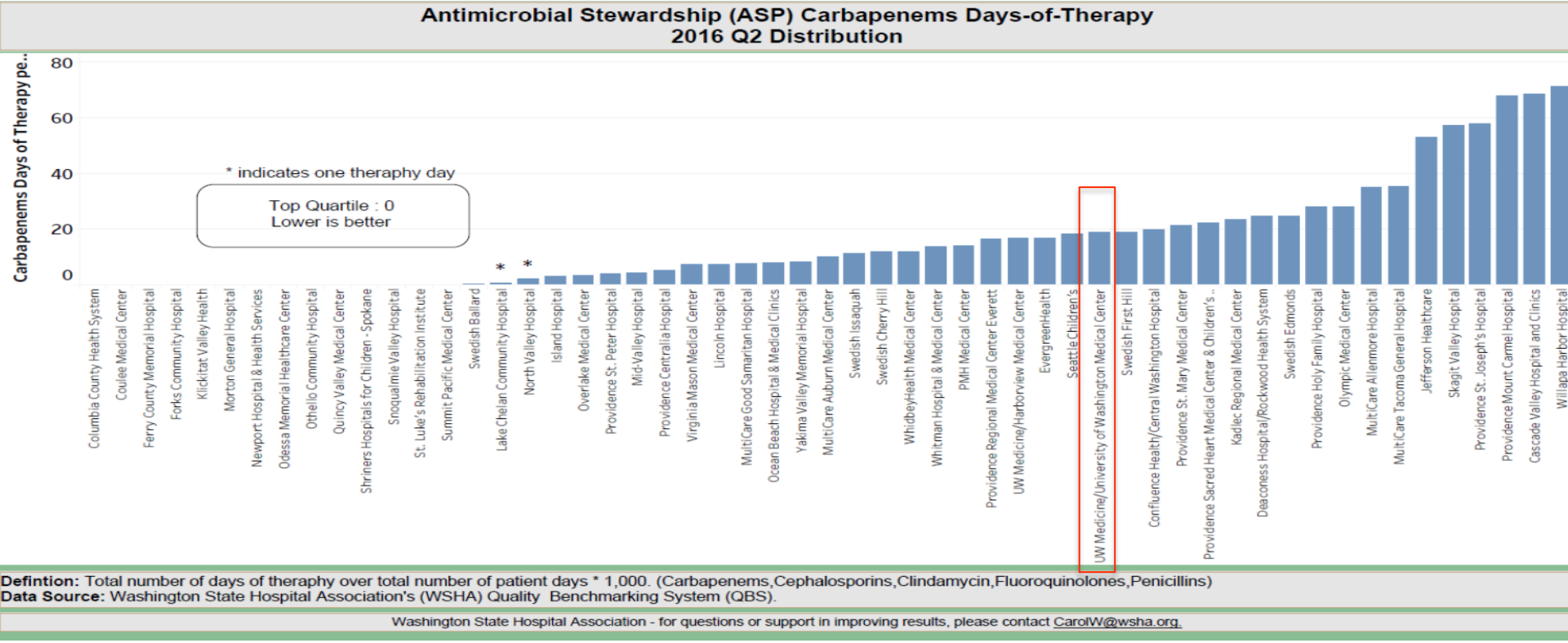
- UW Medicine added Dalbavancin to formulary with defined clinical criteria

2017:

- Review 36 patients prescribed Dalbavancin
- Present at Pharmacy & Therapeutics
- Maintain criteria specified in 2016

Quarterly Activities

- Summarize the antibiotic consumption for the hospital
- Submit data to WSHA



Yearly Activities

- Review published antibiogram
- Review yearly antimicrobial costs

- Are there drastic changes that *MAY* impact our antibiotic usage?
  - Do we need to change our ordersets?
  - Do we need to review our formulary?

How Do I Apply This to My Setting?

- Start small!
- What is your baseline antibiotic usage at your institution?
- Are there particular antibiotics that you are concerned about being misused?
  - Do a MUE to review indication, duration, IV to PO, etc
  - ***I noticed an increase in IV levofloxacin---do a review of the last 6 months.***
- Develop a guideline for a common question or disease (renal dosing of antibiotics, IV to PO, etc)

Guidelines

UW Medicine OCCAM

Guidance

A. Community-acquired pneumonia [non-aspiration risk] (*S. pneumoniae, atypicals*)

Diagnosis: Send sputum gram stain & culture, CXR, urinary pneumococcal antigen, and blood cultures.

- Ceftriaxone 1 gm IV q24 hours **PLUS**
- Azithromycin 500 mg PO/IV q24 hours
- If previous MRSA colonization or infection, **consider ADDING:** Vancomycin loading dose IV x1 (2 gm if ≥70 kg, 1.5 gm if <70kg), then 15 mg/kg IV q12 hours.
- ***Typical Duration: 7 days***

B. CAP with cavitary lesion(s) (Oral anaerobes and MRSA)

- Ampicillin/Sulbactam 3 gm IV q6 hours **PLUS**
- Azithromycin 500 mg PO/IV q24 hours **PLUS**
- Vancomycin loading dose IV x1 (2 gm if ≥70 kg, 1.5 gm if <70kg), then 15 mg/kg IV q12 hours.
- ***Typical Duration: 10-21 days***

provide initial guidance, and may be modified depending on individual patient. **THESE GUIDELINES ARE NOT MEANT FOR PATIENTS ON ECMO, SCUF, UF, SLED, CVVHD, OR CVVH, CONTACT YOUR CLINICAL PHARMACIST FOR RECOMMENDATIONS.**

Drug (Small Screens? Touch Name)	Normal Renal Function Does	CrCl (mL/min) 10 - 50	CrCl (mL/min) <10	Hemodialysis Assumes TIW HD; give doses after HD if possible
	HSV treatment	**HSV treatment** *25-50*: 5mg/kg q12h *10-25*: 5mg/kg	**HSV treatment**	

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You can do it!

- Questions