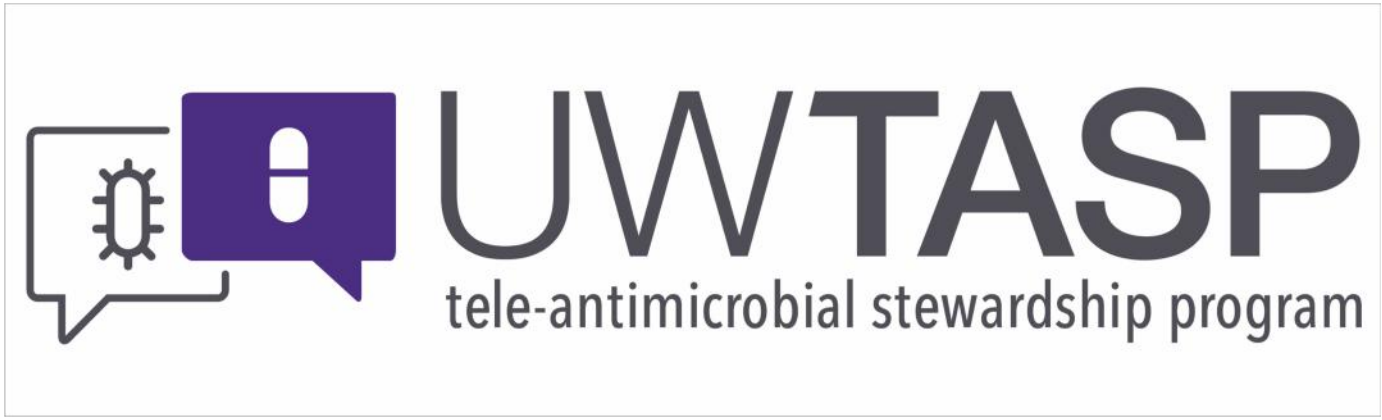
UWTASP

tele-antimicrobial stewardship program

January 22, 2019

Agenda

- Recap and Recharge January - Review of AMS Resources
- Case Discussions
- Open Discussion



Review of AMS Resources

Chloe Bryson-Cahn, MD

UW Medicine | Harborview Medical Center

chloebc@uw.edu

Jumpstart Stewardship

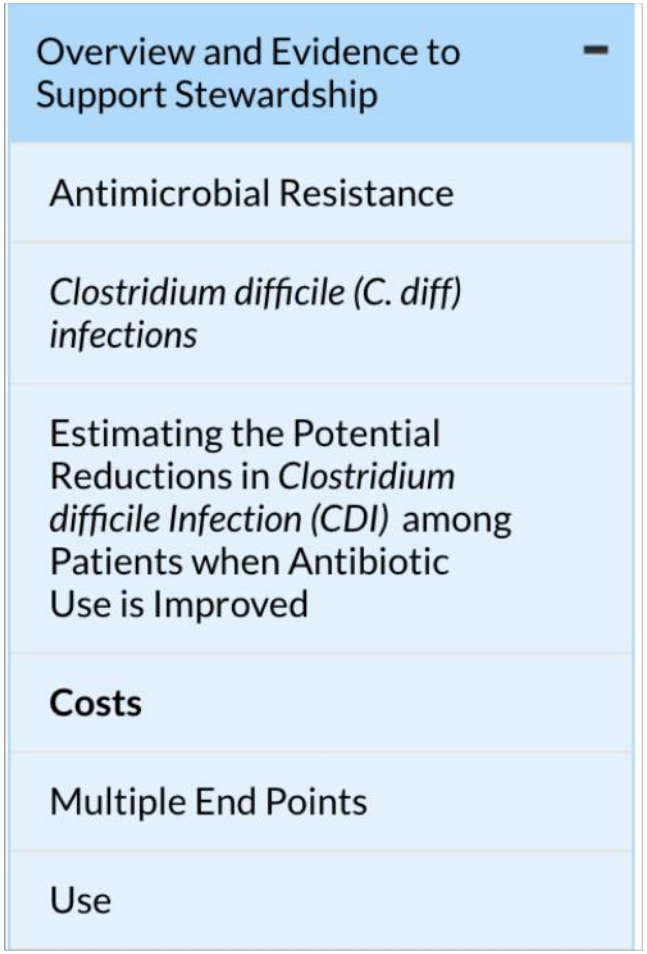
Education • Quality • Infection Prevention
EQuIP Critical Access Hospitals
Training and Professional Development Program

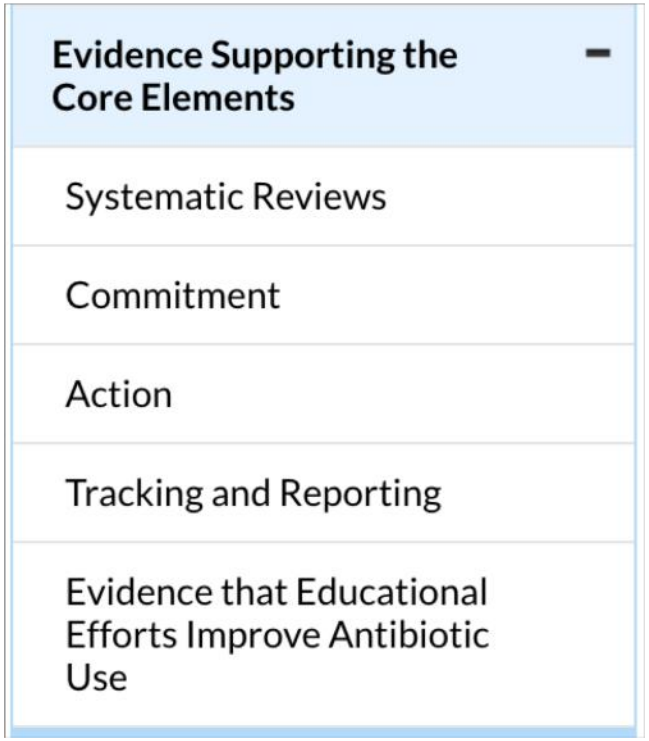
Jumpstart Stewardship: Implementing Antimicrobial Stewardship in a Small, Rural Hospital

- 60 page (**FREE**) document with practical advice
- Worksheets to assess:
  - Current state
  - Stakeholders, team, resource needs
  - ASP intervention feasibility
  - Sources of data
- Intervention monitoring guidance

http://medicare.qualishealth.org/sites/default/files/medicare.qualishealth.org/JumpStart_Stewardship_Workbook.pdf

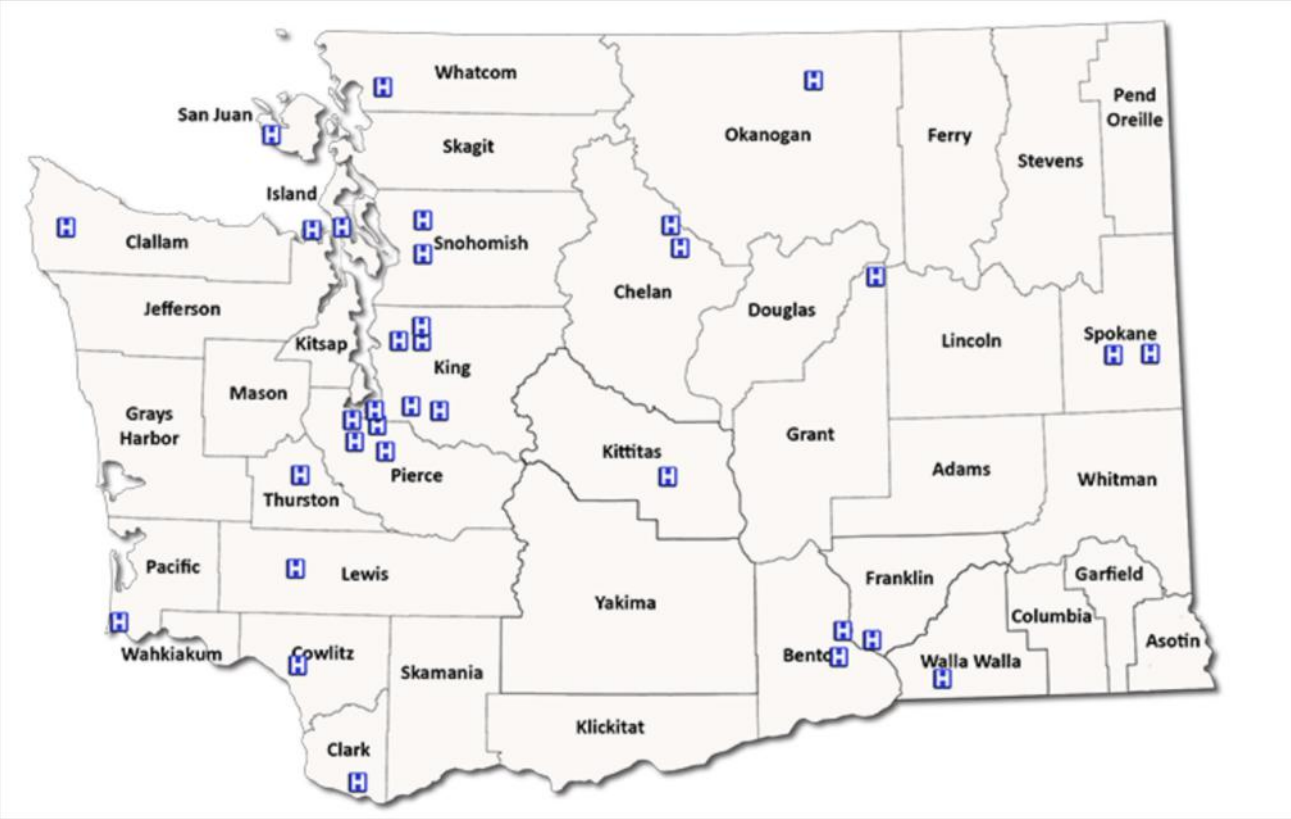
Evidence to Support Stewardship





https://www.cdc.gov/antibiotic-use/healthcare/evidence/asp-int-costs.htm
https://www.cdc.gov/antibiotic-use/community/improving-prescribing/evidence/dataforactionaction.html

WA State Antibiograms



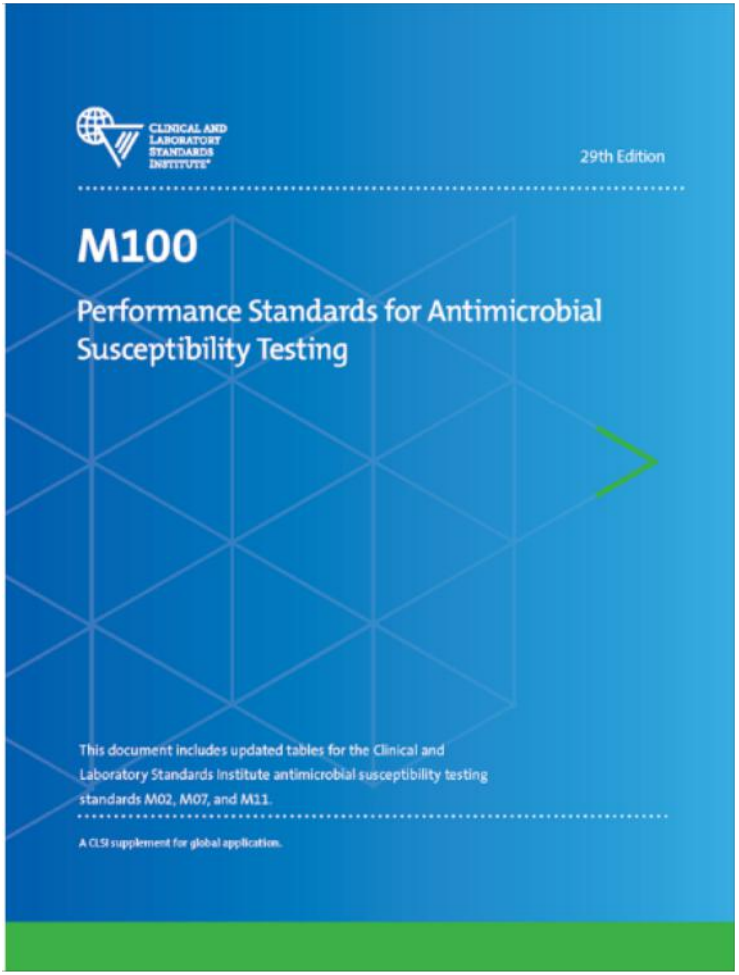
https://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/HealthcareProfessionsandFacilities/AntibioticResistance/Stewardship/Antibiograms

Micro Lab Resources

CLSI M100

Available for FREE

use link below, click on guest access



http://em100.edaptivedocs.net/dashboard.aspx

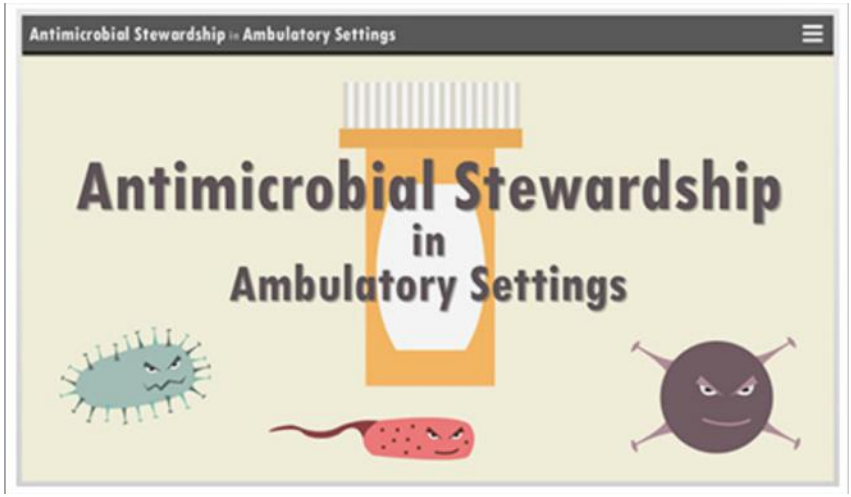
Clinical Practice Guidelines

- UTI
- Acute COPD Exacerbation
- Pneumonia
- Staph aureus bacteremia
- Diabetic foot infection
- Soft tissue infection

https://www.nebraskamed.com/for-providers/asp/plans

EQuIP for Ambulatory Care Clinics

- JumpStart Stewardship for Ambulatory Settings
- Commitment Poster Templates
- Education Module
- Practice Guidance
  - Acute OM
  - Bronchitis
  - Sinusitis
  - Pharyngitis



https://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/HealthcareAssociatedInfections/EQuIP/AmbulatoryCare

PRACTICE GUIDANCE FOR JUDICIOUS USE OF ANTIBIOTICS

Striving for better outcomes for individual patients, improved population health, and lower healthcare costs

ACUTE UNCOMPLICATED BRONCHITIS *(Adults)*

This guideline is not intended for patients with COPD/chronic bronchitis or other serious comorbidities.

Symptoms and Diagnosis

BRONCHITIS

(Viral >90% of cases)

Self-limited inflammation of the bronchi due to respiratory infection

- Primary symptom is cough for 1-3 weeks (cough may linger up to 6-8 weeks)
- Colored sputum occurs in 50% of cases and does NOT necessarily indicate bacterial infection
- May have wheezing or rhonchi on chest exam, but NOT rales or signs of consolidation
- Low grade fever is common early in the illness
- Using the term "chest cold" rather than bronchitis may reduce expectation for antibiotics

CONSIDER PERTUSSIS

Treat AND test for pertussis in patients with persistent cough when any of the following are present:

- Paroxysms
- Inspiratory whoop
- Exposure to known pertussis case
- Pertussis is circulating widely in the community—
  See Washington pertussis update at:
  https://go.usa.gov/xRPXv

Report suspect, probable, or confirmed pertussis to local public health.

NOTE: Treating pertussis may not shorten duration of symptoms but helps prevent spread to contacts.

RULE OUT PNEUMONIA

Assess oxygen saturation in addition to vital signs.

Pneumonia is UNLIKELY in healthy immunocompetent adults < 70 years without:

- Heart rate > 100 bpm
- Respiratory rate > 24 bpm
- Oral temperature > 38°C (100.4°F)
- Abnormal chest exam (rales, egophony, tactile fremitus, or dullness to percussion)
- Infiltrate on chest x-ray

WHEN TO CONSIDER CHEST X-RAY

- Signs/symptoms or suspicion of pneumonia
- Abnormal oxygen saturation, vital signs, or chest exam
- Cough not improving after > 6-8 weeks
- Fever > 4 days, or recurrent fever after having resolved for > 24 hours
- History of smoking

NOTE: Treat pneumonia with antibiotics.

Treatment

SYMPTOMATIC TREATMENT

- Extra rest, hot drinks, oral hydration
- Analgesics/antipyretics, as needed
- Consider bronchodilators if history of asthma
- Inhale steam from shower or bath to loosen secretions
- Avoid cigarette smoke; offer smoking cessation resources, if indicated

Offer positive recommendations using this Symptomatic Prescription Pad: https://go.usa.gov/xRPXy

NOTE: See back for help when discussing non-antibiotic treatment plan with patients.

AVOID ANTIBIOTICS

- Antibiotics are not needed for otherwise healthy adults with acute bronchitis
- Efficacy of antibiotics for symptom relief from bronchitis is limited, including bronchitis due to atypical bacteria
- Cough due to pertussis should be treated with antibiotic therapy (see other side for dosing)
- Offer assured follow up for if symptoms persist or worsen

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DIFFERENTIAL DIAGNOSIS OF COUGH

In addition to cough due to acute bronchitis, persistent cough, especially cough lasting > 6-8 weeks, may be a sign of another disease process ranging from minor to serious, such as post-nasal drip syndrome, medication use (e.g., lisinopril), irritant exposure, asthma, Gastroesophageal Reflux Disease (GERD), smoking or second-hand smoke exposure, chronic bronchitis, bronchiectasis, or malignancy.

BEST PRACTICES FOR COMMUNICATING WITH PATIENTS

- Identify and validate patient's concerns
- Provide clear recommendations including specific symptom treatment and contingency plan for if symptoms worsen
- Confirm agreement and answer questions
- Provide education about antibiotic use and associated risks, including bacterial resistance and *C. difficile*

POTENTIAL HARMS ASSOCIATED WITH ANTIBIOTIC USE

- May cause significant side effects, such as antibiotic-associated diarrhea and allergic reactions
- Can increase the risk of carrying a drug-resistant organism which may decrease the effectiveness of antibiotics in the future and make an infection more severe
- Can result in a diarrheal disease caused by *C. difficile* which can be severe and even fatal

Visit CDC's Common Illnesses index at https://go.usa.gov/xRPXH for patient education materials.

Antibiotic Therapy for Pertussis

DRUG	DOSE	DURATION
Azithromycin	**Adult:** 500 mg PO x 1 dose then 250 mg PO QD x 4 days	5 days

Antibiotic therapy may be indicated for bronchitis in patients with comorbidities such as immunosuppression, COPD/chronic bronchitis, cystic fibrosis, or other underlying lung disease other than asthma. Recommendations for these patients is beyond the scope of this guideline.

- For treatment guidance for COPD exacerbation, see **Global Strategy for the Diagnosis, Management and Prevention of COPD, 2017**.
- For treatment guidance for community acquired pneumonia, see **Infectious Diseases Society of America/American Thoracic Society Consensus Guidelines on the Management of Community-Acquired Pneumonia in Adults.**

ANTIBIOTIC ALLERGY

Most patients who report antibiotic allergies, particularly penicillin class allergies, do not have true drug allergies. It is important to carefully evaluate reported drug allergies starting with a history before determining whether an alternative agent is indicated.

NOTE: This guidance is not meant to replace the clinical judgment of the individual provider or establish a standard of care.

REFERENCES

1. Gonzales R, et al., Principles of appropriate antibiotic use for treatment of uncomplicated acute bronchitis: background. Ann Intern Med 2001; 134:521.
2. Harris AM, et al., Appropriate antibiotic use for acute respiratory tract infection in adults: advice for high-value care from the American College of Physicians and the Centers for Disease Control and Prevention. Ann Int Med 2016; 164:425.
3. Smith SM, et al., Antibiotics for acute bronchitis. JAMA 2014;312(24)2678-2679.
4. Global Initiative for Chronic Obstructive Lung Disease. Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease. 2017 report. Available at: http://goldcopd.org/wp-content/uploads/2016/12/wms-GOLD-2017-Pocket-Guide.pdf, accessed on July 25, 2017.
5. Mandell LA, et al., Infectious Diseases Society of America/American Thoracic Society Consensus Guidelines on the Management of Community-Acquired Pneumonia in Adults. Clin Infect Dis 2007;44:S27-72.

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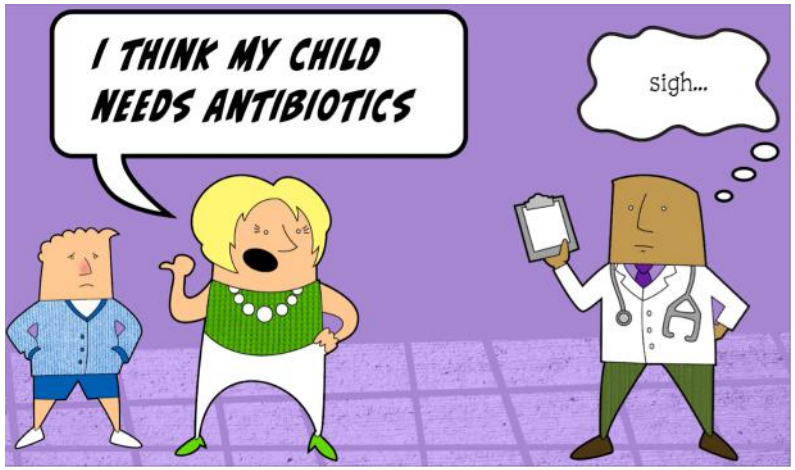
DART Learning Modules

Dialogue Around Respiratory Illness Treatment: optimizing communication with parents

- 7 short videos, ~15 minutes total
- Final video – “Putting it all together”



https://www.seattlechildrens.org/research/centers-programs/child-health-behavior-and-development/labs/mangione-smith-lab/dart-learning-modules/

Podcasts

- CORE IM | Internal Medicine Podcast
  - Episode #23 – UTIs and Delirium

  “Do UTIs really cause delirium and what does the evidence tell us”

https://itunes.apple.com/us/podcast/core-im-internal-medicine-podcast/id1297791208?mt=2

CDC Antibiotic Stewardship Training Series

CDC TRAIN

- Section 1, Modules 1, 2, and 3 – Antibiotic Resistance, Antibiotic Stewardship, and Antibi…
- Section 2, Module 4A – Outpatient Antibiotic Use Across the United States: Background …
- Section 2, Module 4B – Outpatient Antibiotic Use Across the United States: Drivers of Ina…
- Section 2, Module 5 – Core Elements of Outpatient Antibiotic Stewardship: Implementing …
- Section 2, Module 6 – Communication Training: A Key to Improving Outpatient Antibiotic …
- Section 3, Module 7A – Antibiotic Stewardship Considerations for the Management of Uri…
- Section 3, Module 7B – Antibiotic Stewardship Considerations for Bronchitis, Asthma and…
- Section 3, Module 7C – Antibiotic Stewardship Considerations for the Management of Ac…
- Section 3, Module 7D – Antibiotic Stewardship Considerations in Dentistry
- Section 4, Module 8 – Antibiotic Stewardship in Emergency Departments & Hospitals
- Section 4, Module 9 – Antibiotic Stewardship in Nursing Homes

https://www.train.org/cdctrain/training_plan/3697

Your Favorite Resources?