Antibiotic Stewardship: Managing Demand

February 14, 2019
11:00 a.m. – 12:00 p.m. CT
JOIN NOW!

HRET HIIN uses the LISTSERV® platform to encourage peer-to-peer networking, share HRET HIIN events and resources, and highlight innovative approaches to reduce harm.
Upcoming Sessions

- Friday, March 22nd - **Antibiotic Stewardship: Conquering Measurement** (12:30 p.m. – 1:30 p.m. CT)
Your HRET HIIN CDI Team

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Patient and Family Engagement Project Consultant
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AGENDA

- Welcome and Introductions
- Is there a problem?
- What is the role of PFE in Antibiotic Stewardship?
- Why do providers “give in”? 
- So How Can we Get Started?
- Questions and Answers
- Bring it Home
HRET HIIN CDI Education Strategy

Laboratory Stewardship

Antibiotic Stewardship

Diagnostic Stewardship
Polling Question

Who is in the room?

a) PFE advisors
b) Quality leaders
c) Infection Preventionists
d) Pharmacists
e) Prescribers
f) Leadership
g) Other
Is There a Problem?

Steve Tremain, MD, FACPE
Improvement Advisor, Cynosure

Barbara DeBaun, RN, MSN, CIC
Improvement Advisor
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Bacteria are Faster Than Humans

Antibiotic deployment

Antibiotic resistance observed
And We are Losing the Race

- There is no business model to develop new antibiotics
- Costs of development are huge, and most drugs never make it to the market
- New drugs that make it to the market are quickly rendered useless by the development of drug resistance
The Human Cost

- **23,000** deaths annually in the US from antibiotic resistant infections (CDC)

- **33,000** deaths annually in the EU.
But Aren’t They Miracle Drugs?

- Yes, and we want to keep them that way.
- Can you imagine a world without effective antibiotics?
  - Some predictions suggest that by 2050 10 million people will die annually in the world due to bacterial resistance alone.
- Fleming predicted that “fools” would overuse antibiotics and that bacterial resistance would emerge that would render them useless.
  - “Bacteria are very clever and will form some bacteria which will not be killed by my penicillin.”
What about the Big 4?

- Choosing Wisely, the American Academies of Pediatrics and Family Practice, and SHEA/IDSA say…
  - NO antibiotics for uncomplicated
    - The Common Cold
    - Sinusitis
    - Pharyngitis
    - Bronchitis

www.choosingwisely.org
What about those “UTI’s”?  

- Asymptomatic patients must NOT be screened for bacteria in the urine  
  - Exceptions: prior to a TURP or urologic procedure when mucosal bleeding is expected; one time early in pregnancy  
- Patients who have asymptomatic bacteriuria will likely be treated with antibiotics that are not indicated and may result in serious harm
So Why Do Patients Want Demand Them?

- “Can’t I just have my Z-pack now and go home?”
Two Theories

- Patients do not know the difference between a virus and a bacteria… “germ is a germ”.
  - If we just educate them, they won’t ask anymore
  - This is the basis of the CDC Get Smart education program, and most education programs
- How can you be 100% sure I do not need antibiotics, and they can’t do any harm anyway.

Germs are Germs
“Having a fever means you need antibiotics”
But It Can’t Do Any Harm to Take Them, Right?

- 20% of patients experience an Adverse Drug Reaction (ADR) from antibiotics
- 20% of all ED visits for an ADR are for antibiotics
- 1% of all outpatient antibiotic prescriptions result in an ADR

https://www.wolterskluwercdi.com/blog/ades-from-antibiotic-exposure/
Moderate-to-severe allergic reactions included:

- Anaphylaxis
- Angioedema
- Erythema multiforme
- Exfoliative dermatitis
- Facial-pharyngeal-genital edema
- Hypersensitivity vasculitis
- Red man syndrome
- Respiratory distress or arrest
- Serum sickness
- Stevens-Johnson syndrome

(Hitch, 2005)
And then there’s that Z-pack

- Neuropsychiatric ADRs
- Hypoglycemic coma
Polling Question

Regarding antibiotics, either I or someone I know has experienced

a) A severe allergic reaction
b) A severe non-allergic reaction
c) A minor or moderate reaction
d) CDI
e) No ADRs from antibiotics
How Patients Assess Risk

- Multiple studies of elective surgery patients show that patients over-estimate potential benefit and under-estimate risk of harm.
- Studies show that even if a patient has an ADR to antibiotics it does not change expectations for antibiotics for a future similar illness.
Bad Things Always Happen to Someone Else
But What About Our Concern for the “Community”

- There is ample evidence (and a Nobel prize in Economics) that show that humans tend to choose “self” over “community”
- Benefit to Self is me, now
- Harm to Community, is someone else, remote, not linked to my action
- Hand Hygiene is a good example
So What Are We To Do About Patient Demand?
What is the role of PFE in Antibiotic Stewardship?

Martha Hayward
Patient and Family Engagement Project Consultant
AHA/HRET

Steve Tremain, MD, FACPE
Improvement Advisor, Cynosure
WHAT HAVE WE DONE?!

WE HAVE CREATED A MONSTER
Everyone in a household is impacted
Days out of work/school
Fear of contagion
Loss of sleep
Anxiety
The doctor/patient dynamic
Give me what I ask for or I will go somewhere else

Physician teaching sounds like 'NO'.

The physician may not be the appropriate teacher.

What can we do support the message?

"I want to treat your symptoms today while keeping your body strong enough to fight infection in the future."

"What is your greatest concern about not taking antibiotics today?"
More than anything, we want a solution that brings restored health.
Great Opportunity to Empower – the highest form of engagement

What can I do to help myself?
If we need to re-teach, where will people learn?

- Smoking
- Drunk driving
- C-section
- When do people learn?
Who do we listen to?

- Public Campaigns
- Office waiting rooms
- CDC
- Schools – biology classes
- Friends, family, people like us!
Can't-Miss Anti-Smoking Slogans

- Be smart. ...
- Cigarettes burn holes in your pocket.
- Smoking is like paying someone to kill you. ...
- Everyone has the right to clean air.
- **Cancer** cures smoking.
- Kissing a smoker is like licking an ashtray.
- Tobacco companies kill their best customers.
- Put it out before it puts you out.
Antibiotic Stewardship Slogan Contest!

- Type your slogan into the chat now.

- And the winner is.......
Why Do Prescribers “Give In”? 

Steve Tremain, MD, FACPE  
Improvement Advisor, Cynosure  

Barbara DeBaun, RN, MSN, CIC  
Improvement Advisor  
Cynosure Health
Barriers to Stewardship

- Desire to meet patient expectations
- Time required to “talk” patients out of antibiotics is significant and may be unsuccessful.
  - “The nurse is already knocking on the exam room door.”
- Stewardship education about what is bad for community may get traction
  - but not when it comes to the individual patient not getting what they expect
- Lack of 100% certainty of diagnosis
More Barriers

- Prescribers risk losing patients (\$, reputation)
- Prescribers may risk actual penalties from lower HCAHPS
  - UK with better stewardship saw their patient ratings drop 10%
- Severe ADEs are rare
- Erosion of bacterial susceptibility is invisible to prescriber
  - the negative result is remote, similar to handwashing
What Works

- Substitute meaningfully
- Don’t just say “no”
Name: ____________________________

Date: _____ / _____ / ______

Diagnosis:

- Cold
- Cough
- Flu
- Middle ear fluid (Otitis Media with Effusion, OME)
- Viral sore throat
- Other: ____________________________

You have been diagnosed with an illness caused by a virus. Antibiotics do not cure viral infections. If given when not needed, antibiotics can be harmful. The treatments prescribed below will help you feel better while your body’s own defenses are fighting the virus.

General instructions:

- Drink extra water and juice.
- Use a cool mist vaporizer or saline nasal spray to relieve congestion.
- For sore throats, use ice chips or sore throat spray; lozenges for older children and adults.

Specific medicines:

- Fever or aches:
- Ear pain:
- ____________________________

Use medicines according to the package instructions or as directed by your healthcare provider. Stop the medication when the symptoms get better.

Follow up:

If not improved in _______ days, if new symptoms occur, or if you have other concerns, please call or return to the office for a recheck.

Other: ____________________________

Signed: ____________________________

For More Information call 1-800-CDC-INFO
or visit www.cdc.gov/getsmart
What Works

- Build in transparency and accountability
- If diagnosis is not one associated with antibiotic prescribing, then require explanation (hard stop)
- Audit and feedback
So How Can We Get Started?

Martha Hayward, Patient and Family Engagement Project Consultant, AHA/HRET
Steve Tremain, MD, FACPE, Improvement Advisor, Cynosure Health
Barbara DeBaun, RN, MSN, CIC, Improvement Advisor, Cynosure Health
Small Tests of Change

- Your Emergency Department
- Your Hospital Owned Offices
- Target Patients
- Target Providers
Polling Question

Regarding antibiotic stewardship in the Emergency Dept.

a) We have an organized stewardship program
b) We are starting to pilot/test stewardship in the ED
c) We are planning to implement stewardship in the ED but have not started
d) We have no plans for ED ASP currently
Polling Question

Regarding antibiotic stewardship in primary care

a) We have an organized stewardship program

b) We are starting to pilot/test stewardship in the ED

c) We are planning to implement stewardship in the ED but have not started

d) We are not planning this at this time

e) We do not have primary care under the umbrella of the hospital
Your Ideas???
Questions?
Thank You!

Questions? Please contact:

Lydie Marc, MPH, CHES
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HRET Resources

http://www.hret-hiin.org/topics/clostridium-difficile-infection.shtml