

Antibiotic Stewardship: Using Performance Measures in Practice to Drive Change

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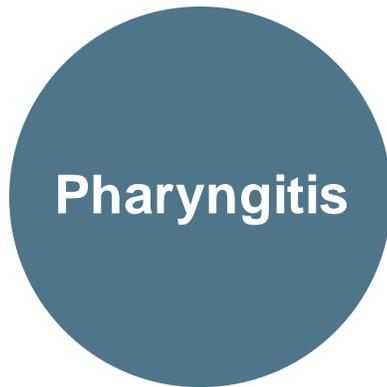
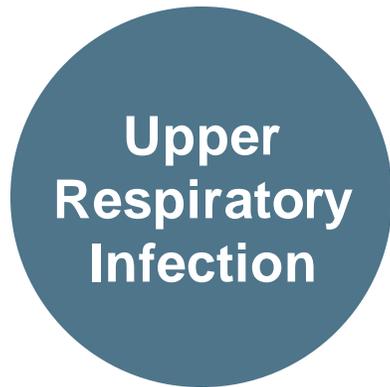
Objectives

By the end of this session, you will be able to

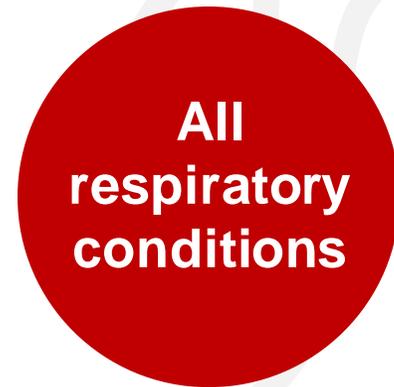
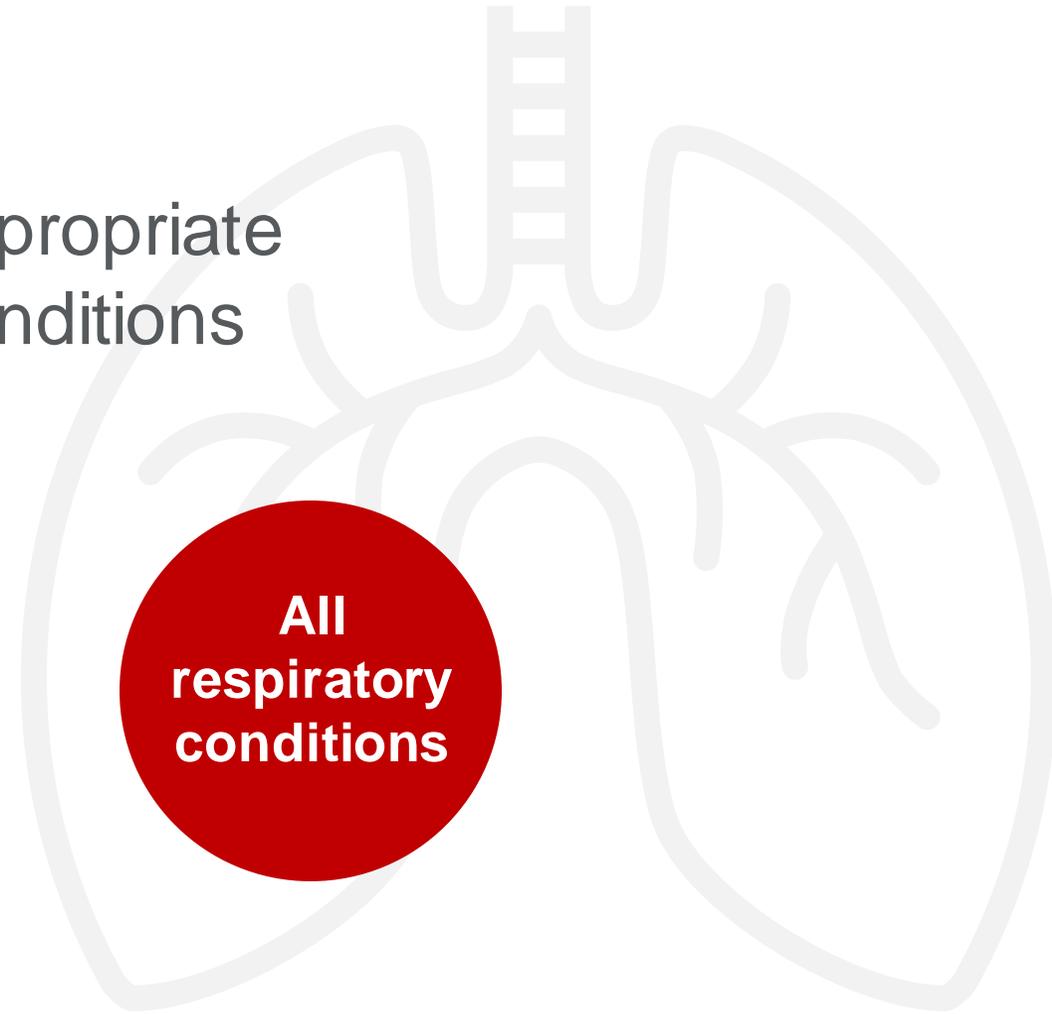
- Describe the new HEDIS *Antibiotic Utilization for Respiratory Conditions* measure
- Describe how Intermountain implemented a system wide antibiotic stewardship program in the Urgent Care
- Describe how Intermountain used antibiotic prescribing metrics to motivate change

HEDIS® Antibiotic Measures Set

Three measures assess avoidance of inappropriate antibiotic prescribing for key respiratory conditions



Domain
Effectiveness of Care



Domain
Utilization

Antibiotic Prescribing for Respiratory Conditions

Variation in prescribing

-  Respiratory conditions account for over 30% of inappropriate antibiotic prescribing
-  Variation in prescribing may reflect diagnosis practices driven by factors outside of clinical relevance
-  Tracking condition-specific prescribing with prescribing across all respiratory conditions may provide important context for antibiotic stewardship

Antibiotic Utilization for Respiratory Conditions

Measure Description

Percentage of episodes for members 3 months of age and older with a diagnosis of a **respiratory condition** that **resulted in an antibiotic dispensing event**

Captures both appropriate and inappropriate prescribing

Product Lines

Medicaid, Commercial, Medicare

Data Source

Administrative claims

Required Benefit

Medical and Pharmacy

Domain

Utilization



Spreading Best Practices in a Learning Health Network: Antibiotic Stewardship in the Urgent Care

Eddie Stenehjem, MD MSc

Senior Medical Director, Medical Specialties

Intermountain Healthcare

 @E_Stenehjem

Where, When, and How We Care for People

COMMUNITY-BASED CARE

SPECIALTY-BASED CARE



Safest, highest quality,
most affordable care for
serious injury and illness

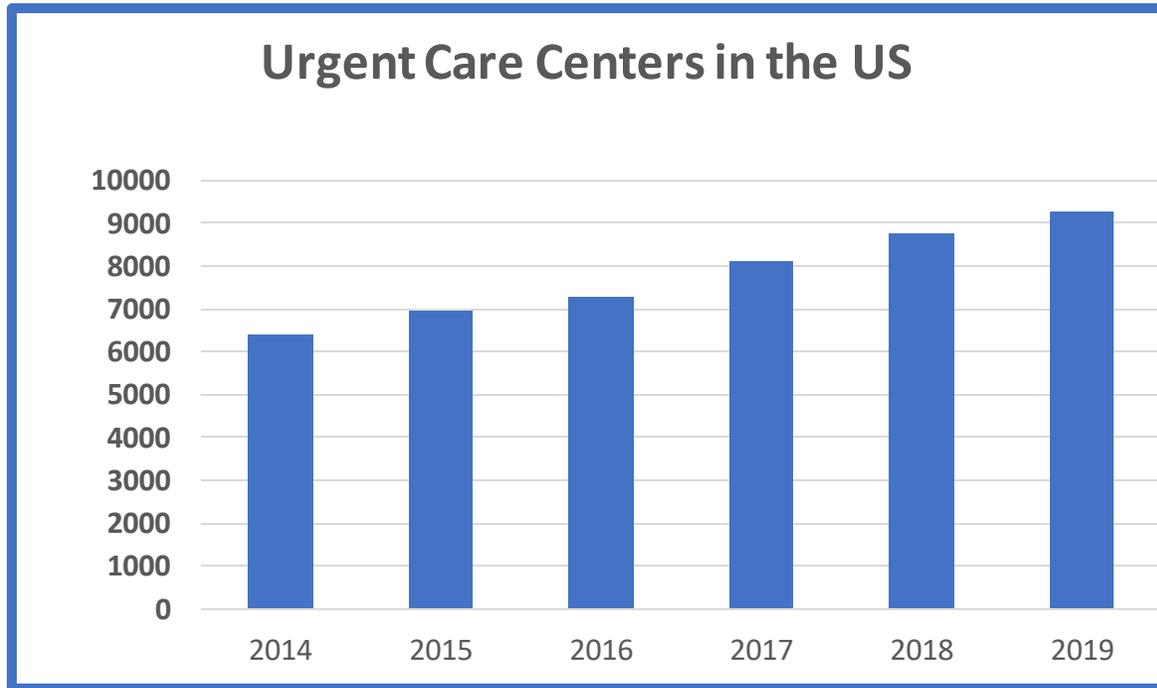
Quality
INNOVATION
SERIES

#QISeries

Background – Urgent Care



Urgent Care (UC) is the fastest growing site of outpatient care delivery in the US with the number of encounters increasing by 50% or more over the past 5 years

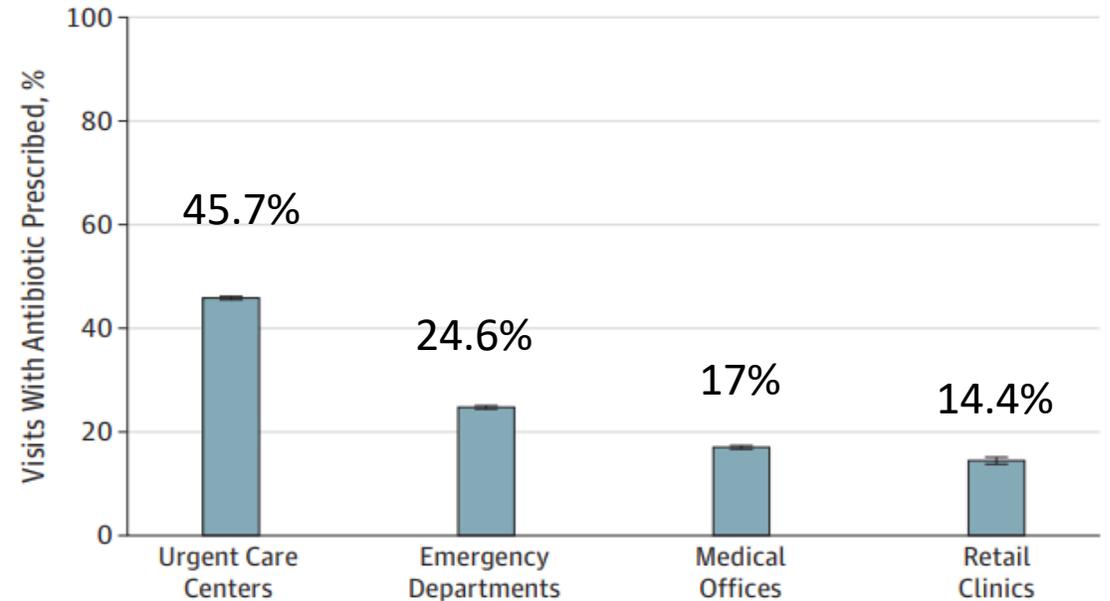


Background – Urgent Care

Visits to UC settings are more likely to result in an inappropriate antibiotic prescription than any other outpatient setting

Stewardship strategies targeting UC are needed

Figure. Percentage of Visits for Antibiotic-Inappropriate Respiratory Diagnoses Leading to Antibiotic Prescriptions



Palms, et al. JAMA Intern Med. 2018 Sep 1; 178(9)

Intermountain Urgent Care Network

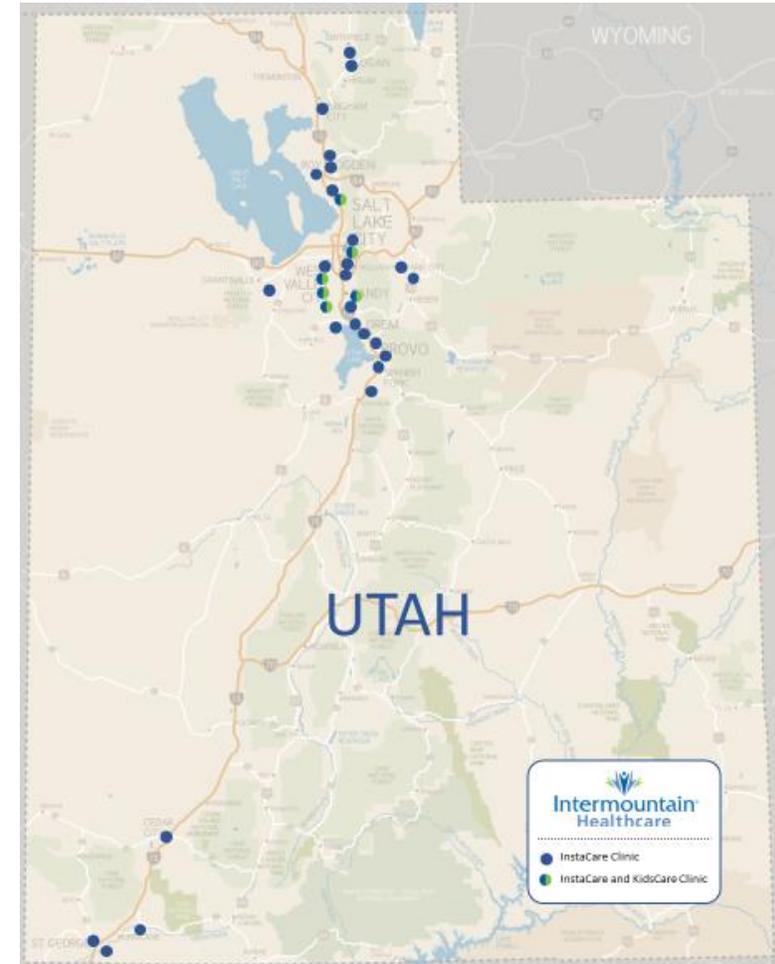
39 urgent care clinics

- 32 InstaCare Clinics
- 6 KidsCare Clinics
- 1 ConnectCare

90% of Utah residents live within 10 minutes of Urgent Care

No formal antibiotic stewardship structure

>50% of outpatient antibiotics in Intermountain Healthcare originate in Urgent Care



Partnership – ESSENTIAL



Infectious Diseases and Antibiotic Stewardship



Urgent Care



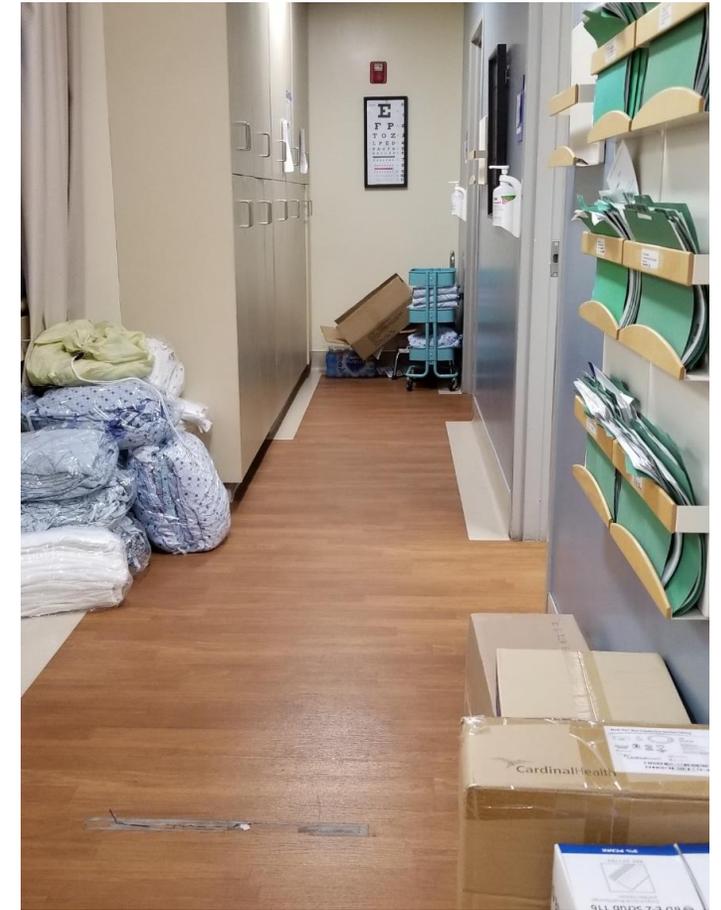
Healthcare Delivery Institute

“Socialization” Phase

Clinic Flow Mapping

Professional Conversations

Strategies



Field Interviews – 13 Clinicians, 14 Staff, 20 Patients

Knowledge, Attitudes, & Behaviors

No expectation of an RX;
highly valued receiving
education about
symptom management

Aware of
guidelines; patient
context affects
adherence

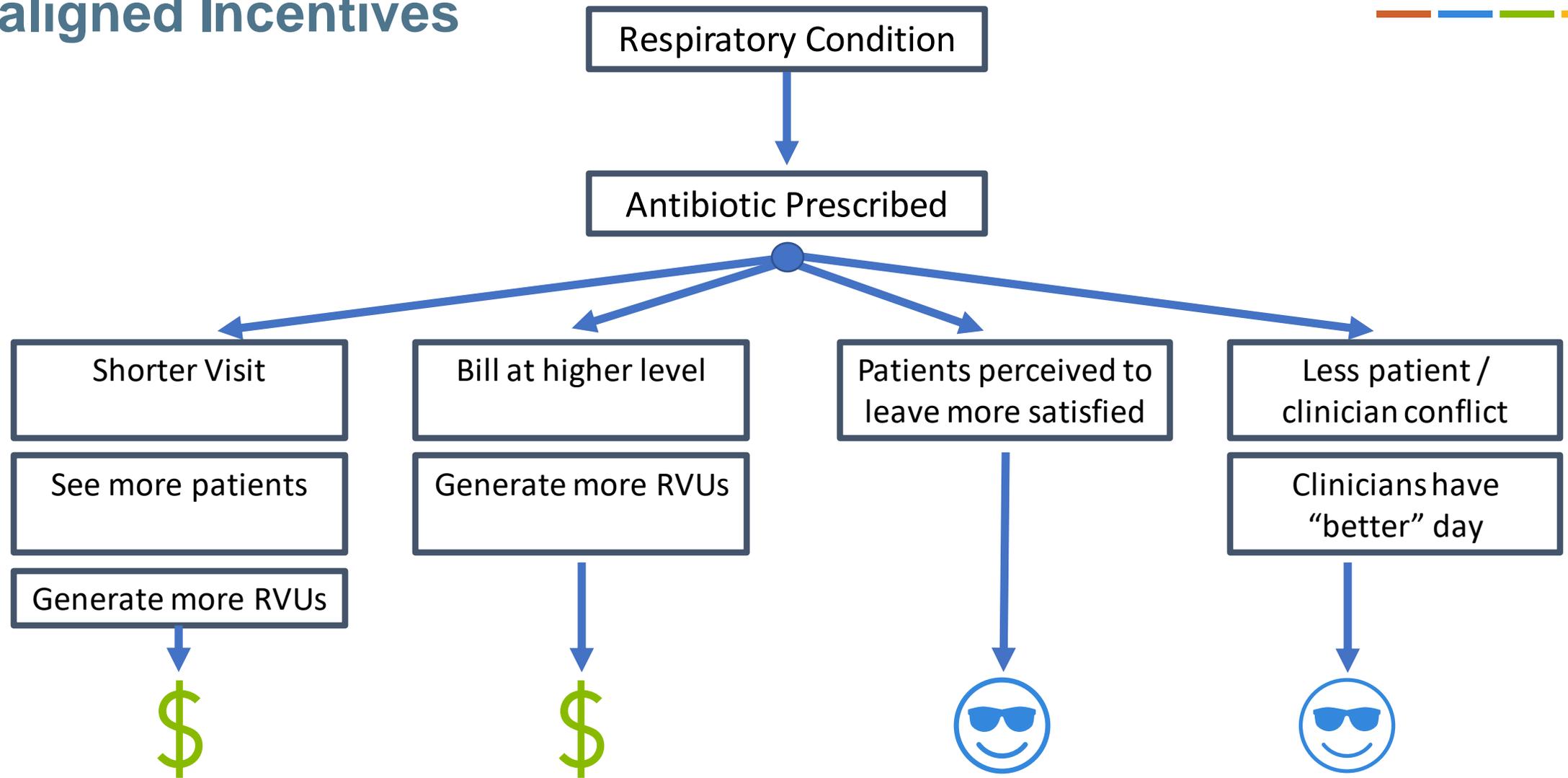
No data linking
adverse events to
inappropriate
prescribing, poor
metrics

Not enough time and
patients do not
understand

Clinicians
incentivized to
prescribe an
antibiotic



Misaligned Incentives



Poor Metrics?

- Most are ICD10-code driven
- Doesn't compare how I prescribe to others
- Easily manipulated
- Doesn't account for where antibiotics are prescribed

Is antibiotics prescribing associated with CODING?

High prescribers more likely to code a respiratory encounter as “sinusitis”

High prescribers also more likely to prescribe for sinusitis, pharyngitis, bronchitis

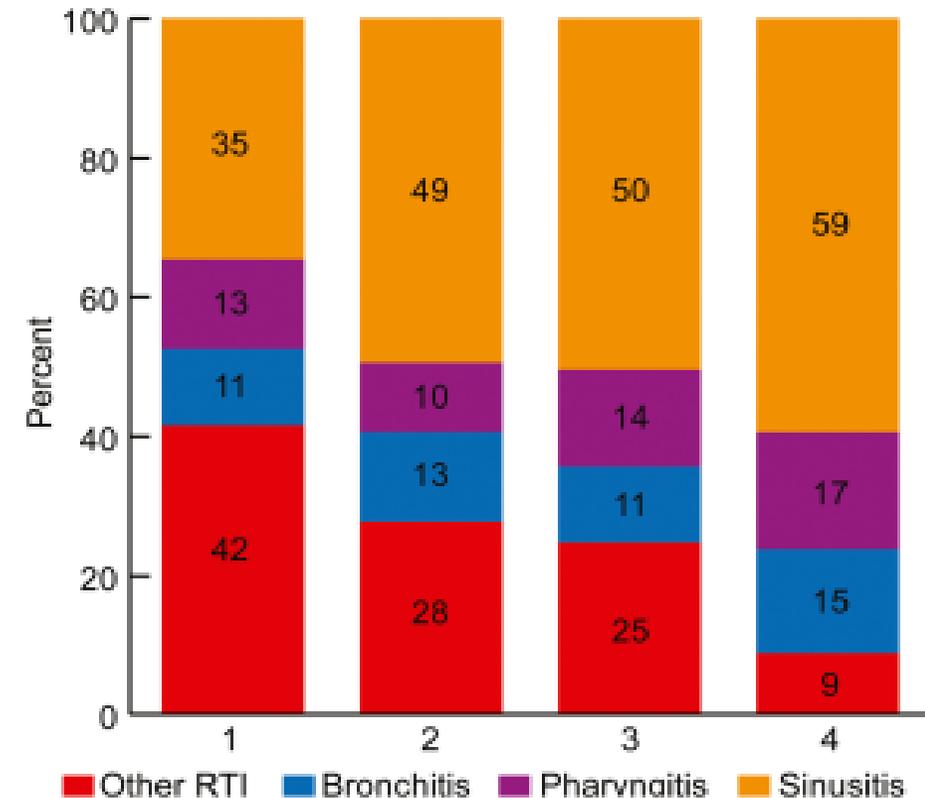


Figure 1 Distribution of RTI diagnoses by physician antibiotic quartiles.

Coding Bias in Respiratory Tract Infections May Obscure Inappropriate Antibiotic Use

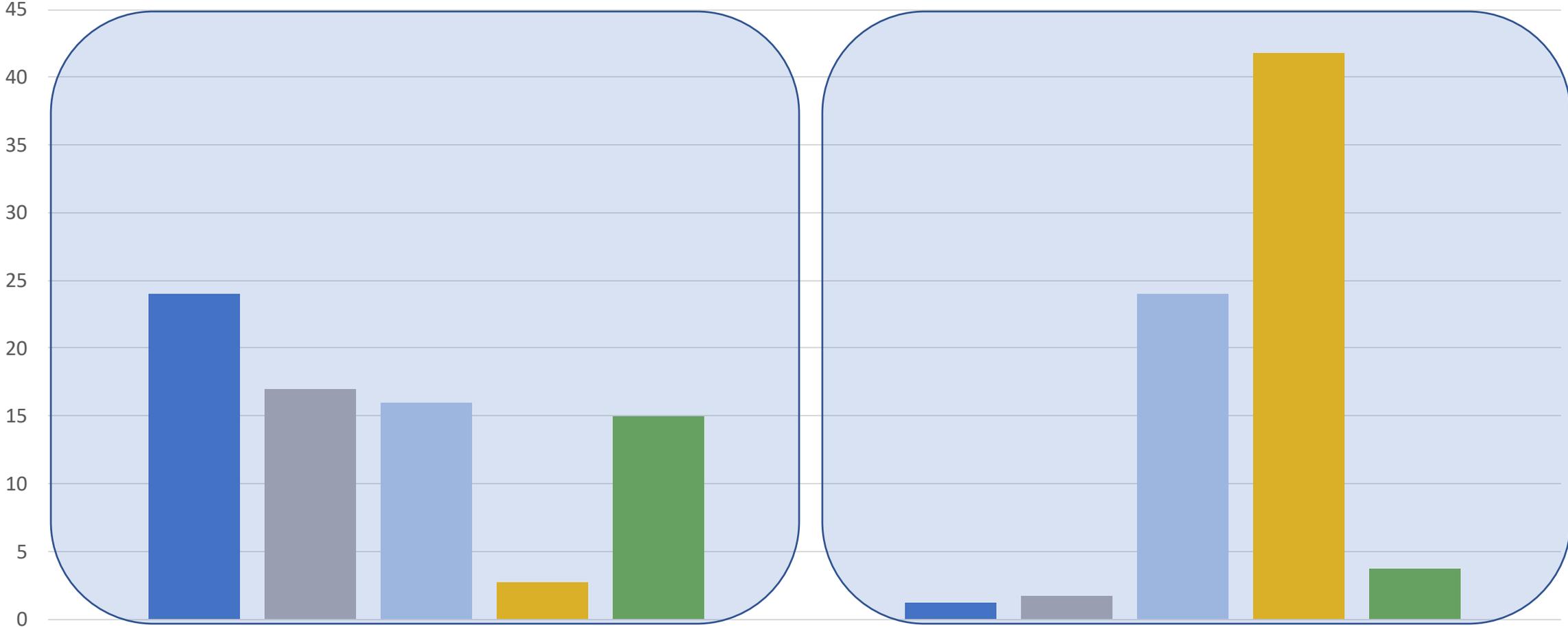
Kathryn A. Martinez, PhD, MPH¹, Mark Rood, MD², and Michael B. Rothberg, MD, MPH¹

¹Center for Value-Based Care Research, Cleveland Clinic, Cleveland, OH, USA; ²Department of Family Medicine, Cleveland Clinic, Cleveland, OH, USA.

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for specific RTI diagnoses, by prescribing quartiles. Analyses were conducted in Stata 14.

Distribution of diagnoses



Provider 1 (87% prescribing rate)

Provider 2 (14% prescribing rate)

■ Otitis Media ■ Sinusitis ■ Pharyngitis ■ Bronchitis and URI ■ Cough



#QISeries



Diagnostic Classification

- Reviewed top 1000 ICD10 codes in UC and classified into categories (collectively >97% of encounters)
 1. Skin and Skin Structure (Skin)
 2. Gastroenterology (GI)
 3. Genitourinary (GU)
 4. Respiratory (Resp)– includes inner ear, pharynx, upper/lower tract
 5. Other
- Additional 410 related codes added



Antibiotic Appropriateness

- Each ICD10 code further adjudicated for antibiotic appropriateness into Tiers adapted from Fleming-Dutra et al:
 - Tier 1 – Always appropriate (pneumonia, UTI, GAS pharyngitis)
 - Tier 2 – Sometimes appropriate (AOM, sinusitis, abscess)
 - Tier 3 – Never appropriate (bronchitis, headache)
- If multiple codes assigned from different Tiers – lowest Tier is used (bronchitis + sinusitis = sinusitis)

Measure Development

All Respiratory Prescribing Measure

- All encounters defined as “respiratory”
- Included all tiers (1-3)
- Excluded encounters with multiple clinical categories (skin and respiratory)
- Data at the clinician, clinic, and system level



Intermountain.net Search...

- Pharmacy Library
- Formulary Resources
- Drug Shortages, Supply, and Recalls
- Drug Information
- Documents, Resources, and Policies
- Antimicrobial Stewardship
- Inpatient Guidelines & Education
- Outpatient Guidelines & Education
- Inpatient Project Resources
- Outpatient Project Resources
- Antibiotic Quick Visits Tips for Providers
- Antibiotic Prescribing Dashboards Tips for Providers
- Antibiotic Delayed Prescribing Tips for Providers
- Antibiotic Stewardship FAQ Tips for Urgent Care Providers**
- Tracking and Reporting
- Data Analytics and Research
- Education and Onboarding
- Patient Assistance and Sample Replacement

Antibiotic Stewardship FAQ Tips for Urgent Care Providers

- Care Process Models (CPMs)
- Delayed Prescribing / SNAP Scripts
- Quick Visits

Coding and Prescribing Metrics

- Are ICD-10 codes for open fractures being evaluated?
- Can you provide the specific respiratory ICD10 codes and their respective tier designation?**

Yes, the excel document with all the ICD10 codes is available and has been sent out. Please contact eddie.stenehjem@imail.org for a copy.
- If a patient is diagnosed with 1) ankle sprain and 2) cough, WOULD that be counted as a respiratory encounter? If a patient came in with two unrelated infectious complaints, such as 1) UTI and 2) cough, how would that be classified?
- How does the algorithm for assigning encounters to clinical categories and tiers work?
- Often there is a “working diagnosis” (e.g. sore throat) for patients that may be refined with additional laboratory

How's it look in our urgent care?

Clinical Infectious Diseases

INVITED ARTICLE

HEALTHCARE EPIDEMIOLOGY: Robert Weinstein, Section Editor



Antibiotic Prescribing Variability in a Large Urgent Care Network: A New Target for Outpatient Stewardship

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Stenehjem E, Wallin A, Fleming-Dutra, KE, et al. Clinical Infectious Diseases. 2019.



Total

N = 1 163 849

Encounter-level patient demographics	
White	83.6% (n = 973 289)
Female	56.7% (n = 659 663)
Patient age, median	30 (IQR 15-48) ^a
Physician provider	90% (n = 104 451) ^a
Advanced practice provider	10% (n = 115 542) ^a
Encounter-level clinical categories	
Respiratory	41.8% (n = 486 061)
Skin	13.7% (n = 159 009)
GU	8.1% (n = 93 855)
GI	6.3% (n = 73 823)
Other	25.3% (n = 294 261)
Unclassified	4.9% (n = 56 840)
Tier 1	11.9% (n = 135 113)
Tier 2	30.1% (n = 341 050)
Tier 3	55.6% (n = 630 846)
Encounter-level antibiotic prescribing rate	
Total antibiotic prescribing rate	34.1% (n = 396 825)

How's it look in our urgent care?

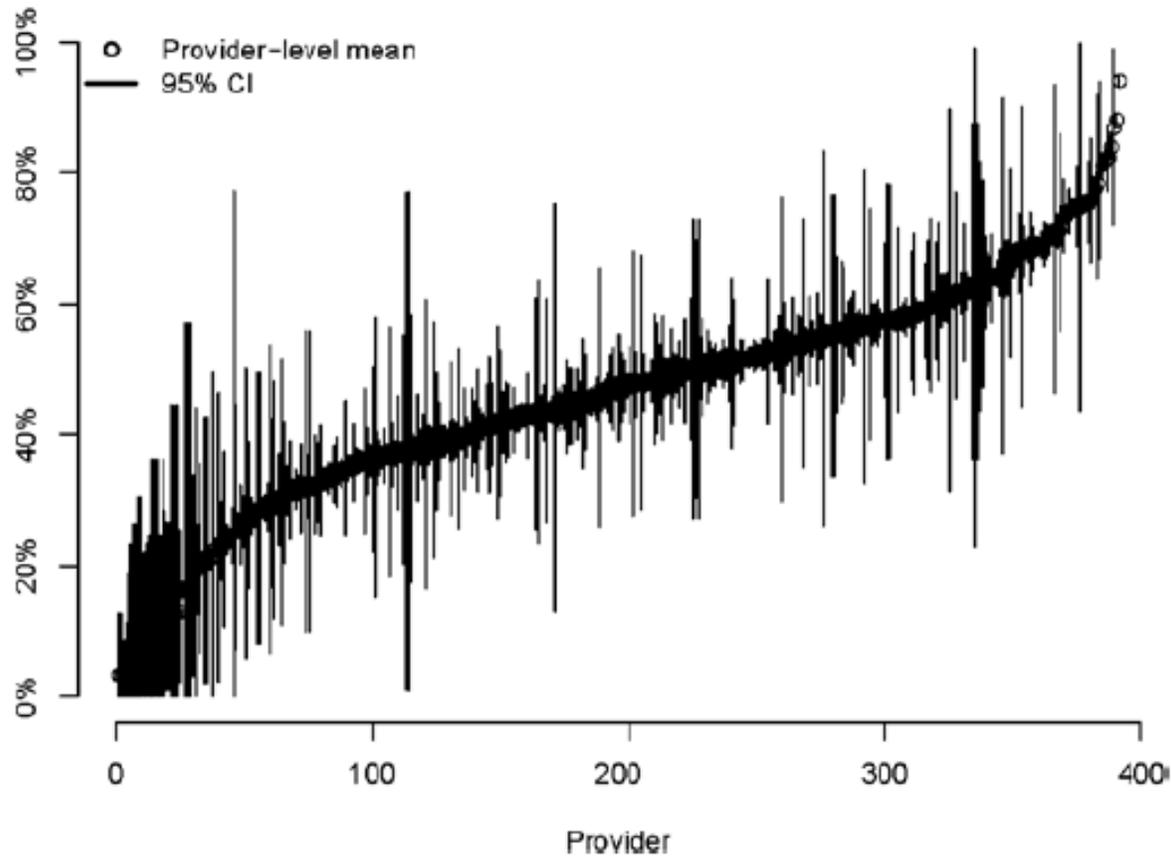
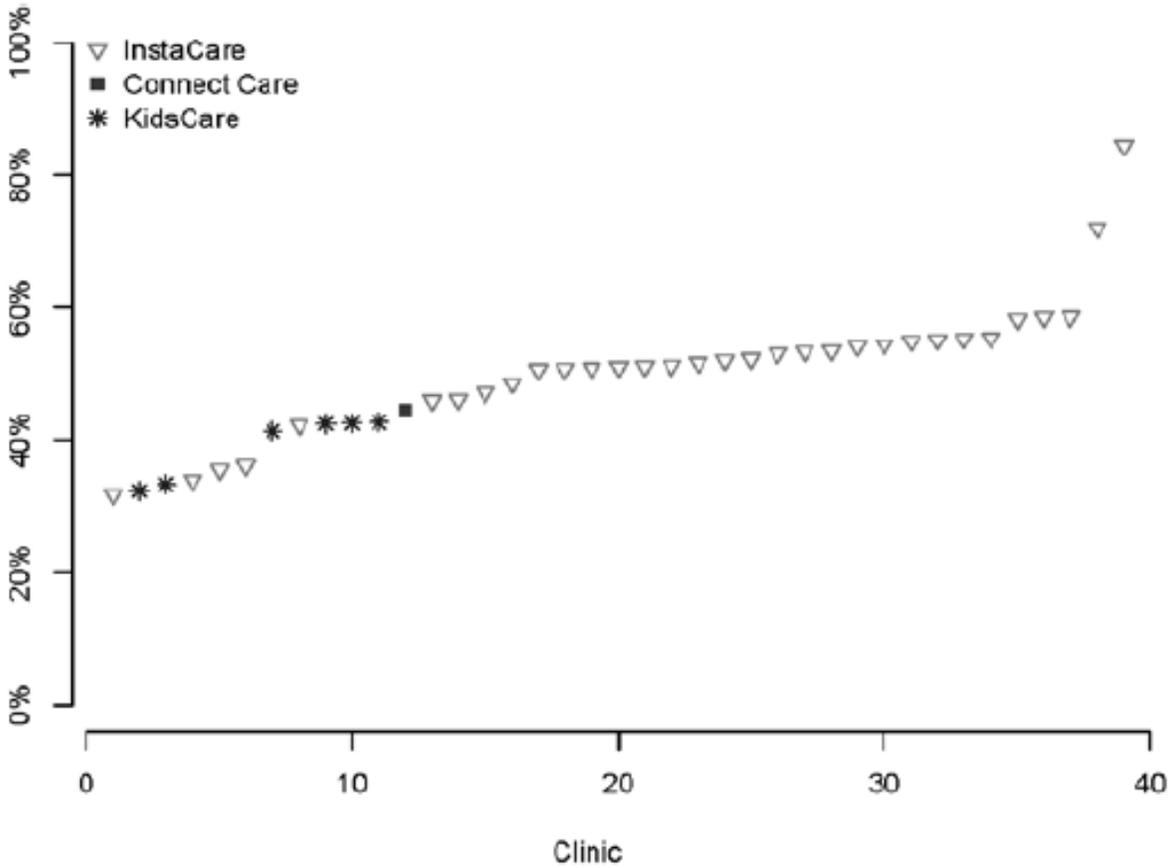


	Total, Respiratory N = 486 061	InstaCare, Respiratory 426 070	Connect Care, Respiratory 17 621	KidsCare, Respiratory 42 370
Distribution of respiratory encounter types				
Tier 1	9.2% (n = 44 727/486 061)	9.4% (40 090/426 070)	0.3% (47/17 621)	10.8% (4590/42 370)
Tier 2	49.9% (n = 242 343/486 061)	49.9% (212 432/426 070)	53.8% (9484/17 621)	48.2% (20 427/42 370)
Tier 3	40.9% (n = 198 991/486 061)	40.7% (173 548/426 070)	45.9% (8090/17 621)	41% (17 353/42 370)
Respiratory encounter antibiotic prescribing rates				
Total respiratory prescribing rates	49.9% (242 651/486 061)	51.3% (218 445/426 070)	44.4% (7829/17 621)	38.7% (16 377/42 370)
Tier 1	96.6% (43 187/44 727)	96.5% (38 686/40 090)	31.9% (15/47)	97.7% (4486/4590)
Tier 2	64.8% (157 078/242 343)	65.4% (138 948/212 432)	81.3% (7715/9484)	51% (10 415/20 427)
Tier 3	21.3% (42 386/198 991)	23.5% (40 811/173 548)	1.2% (99/8090)	8.5% (1476/17 353)
Respiratory tier distribution among respiratory encounters where an antibiotic was prescribed				
Tier 1	17.8% (43 187/242 651)	17.7% (38 686/218 445)	0.2% (15/7829)	27.4% (4486/16 377)
Tier 2	64.7% (157 078/242 651)	63.6% (138 948/218 445)	98.5% (7715/7829)	63.6% (10 415/16 377)
Tier 3	17.5% (42 386/242 651)	18.7% (40 811/218 445)	1.3% (99/7820)	9% (1476/16 377)

Respiratory, Tier 2: Otitis Media, Sinusitis, Pharyngitis

Stenehjem E, Wallin A, Fleming-Dutra, KE, et al. Clinical Infectious Diseases. 2019.

Respiratory Antibiotic Prescribing Rates - VARIABILITY



Stenehjem E, Wallin A, Fleming-Dutra, KE, et al. Clinical Infectious Diseases. 2019.

CDC SHEPHERD Contract

Improve respiratory antibiotic prescribing in a large network of urgent care clinics by implementing a comprehensive, multifaceted stewardship program based on CDC Core Elements



- Commitment**
Demonstrate dedication to and accountability for optimizing antibiotic prescribing and patient safety.
- Action for policy and practice**
Implement at least one policy or practice to improve antibiotic prescribing, assess whether it is working, and modify as needed.
- Tracking and reporting**
Monitor antibiotic prescribing practices and offer regular feedback to clinicians, or have clinicians assess their own antibiotic prescribing practices themselves.
- Education and expertise**
Provide educational resources to clinicians and patients on antibiotic prescribing, and ensure access to needed expertise on optimizing antibiotic prescribing.



ADAPT TO THE
URGENT CARE
SETTING

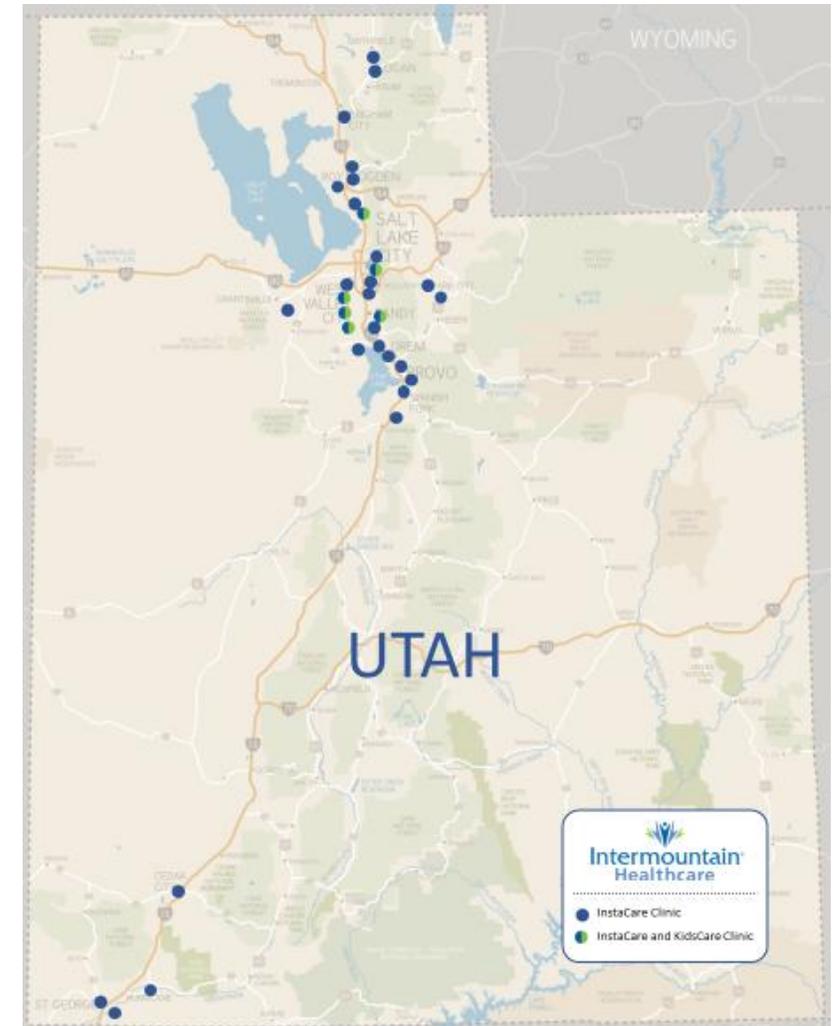
Methods – Design and Setting

Pre-post design 24 months

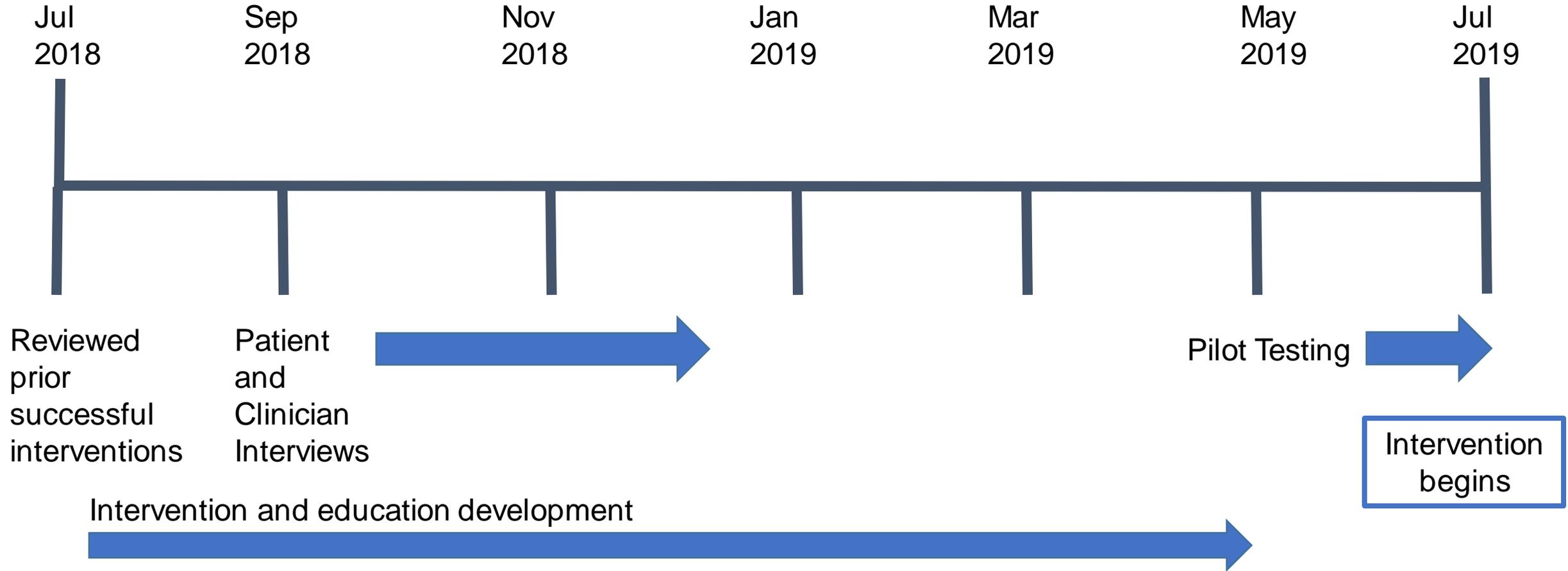
- *Pre-intervention*: July 2018-June 2019
- *Intervention*: July 2019-June 2020

39 UC clinics within Intermountain Healthcare throughout Utah

- 32 InstaCare – all ages
- 1 Connect Care – telemedicine
- 6 KidsCare – pediatrics only



Intervention Timeline



5 Categories for Stewardship Interventions



Education:
Clinicians and
Patients



Electronic
Health Record
Tools



Provider
Benchmarking
Dashboard



Media



Organizational
Alignment

Education – Clinicians

Clinical guidelines updated with metrics in mind

Monthly presentations for UC staff

Clinical champion for detailing

Podcasts/blog posts

Clinic materials

Accessible website



This care process model (CPM) was developed by Intermountain Healthcare's Antibiotic Stewardship Clinical Program, Community-Based Care, and Intermountain Pediatrics. Based on expert opinion, Society of America (IDSA) Clinical Practice Guidelines, it provides best practice recommendations of group A streptococcal pharyngitis (strep) including the appropriate use of antibiotics.

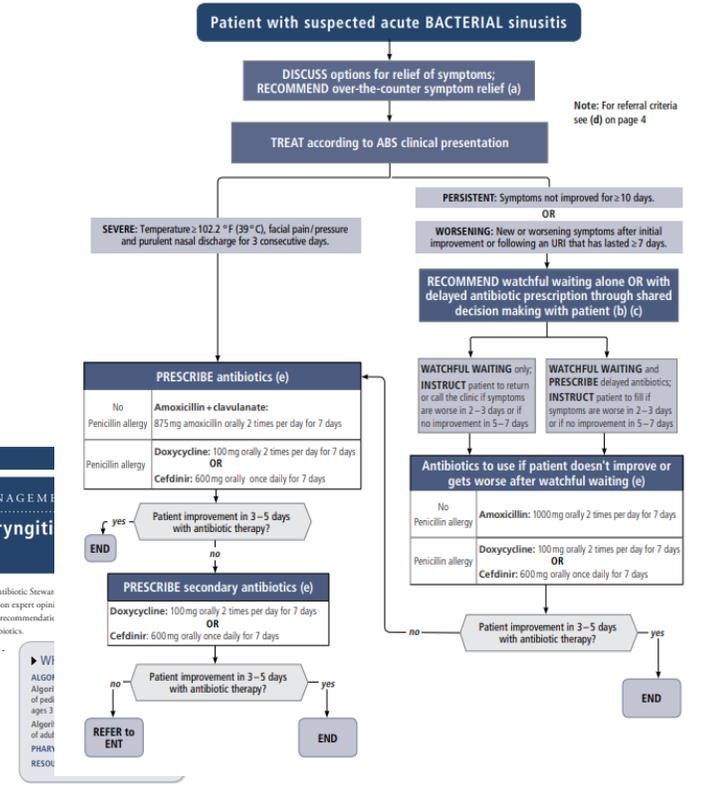
Why Focus on STREPTOCOCCAL PHARYNGITIS?

- Antibiotic prescribing for acute pharyngitis has dropped, but further reduction is needed. Approximately 37% of children presenting for medical visits with sore throat are group A streptococcus positive, but antibiotics are still prescribed about 50% of the time based on 2010-11 national data. For adults, approximately 18% are group A streptococcus positive and yet 72% of those aged 20 through 64 years are prescribed an antibiotic.^{10,102}
- Unnecessary antibiotic prescribing is costly and dangerous. From 1997 to 2010, the financial cost of unnecessary antibiotic prescribing to adults with sore throat was about \$500 million in the United States. Antibiotics can also be expensive for patients and can have negative side effects. Between 5% and 25% of patients on antibiotics develop diarrhea, and 1 in 1,000 visit an emergency department for a serious adverse drug event.¹⁰²

KEY POINTS

- Accurate diagnosis and appropriate treatment can prevent serious complications. When strep is present, appropriate antibiotics can prevent acute rheumatic fever, peritonsillar abscess, and other invasive infections.¹⁰² Treatment also decreases spread of infection and improves clinical symptoms and signs for the patient.
- Differentiating between a patient with an active strep infection and a patient who is a strep carrier with an active viral pharyngitis is challenging. Treating patients for active strep infection when they are only carriers can result in overuse of antibiotics. Approximately 20% of asymptomatic school-aged children may be strep carriers, and a throat culture during a viral illness may yield positive results, but not require antibiotic treatment.¹⁰² Prescribing repeat antibiotics will not help these patients and can contribute to antibiotic resistance.
- For adult patients, routine overnight cultures after a negative rapid strep test are unnecessary in usual circumstances because the risk for acute rheumatic fever is exceptionally low.¹⁰² Physicians may continue to use overnight throat cultures when the patient's risk score is high or if the patient has an increased likelihood of exposure due to contact or employment (e.g., teachers, family member with strep, etc.).

ALGORITHM 2: TREATMENT OF SUSPECTED ABS IN ADULTS



MEASUREMENT & GOALS

- Ensure appropriate use of throat culture for adult patients who meet high-risk criteria
- Select appropriate antibiotics for patients who meet the diagnostic criteria for a group A strep throat infection.
- Reduce the unnecessary use of antibiotics for an unclear diagnosis of strep and for strep carriers.

Indicates an Intermountain measure

GermWatch

GermWatch is Intermountain's source for up-to-date information about infectious diseases currently circulating in Utah communities. For Intermountain physicians: [germwatch.org](#) For patients and patients: [germwatch.org](#)



Education – Co-created with patients

FACT SHEET FOR PATIENTS AND FAMILIES



Watchful Waiting and Delayed Antibiotic Prescriptions

What is watchful waiting?

Watchful waiting is the practice of keeping an eye on symptoms to see if they improve with time. This is considered the best practice by most experts who treat sinus infections, earaches, severe colds, and bronchitis [bron-KITE-iss]. They know that most people will get better on their own with over-the-counter medicines and will not need antibiotics.

In addition to watchful waiting, some patients who have a sinus or ear infection may get a prescription from their doctor for an antibiotic that can be filled at a later date if their symptoms don't get better. This is called a **delayed antibiotic prescription**.

How is watchful waiting done?

If the doctor believes that you or your child doesn't need an antibiotic right away, they will ask you to do the following:

- **Closely track you or your child's symptoms**, such as temperature, pain, cough, or runny nose, for several days. Note if they are getting worse, staying the same, or getting better.
- **Take over-the-counter medicines** that your doctor recommends to help you or your child feel better while waiting. Make sure to rest and drink extra water.

Your doctor will tell you how long to watch and wait. If your symptoms haven't started to get better or if they are worse at the end of the watchful waiting period, then call your doctor for further instructions. Or, if you have a delayed antibiotic prescription from your doctor, you can now fill the prescription at your pharmacy and start taking the antibiotics.



My Watchful Waiting

Have your doctor fill out the start date and end date of your "watchful waiting" period.

Start Date _____
End Date _____

If you or your child gets worse or hasn't improved by the end date of the "watchful waiting" period:

Call your doctor for instructions: _____ (Phone number)

OR

Fill your delayed antibiotic prescription at your pharmacy and begin taking antibiotics.

1

Watchful Waiting Handout

FACT SHEET FOR PATIENTS AND FAMILIES



Treating Your Cold, Flu, and Other Symptoms (for those 12 years of age and older)

Here are some over-the-counter medicines and other ways to treat your symptoms. Have your medical provider or pharmacist check the boxes for treatments that will work best for you. Do not use if the box is not checked.

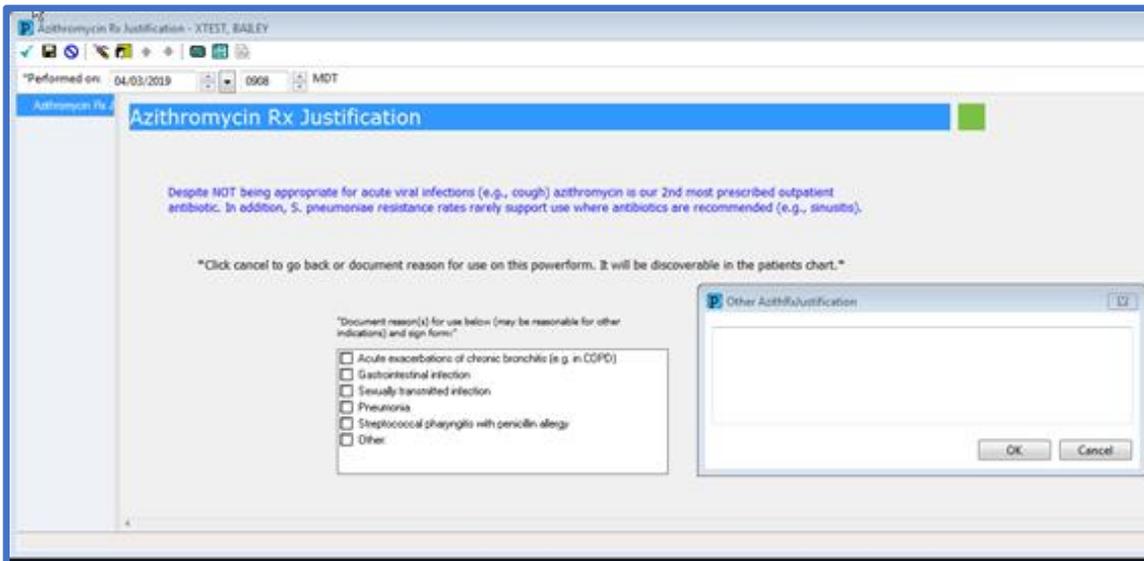
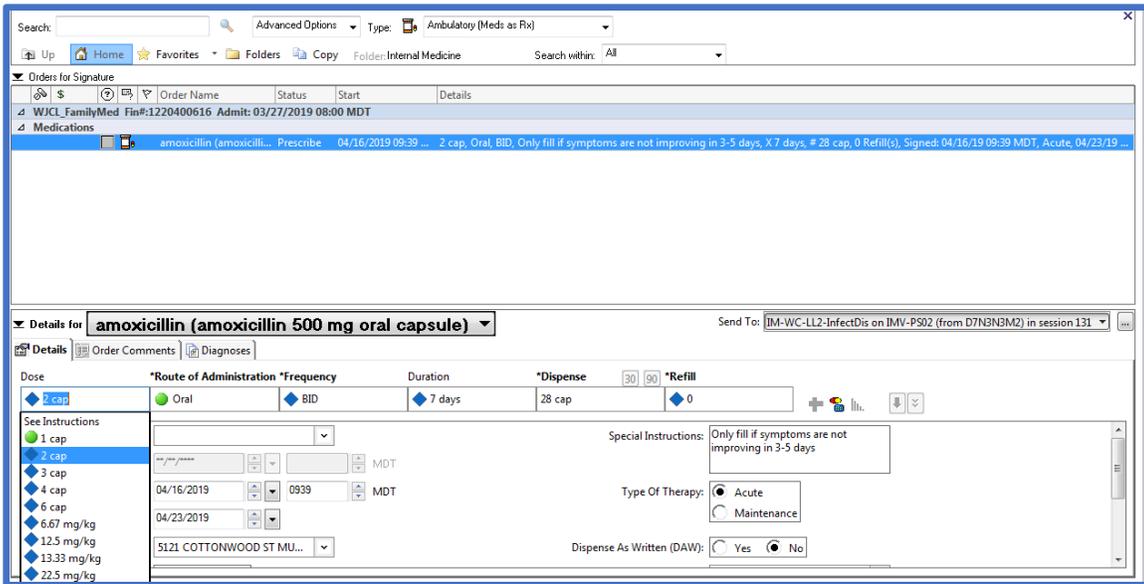
If you have	<input checked="" type="checkbox"/>	Use (active ingredient)	Such as (brand)	Comments
Aches, pain, fever 	<input checked="" type="checkbox"/>	Acetaminophen	Tylenol	
	<input checked="" type="checkbox"/>	Ibuprofen	Advil, Motrin	
	<input checked="" type="checkbox"/>	Naproxen	Aleve	
Sore throat 	<input checked="" type="checkbox"/>	Throat lozenges	Cepacol Throat Lozenges	
	<input checked="" type="checkbox"/>	Throat spray	Chloraseptic Spray	
	<input checked="" type="checkbox"/>	Herbal tea		
Cough 	<input checked="" type="checkbox"/>	Guaifenesin	Mucinex	Helps thin mucus
	<input checked="" type="checkbox"/>	Dextromethorphan	Robitussin, Delsym	Cough suppressant
	<input checked="" type="checkbox"/>	Vaporizer/humidifier		Clean after each use
	<input checked="" type="checkbox"/>	Menthol	Vicks Vapor Rub, Cough drops	
Stuffy nose 	<input checked="" type="checkbox"/>	Phenylephrine or Pseudoephedrine	Sudafed	
	<input checked="" type="checkbox"/>	Oxymetazoline nasal spray	Afrin, Zicam	Do not use for more than 3 days
	<input checked="" type="checkbox"/>	Phenylephrine nasal spray	Neo-Synephrine	Do not use for more than 3 days
	<input checked="" type="checkbox"/>	Saline nasal spray		
	<input checked="" type="checkbox"/>	Nasal/Sinus irrigation	Neti Pot	
Allergy symptoms such as sneezing, runny nose, itchy eyes, post nasal drip	<input checked="" type="checkbox"/>	Fexofenadine, Loratadine, or Cetirizine	Zyrtec, Allegra, Claritin, Alavert	Non-drowsy antihistamines
	<input checked="" type="checkbox"/>	Diphenhydramine, or Chlorpheniramine	ChlorTabs, Chlor-Trimeton, Benadryl	Antihistamines that can cause drowsiness
Combination Medications	<input checked="" type="checkbox"/>	Fluticasone, Triamcinolone, or Budesonide	Fionase, Nasacort, Rhinocort	Steroid nasal spray
	<input checked="" type="checkbox"/>	Acetaminophen, Guaifenesin, and Phenylephrine	Multiple products available, check active ingredients	
	<input checked="" type="checkbox"/>	Acetaminophen, Guaifenesin, Phenylephrine and Dextromethorphan	Multiple products available, check active ingredients	
	<input checked="" type="checkbox"/>	Ibuprofen and Phenylephrine	Advil Sinus	
Other	<input checked="" type="checkbox"/>	Cetirizine and Pseudoephedrine	Zyrtec - D	

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Symptomatic Therapies Checklist

Quality
INNOVATION
SERIES

#QISeries



Electronic Tools

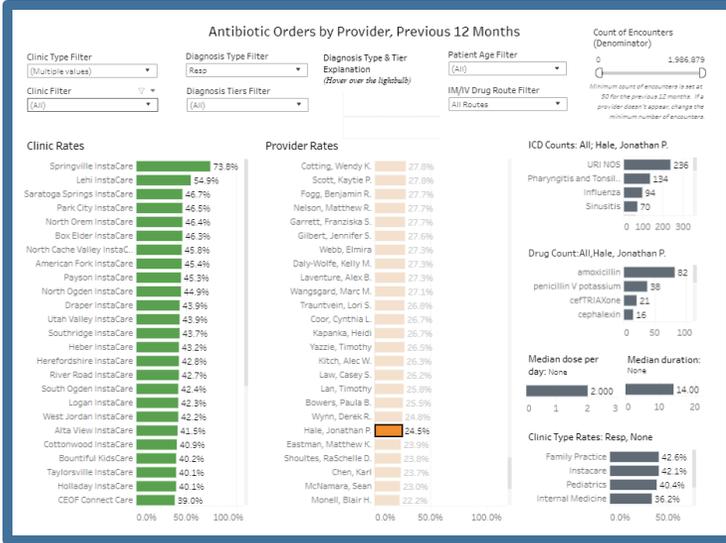
1. Easier to do the right thing:

- Pre-templated notes for workflow enhancements
- Delayed prescription order sentences

2. Harder to do the wrong thing:

- Azithromycin justification alert

Provider Benchmarking Dashboard

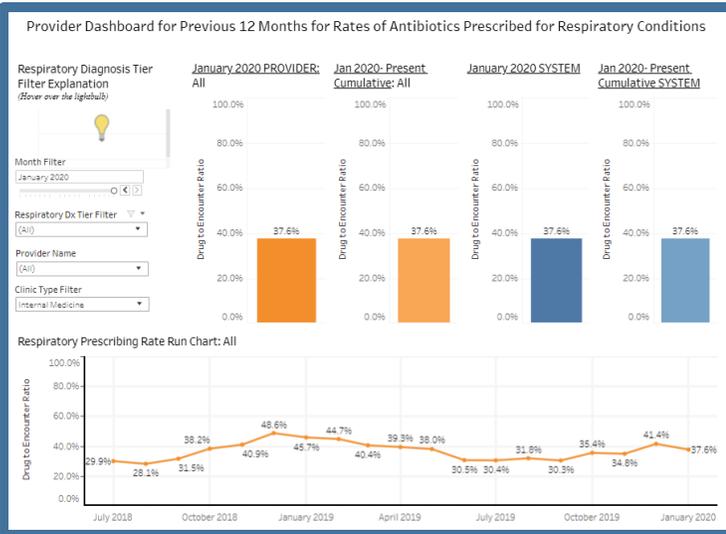


Continuous tracking of prescribing metrics

Transparent individual, clinic, and system level data

Peer comparison

Reviewed bi-annually with clinicians



Media

Print and traditional

Social media

In-clinic media

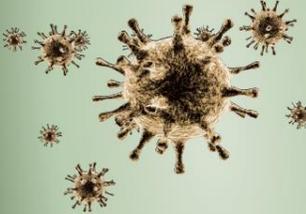
Antibiotics are only needed for certain infections caused by bacteria.

Antibiotics do not work on viruses.

We commit to protecting patients & reducing the threat of antibiotic resistance.

Make sure to wash your hands, cover your cough, and get vaccinated for the flu.

Any time antibiotics are used, they cause side effects such as diarrhea, upset stomach, and a



Organizational Alignment

Compensation alignment with quality indicators

Annual professional conversations with review of metrics

Provided tools and data to improve – they had control

- Delayed prescriptions
- Patient education
- Available content expertise

No exceptions – entire service line



A Goal Was Set

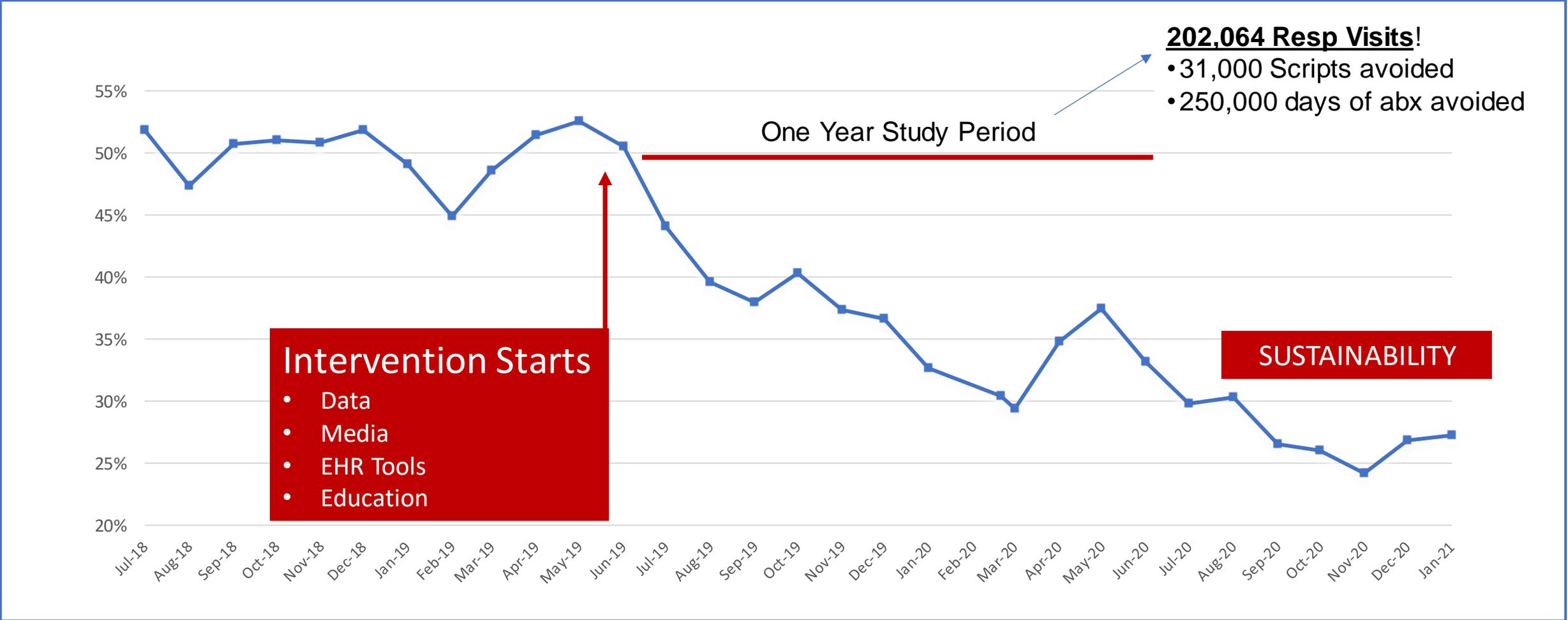
<50%

Respiratory
Prescribing
Rate

Outcomes

1. **All respiratory encounter prescribing rate (monthly %)**
2. First line therapy use for sinusitis/OM/pharyngitis (monthly %)
3. Respiratory “Tier 3” antibiotic prescribing rate (monthly %)
4. Delayed prescribing use for sinusitis/OM (monthly %)
5. Azithromycin use (monthly %)
6. Balancing Measures:
 - 14-day hospitalization urgent care visit
 - Patient satisfaction

Monthly Percentage of Respiratory Visits with an Antibiotic Prescribed



202,064 Resp Visits!
 • 31,000 Scripts avoided
 • 250,000 days of abx avoided

Intervention Starts

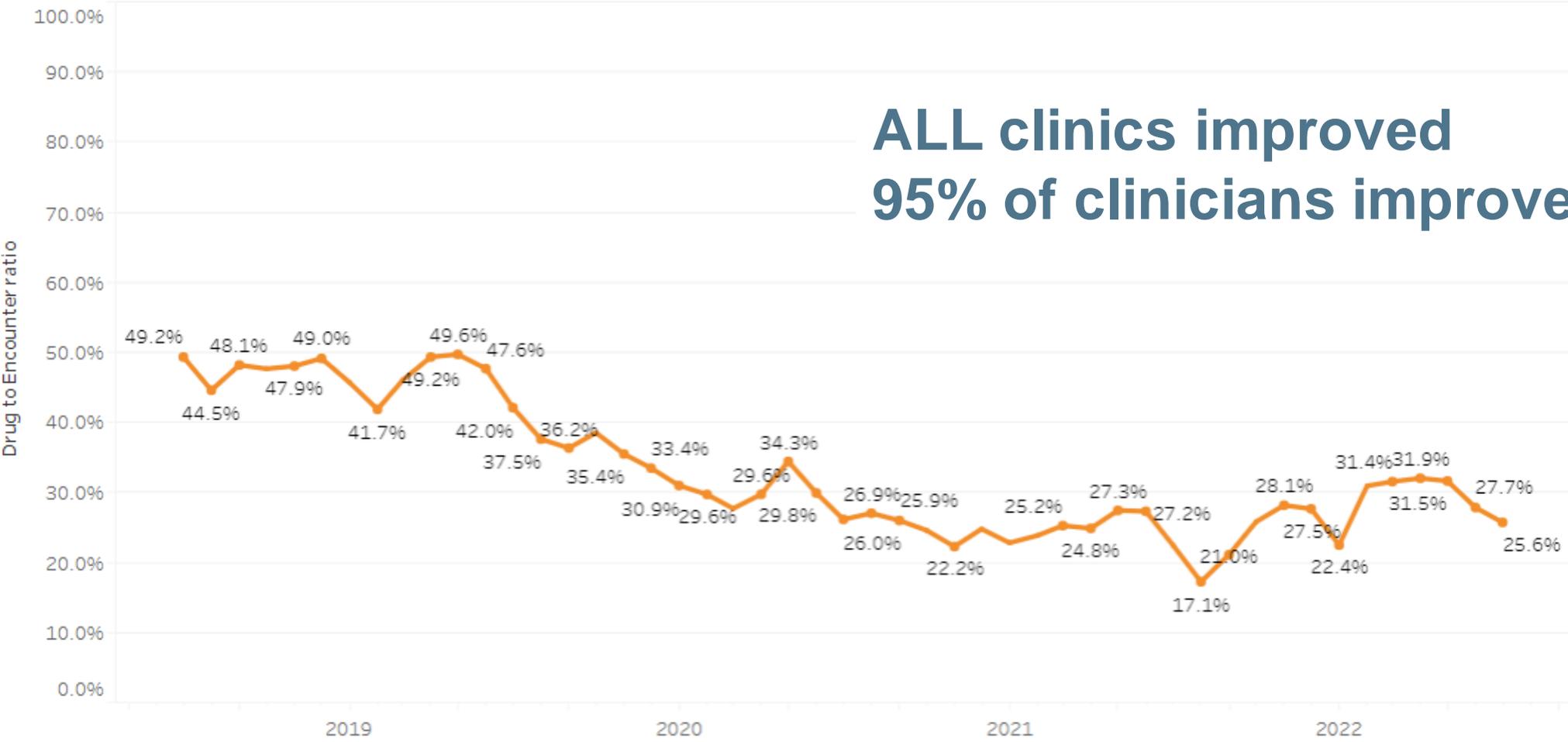
- Data
- Media
- EHR Tools
- Education

SUSTAINABILITY

CULTURE CHANGE!



Respiratory Prescribing Rate Run Chart: All

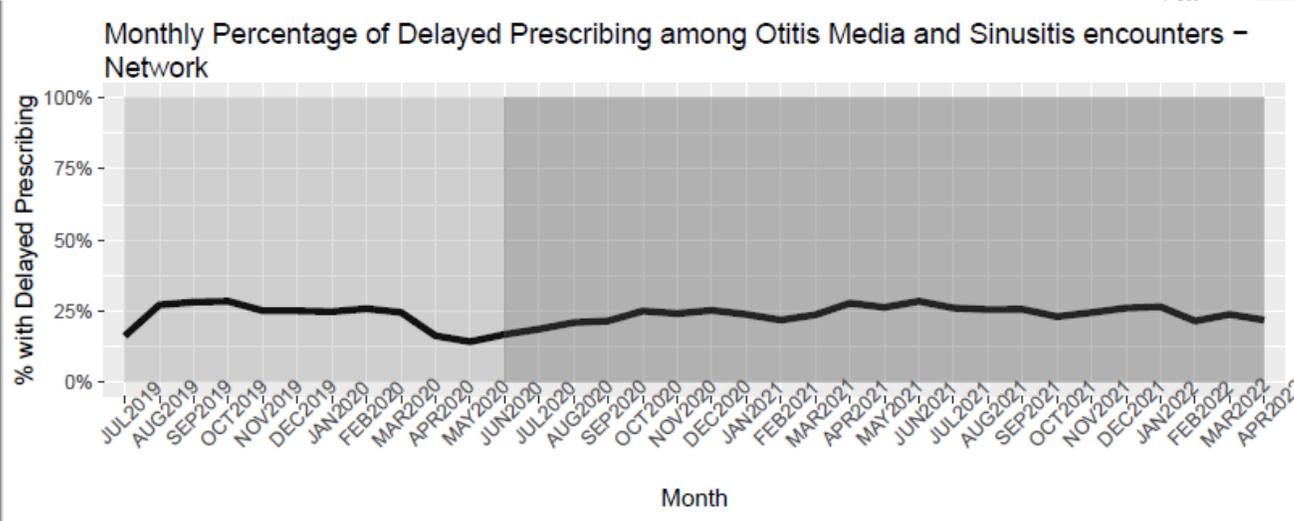
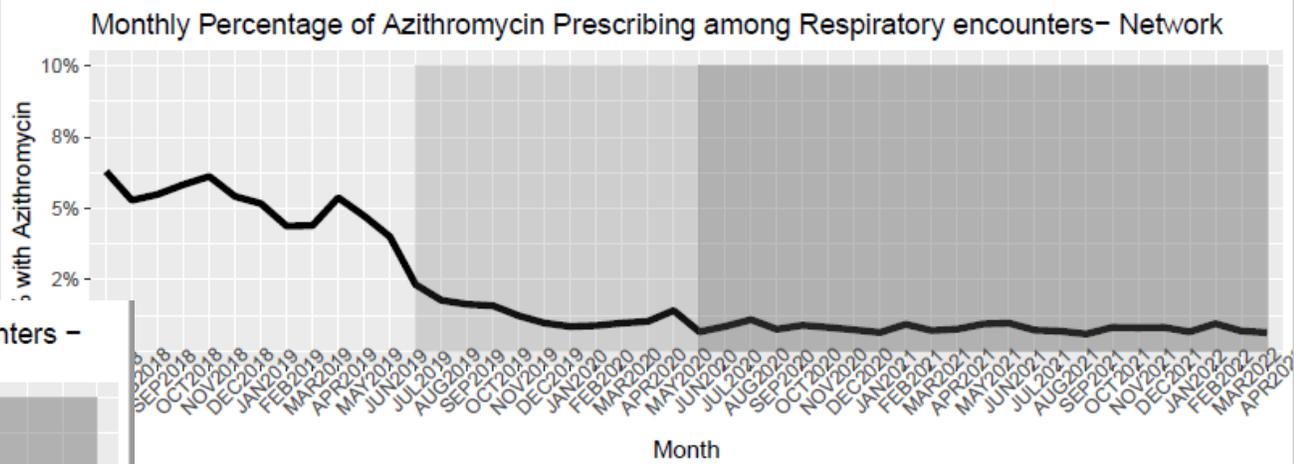
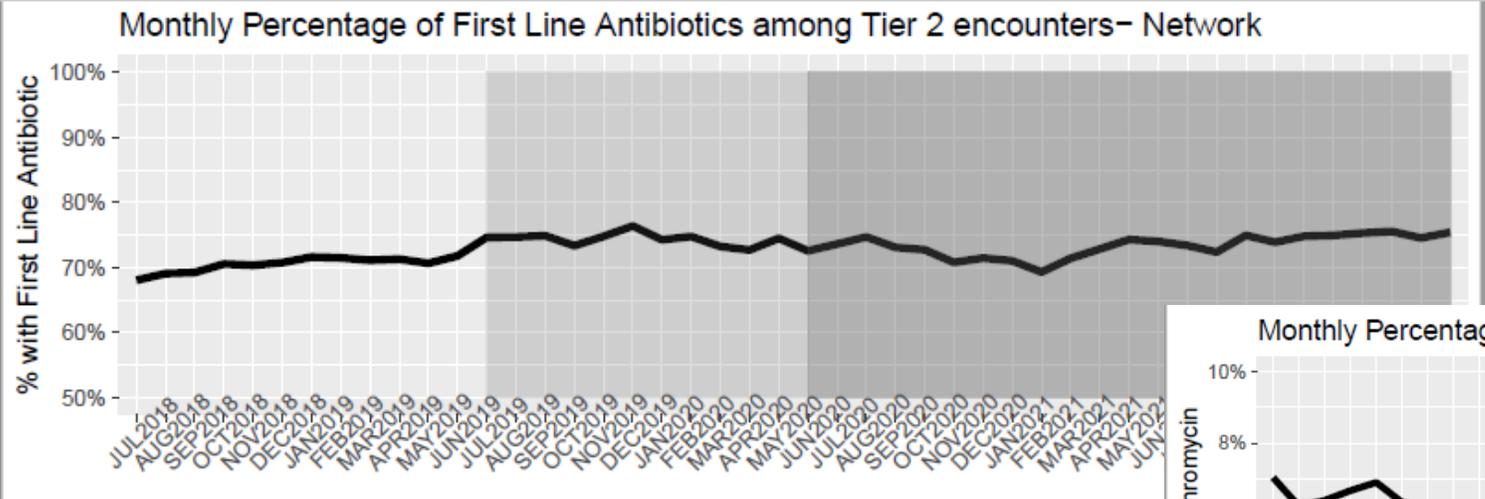


**ALL clinics improved
95% of clinicians improved**

Last Updated with qm.ams data: 8/1/2022 10:15:05 PM

Secondary Outcomes

- Increased first line therapy: 70 --> 74%
- Decreased tier 3 prescribing: 20 --> 8%
- Sustained delayed prescribing: 23%
- Decreased azithromycin use
- No change in balance measures



Key Takeaways



- Alignment in prioritization - PARTNERSHIP
- Measures matter to clinicians, all respiratory prescribing rate has become the standard for Intermountain
- Integration of antibiotic stewardship into the healthcare network is critical
- Now moving into other ambulatory practices

NCQA Antibiotic Stewardship Upcoming Webinars

Webinar Title	Speakers	Date & Time (Eastern)
<p>What's New in the World of Antibiotic Stewardship? Part 2: Impacts of COVID and Use of Telehealth</p>	<p>Sharon Tsay, MD <i>Centers for Disease Control and Prevention</i> Moderator: Sepheen Byron, DrPH, MHS <i>National Committee for Quality Assurance</i></p>	<p>8/25/2022 1:00 - 2:00 pm</p>
<p>Addressing the Social and Behavioral Drivers of Prescribing: Innovative Approaches to Antibiotic Stewardship</p>	<p>Julie Szymczak, PhD <i>University of Pennsylvania</i> Rita Mangione-Smith, MD <i>Kaiser Permanente Washington</i> Moderator: Nancy McGee, MS, MBA <i>National Committee for Quality Assurance</i></p>	<p>9/1/2022 1:00 - 2:15 pm</p>
<p>Panel Discussion: How Health Plans Approach Antibiotic Stewardship and HEDIS Antibiotic Measures</p>	<p>Shawn Trivette, PhD Moderator: Nancy McGee, MS, MBA <i>National Committee for Quality Assurance</i> Health Plan Panelists</p>	<p>9/8/2022 1:00 - 2:30 pm</p>



Q&A

Supplemental Materials

Intermountain Healthcare Antibiotic Stewardship Resources



Antibiotic Stewardship

Visit [Intermountain's Antibiotic Stewardship page](#) to access multiple podcasts and other resources for your use

-  [Antibiotic Fact Sheet](#)
-  [Treating Your Cold, Flu, and Other Symptoms Checklist \(12 Years of Age and Older\)](#)
-  [Treating Your Cold, Flu, and Other Symptoms Checklist \(12 Years of Age and Older\) \(SPANISH\)](#)
-  [The Watchful Waiting and Delayed Antibiotic Prescription](#)
-  [The Watchful Waiting and Delayed Antibiotic Prescription \(SPANISH\)](#)

Thank You

Steps to claim continuing education credits

1. Register for your course

- Navigate to education.ncqa.org
- Select Login with NCQA Account
- Select “Create Account” if you do not have an existing account, complete the requested information to complete the form and to gain access to the account. If you have an existing account, log in using those same credentials.
- Once you have logged on, click the course link to register: [What’s New in Antibiotic Stewardship? Part One: Using Performance Measures in Practice to Drive Change](#)

2. Complete your course and download your certificate

- Complete the Evaluation and Attestation to gain access to your certificate.
- Click on your name at the top right to select your profile.
- On profile, please be sure you have entered your Name and Credential(s) as they should appear on your certificate by clicking “edit” → “info” → “save”
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