IPRO HQIC
Antibiotic Stewardship During the COVID Pandemic

November 4, 2021

1:00 – 2:00 PM ET | 2:00 – 3:00 PM CT

Please note - this event is being recorded.

IPRO HQIC

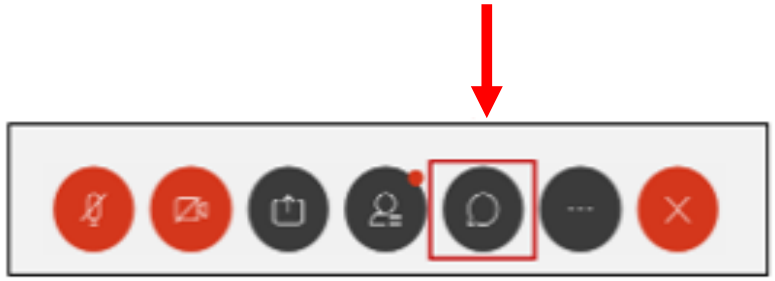
- Healthcentric Advisors
- Qlarant
- Kentucky Hospital Association
- Q3 Health Innovation Partners
- Superior Health Quality Alliance

HQIC
Hospital Quality Improvement Contractors
CENTERS FOR MEDICARE & MEDICAID SERVICES
iQUALITY IMPROVEMENT & INNOVATION GROUP

How to Use the Chat Box Feature

To send a Chat Message:

- **Open** the **Chat** Panel

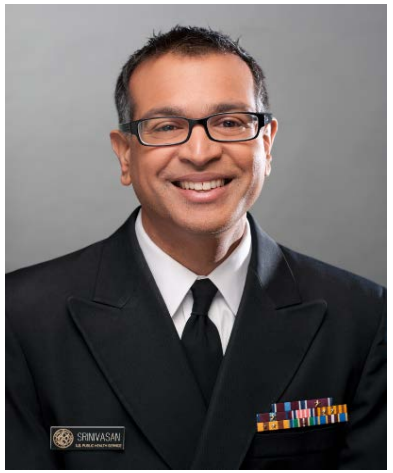


- ***Scroll** All the Way **Down***
- ***Select "Everyone"***
  - ***Do not** select "**All Attendees**"*
- **Type message** in Chat Text Box, press **Enter** on your keyboard

Enter in Chat:

- **Name**
- **Role**
- **Organization**
- **State**

Welcome and Introduction of Today's Speakers



Arjun Srinivasan, MD
CAPT USPHS
Associate Director for Healthcare Associated Infection Prevention Programs
Division of Healthcare Quality Promotion
Centers for Disease Control & Prevention

Valerie Vaughn, MD MSc
Director of Hospital Medicine Research
University of Utah
Hospitalist Lead
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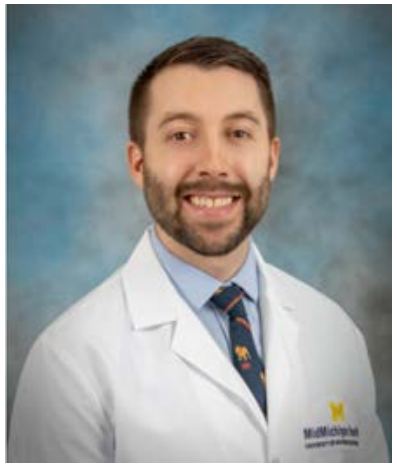

Robert Neetz, PharmD BCPS
Lead Antimicrobial Stewardship Pharmacist
MidMichigan Health

Lynda Martin, MPA BSN RN CPHQ
Senior Director Patient Safety
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Why Focus on Antibiotic Stewardship (AS)

National Priority Aimed at Optimizing Use of Antibiotics to:

- Effectively treat infections
- Prevent patient harm caused by unnecessary antibiotic use
- Combat antibiotic resistance

Impact of COVID Pandemic on AS Programs & Teams

- Added further challenges to manage both viral and bacterial infections in patients with extended lengths of stay

Today's Learning Objectives

- Review current status of AS programs in US hospitals
- Describe national trending data on antibiotic use and antibiotic resistance before and during the COVID pandemic (2019 vs. 2020)
- Assess opportunities to decrease antibiotic use in hospitalized patients with COVID infection
- Identify successful AS therapy targets and associated resource challenges for AS teams during COVID pandemic
- Evaluate laboratory stewardship including use of procalcitonin to guide antibiotic therapy selection/duration during COVID pandemic
- Hear about a hospital's challenges, successes and experience with quickly convening a key stakeholder group to devise, implement and communicate their antibiotic stewardship and treatment of COVID patients strategies

Setting the Stage – IPRO HQIC Circle of Safety: All-Cause Harm Prevention Model & Resource Tool

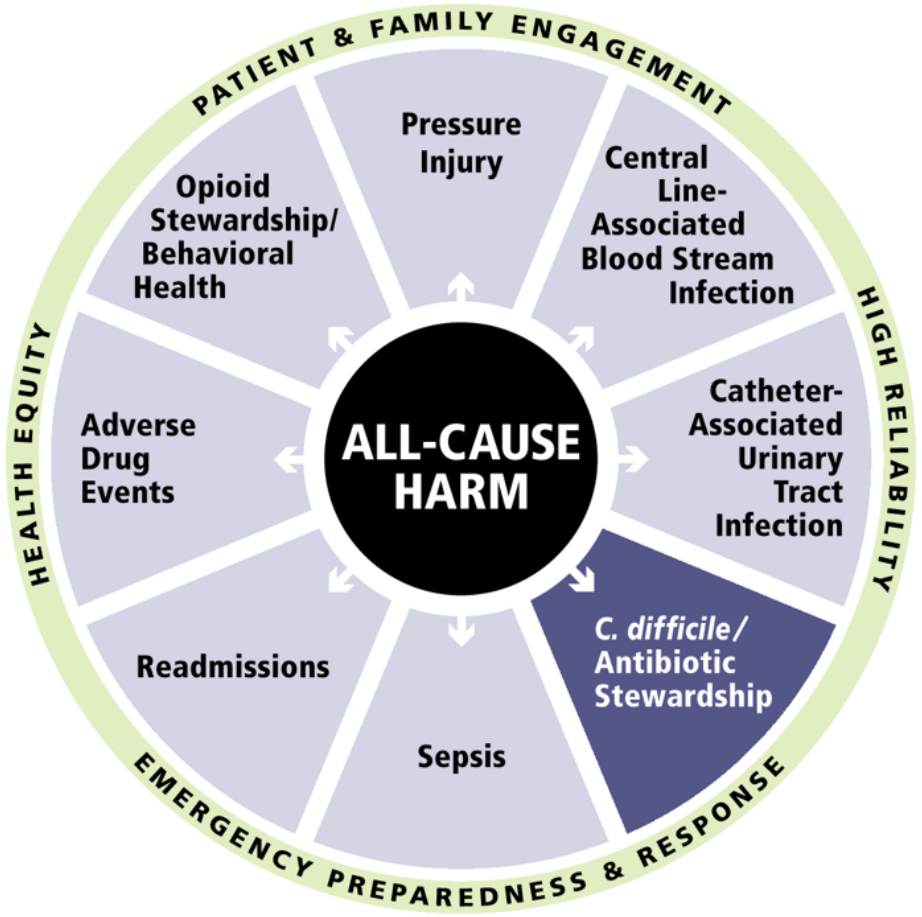
Health Equity

Collect REaL Data

Stratify quality & safety outcomes data by REaL

Identify disparate gaps in care

Take action to close gaps using targeted solutions



Patient & Family Engagement

Planning Checklists Admission

Planning Checklists Discharge

Huddles Shift Change

Accountable PFE leader

Active PFE Committee

IPRO HQIC Hospital Antibiotic Stewardship Assessment

Completed June 2021 - representing 176 hospitals

- **Challenges Identified**
  - Including AS in ongoing provider education programs & competencies
  - Established guidelines for automatic changes from IV to oral in identified situations
  - Ensure AS program work with ICU to optimize antibiotic treatment protocols for possible sepsis cases
  - Tracking of diagnosis, drug, dose, duration & de-escalation with antibiotic time out

Antibiotic Resistance (AR), Antibiotic Use (AU), and Stewardship During the COVID-19 Pandemic

Arjun Srinivasan, MD

CAPT, USPHS

Associate Director for Healthcare-Associated Infection (HAI) Prevention Programs

Division of Healthcare Quality Promotion

National Center for Emerging and Zoonotic Infectious Diseases

November 4, 2021

Patient Discharge Data: Flu & COVID-19

	Patients with Influenza-Like Illness (Jan-March 2019)	Patients with COVID-19 (Jan-October 2020)
Median length of stay	5.88 days	8.20 days
Discharges with bacterial/fungal culture	55.8%	56.7%
Discharges with an AR-positive culture with a susceptibility result	12.4%	9.1%

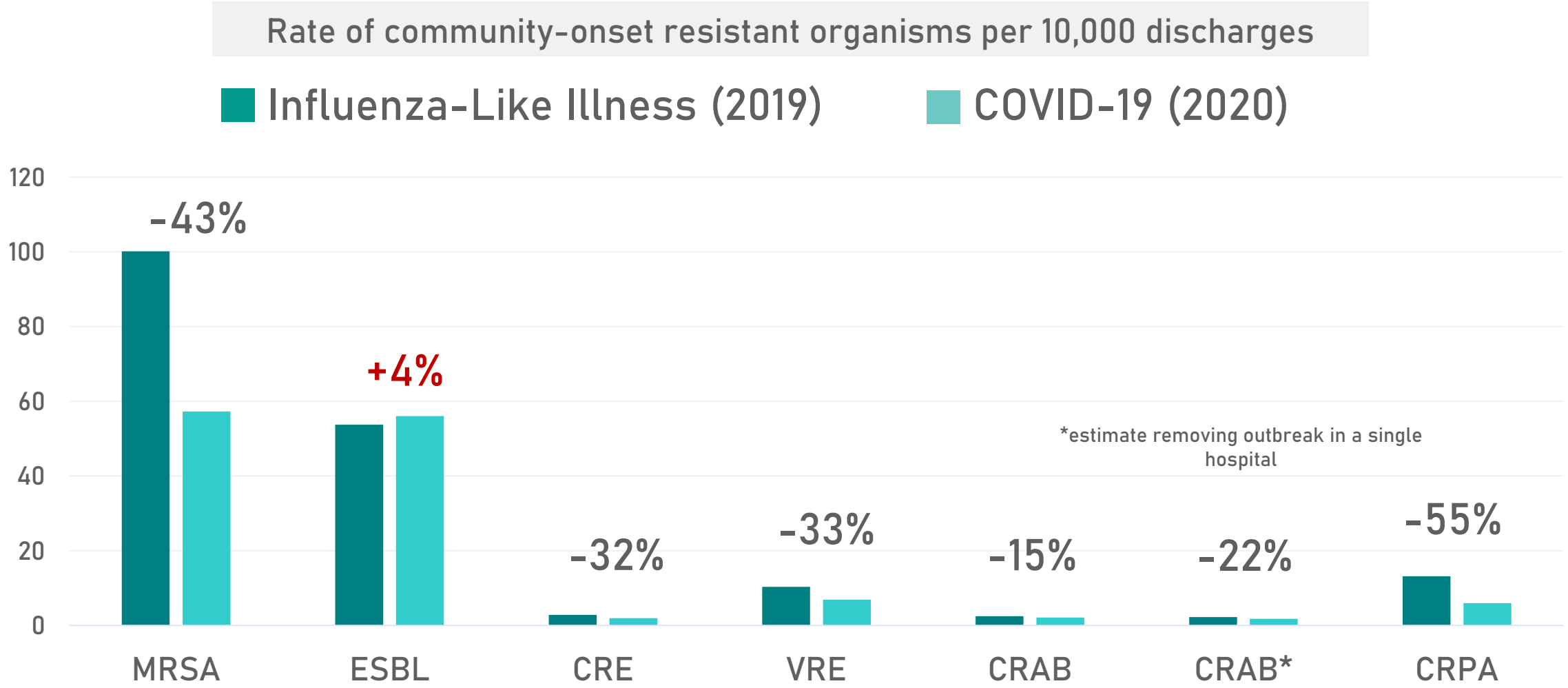
Source: Premier Healthcare Database

Influenza-Like Illness Definition: A hospitalization with a discharge during January 1, 2019-March 30, 2019, and any of the following ICD-10-CM codes: B97.89, H66.9, H66.90, H66.91, H66.92,H66.93, J00, J01.9, J01.90, J06.9, J09.X, J10.X, J11.X, J12.89, J12.9, J18, J18.1, J18.8, J18.9, J20.9, J40, R05, R50.9

COVID-19 Definition: An ICD-10-CM code of U07.1 (confirmed) with a discharge date April–October 2020 or ICD-10-CM code of B97.29 (suspected) with a discharge date March–April 2020, and admission dates February–April 2020

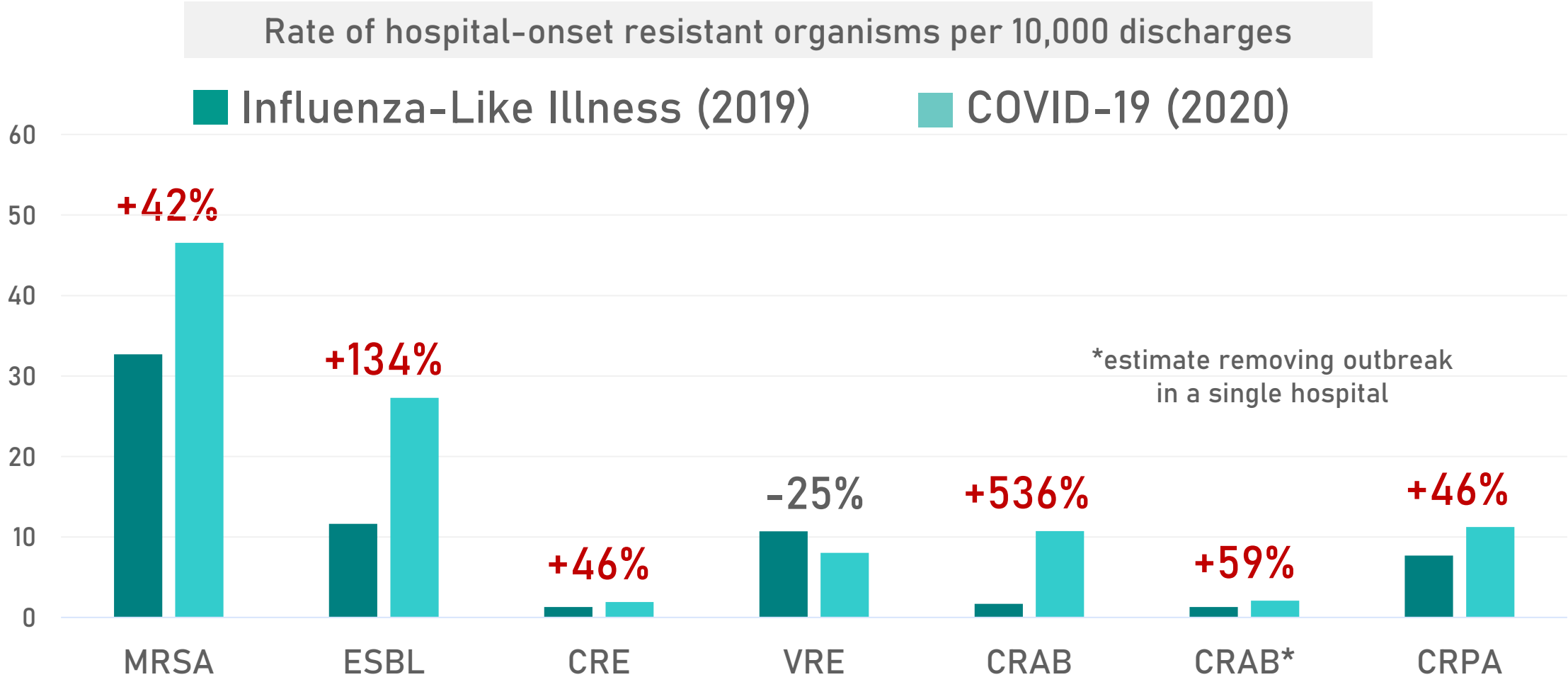
Data collected January 10, 2021

AR Pathogens in Hospitalized Patients:
Community-Onset Infections Only



Source: Premier Healthcare Database

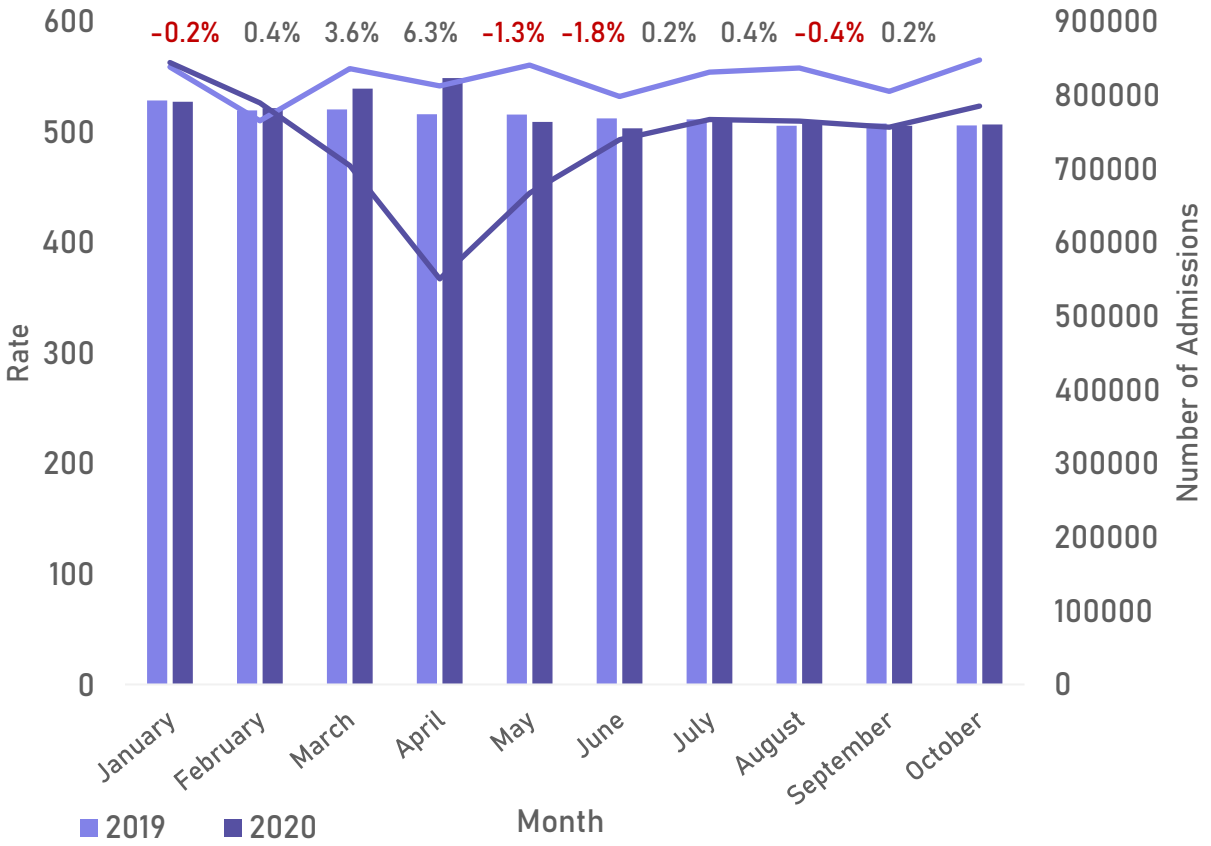
AR Pathogens in Hospitalized Patients:
Hospital-Onset Infections Only



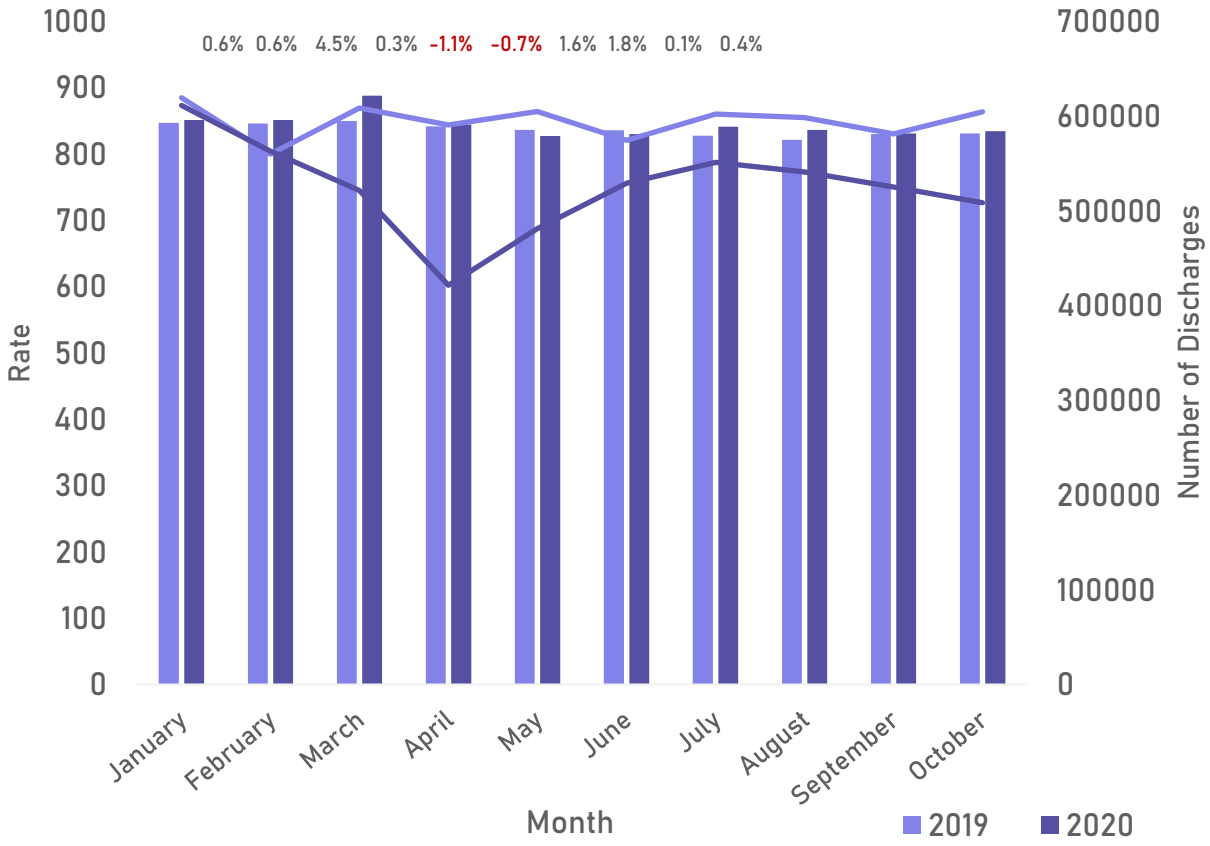
Source: Premier Healthcare Database

Aggregate Hospital Antibiotic Use: All Antibiotics

National Healthcare Safety Network (710 hospitals)
Days of Therapy per 1,000 Days Present – All Antibacterial Agents



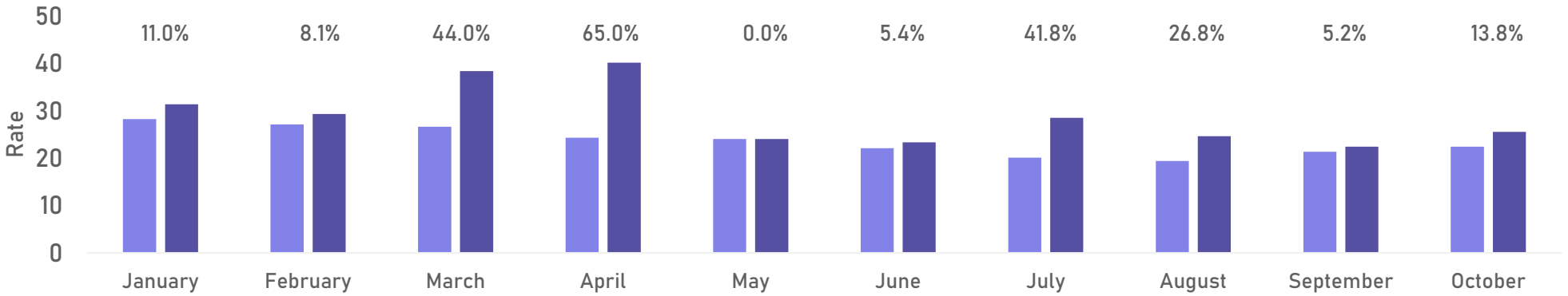
Premier Healthcare Database (716 hospitals)
Days of Therapy per 1,000 patient days – All Antibacterial Agents



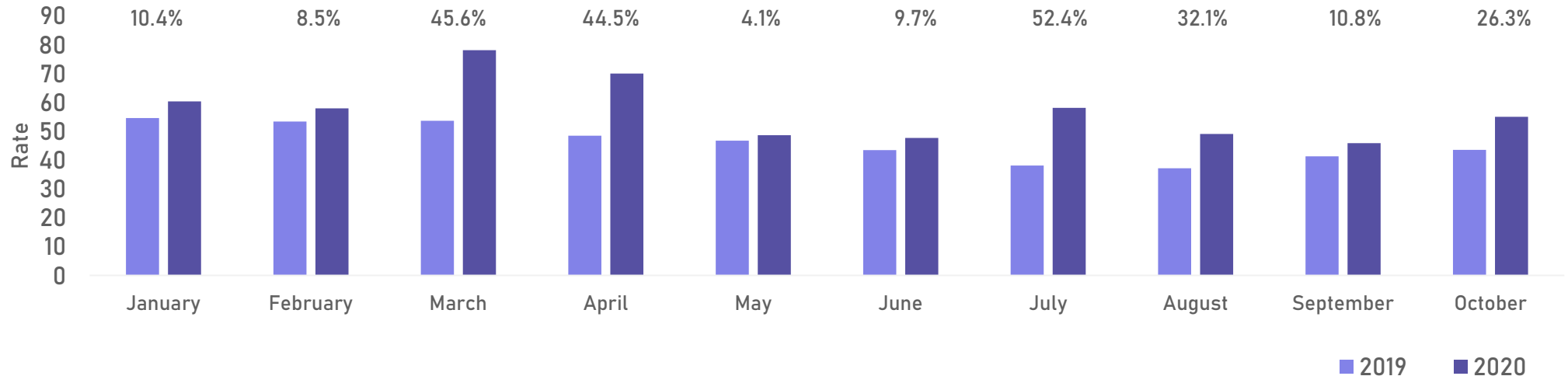
Note: NHSN AU days present denominator counts any portion of a day when a patient was hospitalized and thus is larger than the Premier patient day denominator, which counts 24-hour periods.
% indicates percent difference in pooled mean rate by year.

Aggregate Hospital Antibiotic Use: Azithromycin

National Healthcare Safety Network (710 hospitals)
Days of Therapy per 1,000 Days Present – Azithromycin



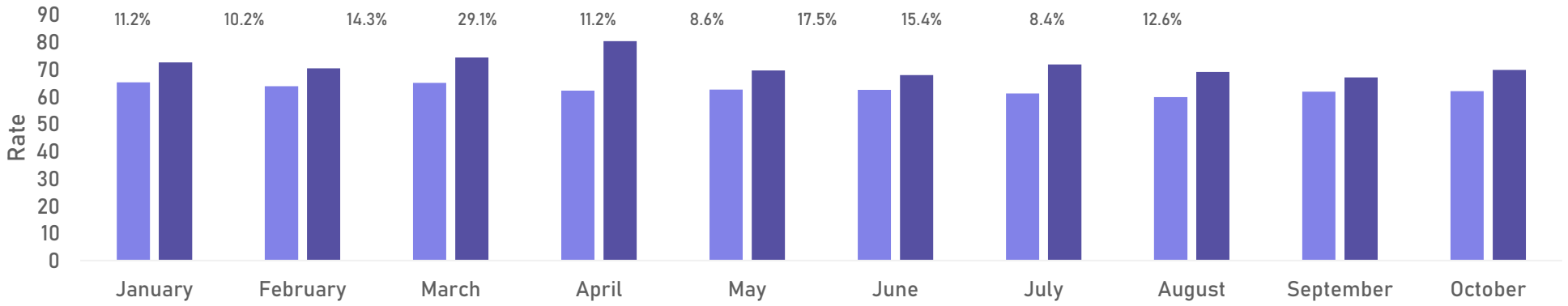
Premier Healthcare Database (716 hospitals)
Days of Therapy per 1,000 patient days– Azithromycin



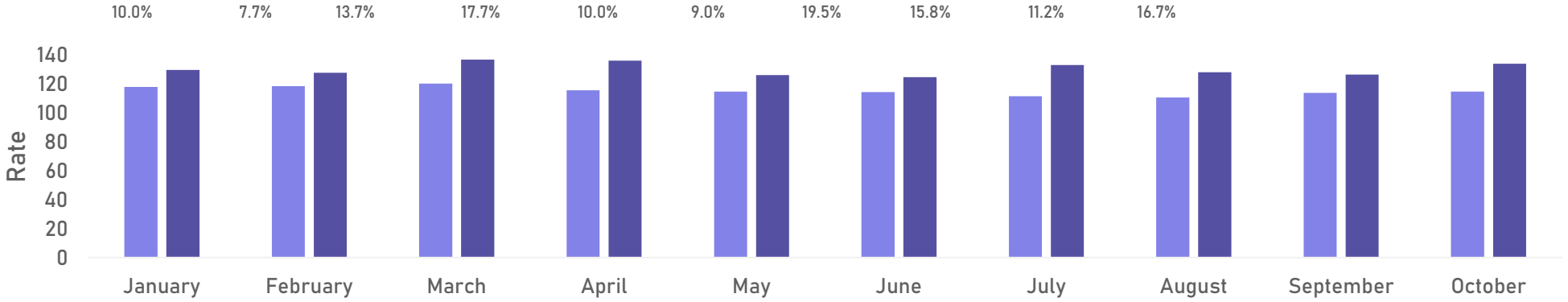
Note: NHSN AU days present denominator counts any portion of a day when a patient was hospitalized and thus is larger than the Premier patient day denominator, which counts 24-hour periods.
% indicates percent difference in pooled mean rate by year.

Aggregate Hospital Antibiotic Use: Ceftriaxone

National Healthcare Safety Network (710 hospitals)
Days of Therapy per 1,000 Days Present – Ceftriaxone



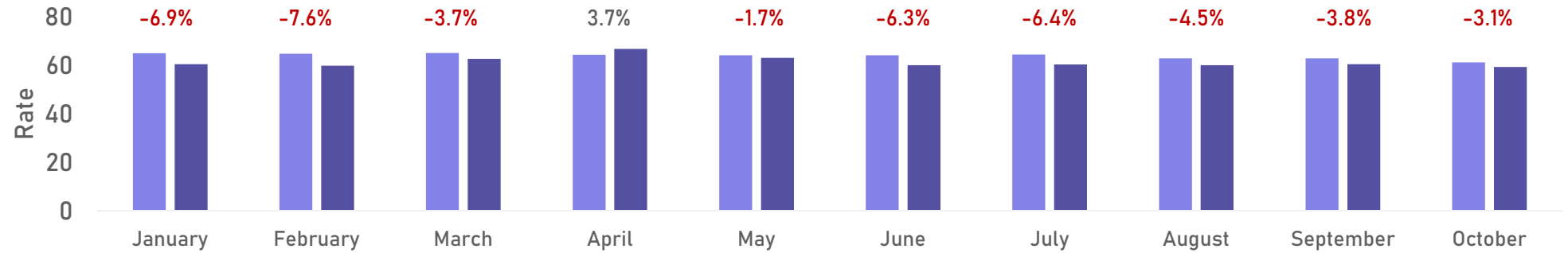
Premier Healthcare Database (716 hospitals)
Days of Therapy per 1,000 patient days– Ceftriaxone



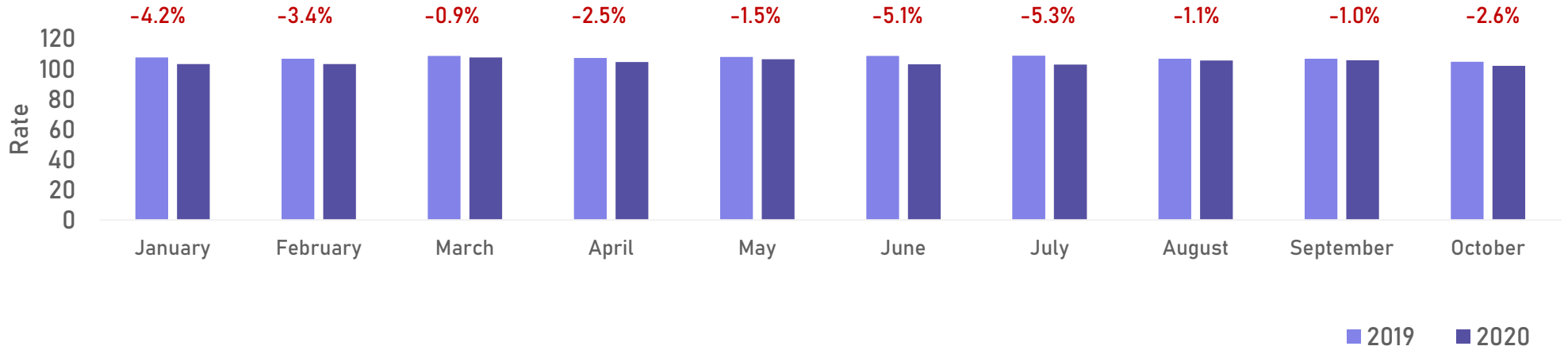
Note: NHSN AU days present denominator counts any portion of a day when a patient was hospitalized and thus is larger than the Premier patient day denominator, which counts 24-hour periods.
% indicates percent difference in pooled mean rate by year.

Aggregate Hospital Antibiotic Use: Piperacillin-Tazobactam

National Healthcare Safety Network (710 hospitals)
Days of Therapy per 1,000 Days Present – Piperacillin-Tazobactam



Premier Healthcare Database (716 hospitals)
Days of Therapy per 1,000 patient days– Piperacillin-Tazobactam



Note: NHSN AU days present denominator counts any portion of a day when a patient was hospitalized and thus is larger than the Premier patient day denominator, which counts 24-hour periods.
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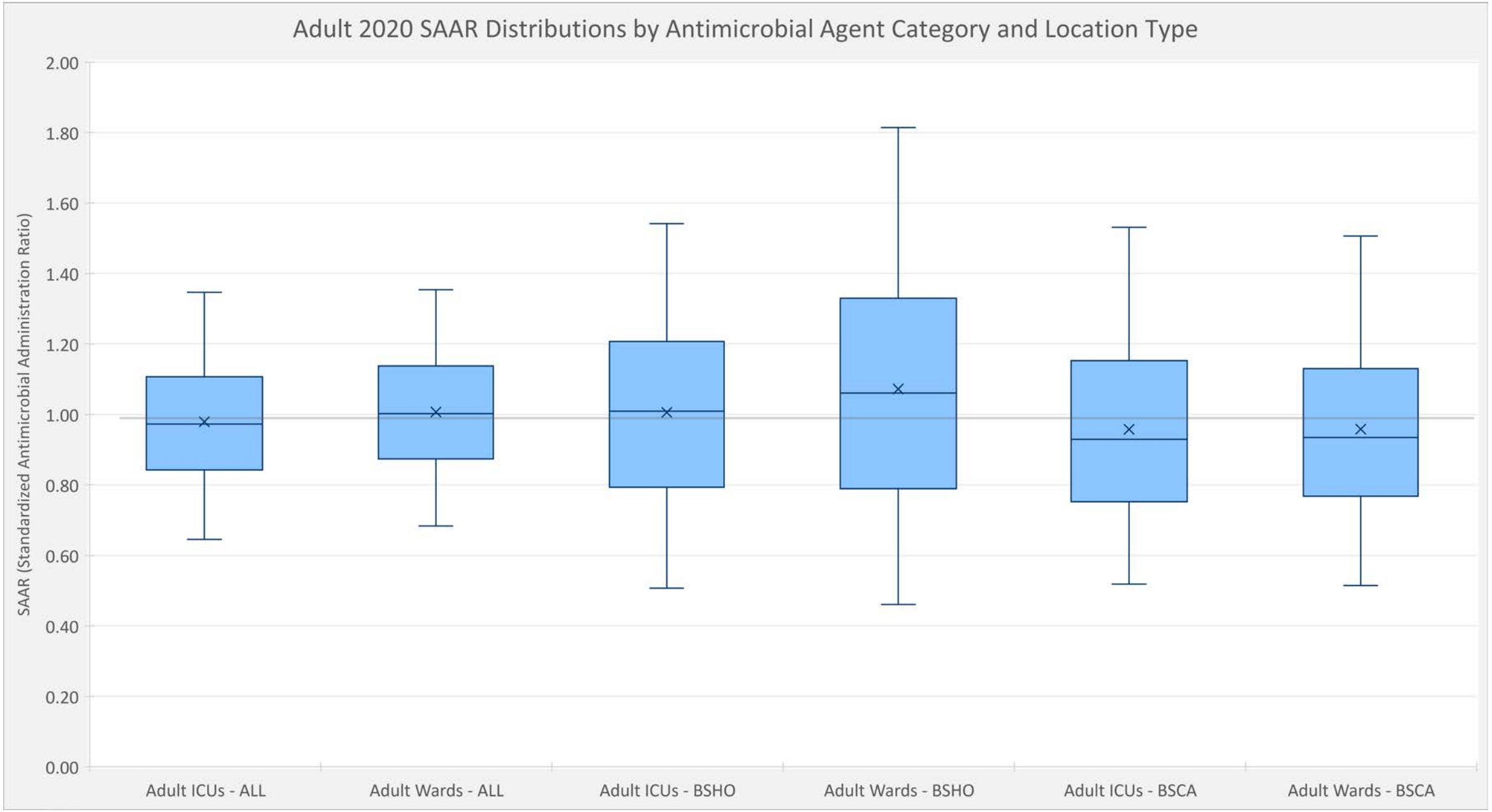

Adult 2020 SAAR Distributions by Antimicrobial Agent Category and Location Type
SAAR (Standardized Antimicrobial Administration Ratio)
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
Adult ICUs - ALL
Adult Wards - ALL
Adult ICUs - BSHO
Adult Wards - BSHO
Adult ICUs - BSCA
Adult Wards - BSCA

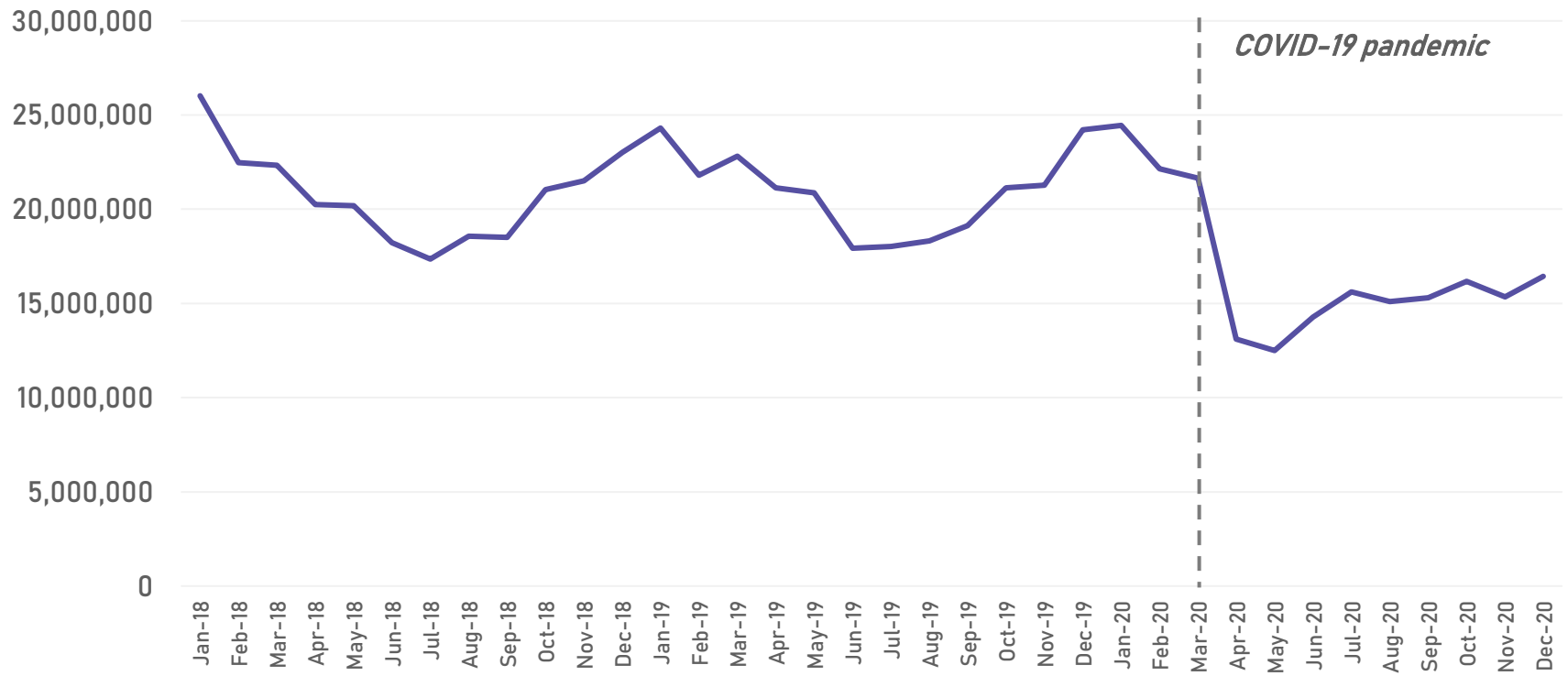
National Outpatient Antibiotic Prescription Trends

December 2020

32% year-over-year decrease

7% month-over-month increase ***(compared with 14% MOM increase in Dec 2019)***

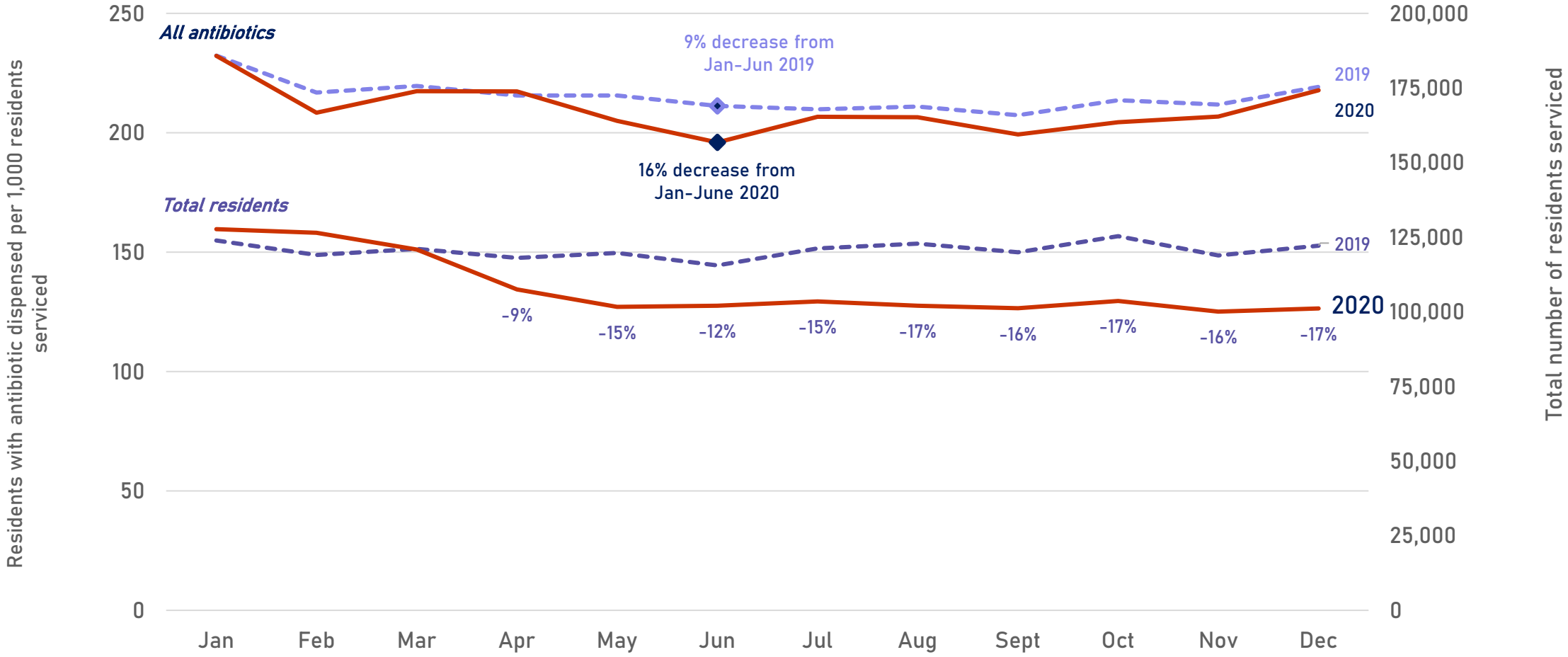
Number of antibiotic prescriptions dispensed from retail pharmacies



Source: IQVIA National Prescription Audit Last update: January 19, 2021

Nursing Home Antibiotic Dispensing Rates

Residents with antibiotic dispensed and total residents serviced, 2019 vs. 2020



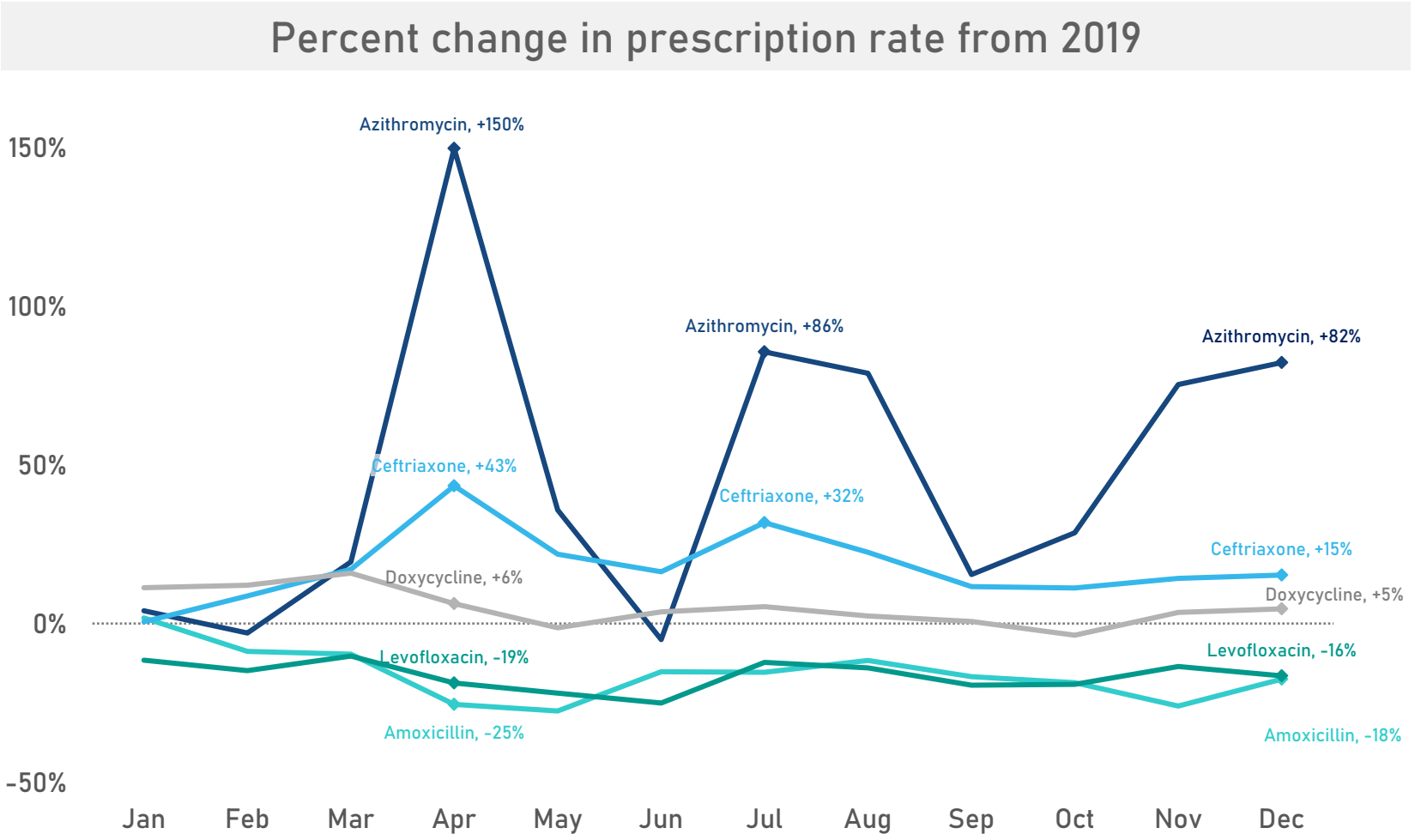
Higher Rates of Antibiotics Commonly Used for Respiratory Infections in Nursing Homes

Antibiotics higher in 2020 than 2019

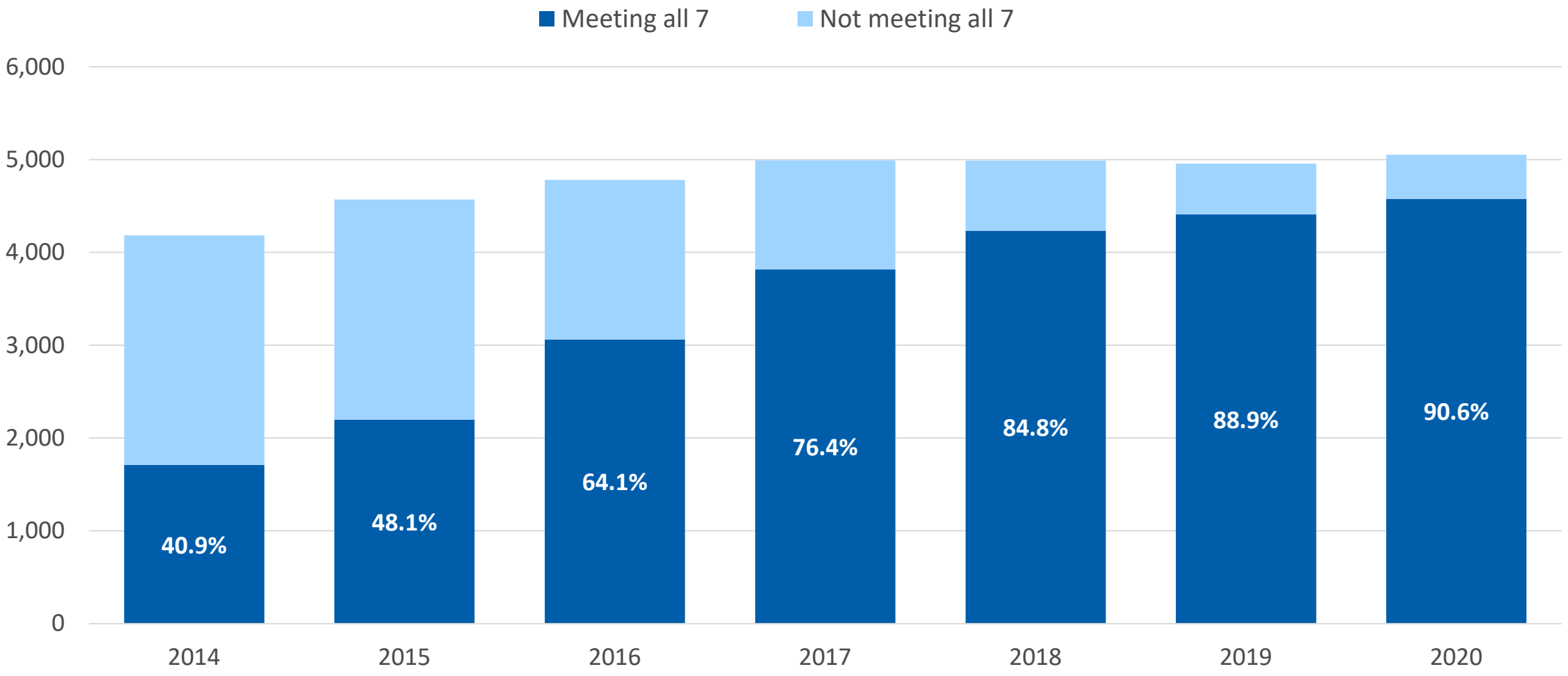
- Azithromycin
- Ceftriaxone
- Doxycycline

Antibiotics lower in 2020 than 2019

- Levofloxacin
- Amoxicillin

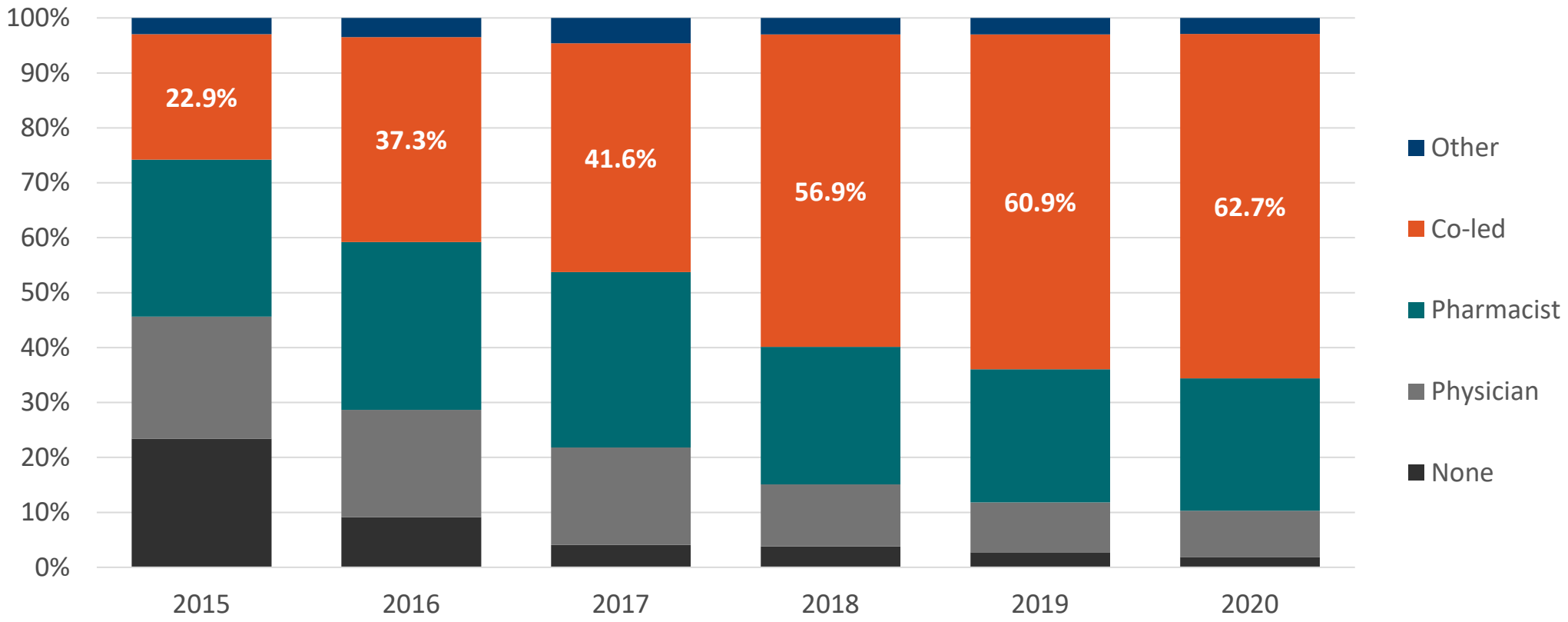


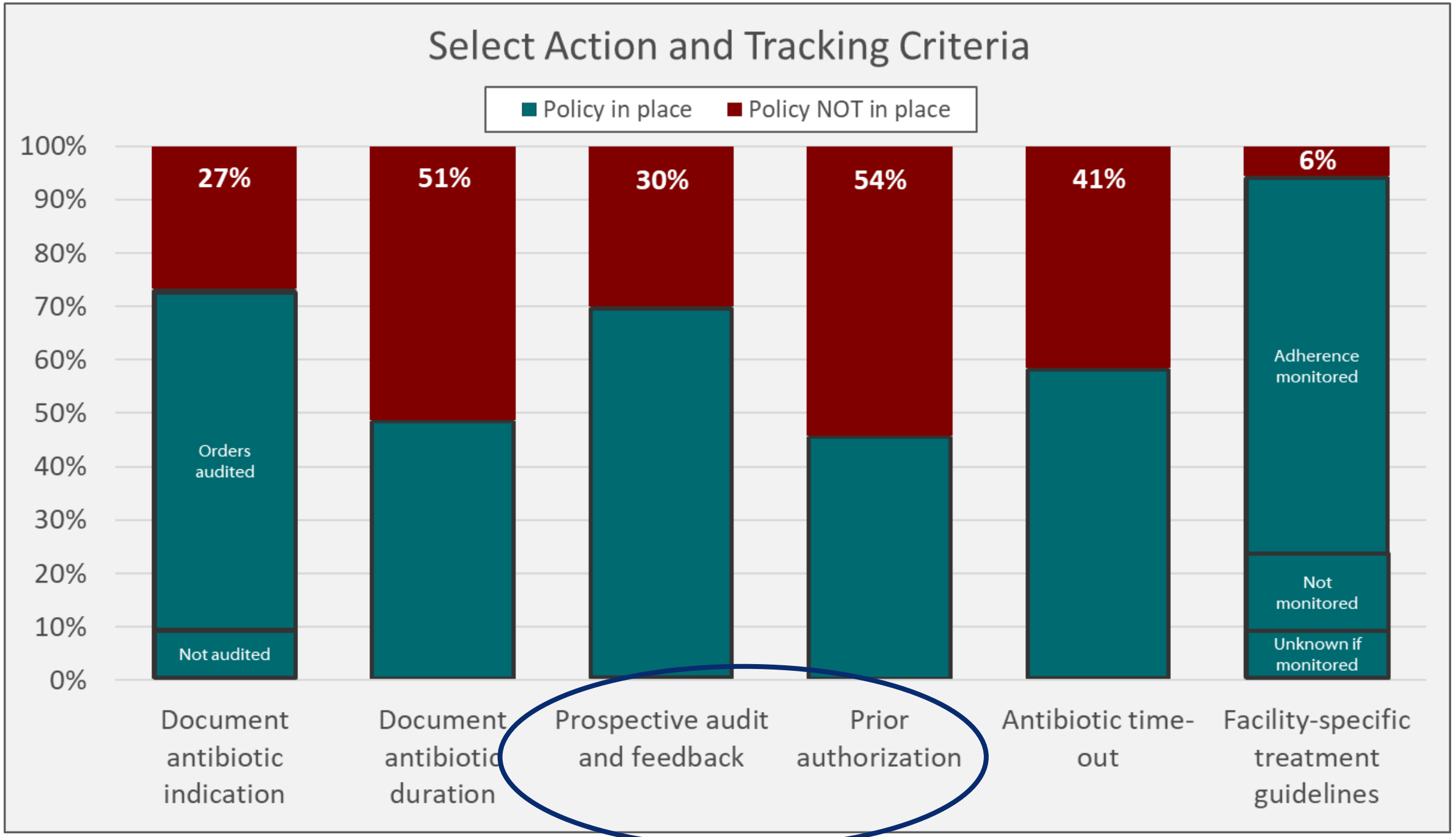
NHSN Annual Hospital Surveys 2014-2020:
Number and percentage of hospitals meeting all 7 Core Elements



Facility leader(s) accountable for ASP outcomes

- Co-led ASPs are becoming more common: **23%** in 2015 vs. **63%** in 2020




Select Action and Tracking Criteria
Policy in place
Policy NOT in place
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
27%
51%
30%
54%
41%
6%
Orders audited
Not audited
Adherence monitored
Not monitored
Unknown if monitored
Document antibiotic indication
Document antibiotic duration
Prospective audit and feedback
Prior authorization
Antibiotic time-out
Facility-specific treatment guidelines

COVID-19, Antibiotic Use, and Community-Onset Bacterial Co-Infections:

Results from the Michigan Hospital Medicine Safety Consortium

Valerie Vaughn, MD MSc
Director of Hospital Medicine Research
University of Utah

Hospitalist Lead
Antimicrobial Use Initiative
Michigan Hospital Medicine Safety Consortium

@ValerieVaughnMD

Disclosures: Speaking Fees from Thermo Fisher Scientific

The views in this presentation reflect my own and do not necessarily reflect the views of any institution, company or regulatory body.

New and evolving research may be discussed if it is pertinent to improving the knowledge base of the hospital-based clinician and in the public domain of scientific evidence.

Views do not necessarily represent those of the University of Utah or the Michigan Hospital Medicine Safety Consortium.

AGENDA

- ASP issues during COVID
- Co-infections
- Burnout
- Visitor Restrictions

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- Co-infections
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CLINICAL CASE 1

- 72 year old man comes into the hospital with a positive COVID-19 test
  - He has a fever to 39°C
  - heart rate 110
  - respiratory rate 25, and
  - SPO2 is 86% on room air→91% on 2L

- He has 4 days of dyspnea and a dry cough
- He looks unwell
- His Chest X-ray is consistent with multifocal pneumonia

Would You Prescribe Antibiotics?

A. Yes!

B. Maybe

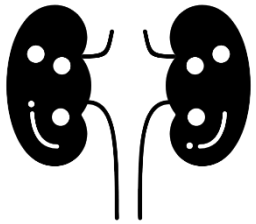
C. Nope

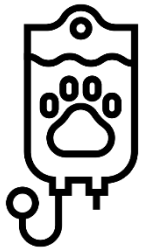

Don't forget to wipe down cell phones/headphones and change out of MICU scrubs when leaving
Did you assess VTE risk on your patients?
Hospitalist

True CASE

April 1

Hypoxia
Diarrhea
Fever





C. Difficile –
COVID-19 +

- 72 yo M hospitalized with COVID19 and hypoxia
- Other symptoms: delirium, diarrhea
- *C. difficile* negative
- No COVID-19 treatment (pre steroids as standard of care)
- Kidney failure
- Briefly on vancomycin and zosyn

True CASE

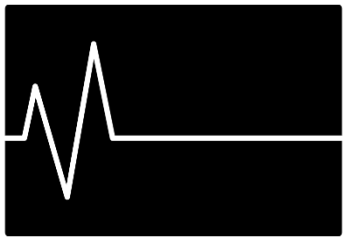
April 7

Feeling better!

April 10

Hypotensive
Given 6L of IVF
Stops urinating
Fluid overloaded

April 11



C. difficile +

Impact Of Antibiotic Use

- Adverse events
  - Up to 27% of inpatients
  - Including AKI (higher risk when vancomycin and zosyn prescribed together)
- Large driver of *C. difficile* infections
  - Even short durations can double the risk of CDI
  - Risk factor for recurrent CDI
  - Decreases in antibiotics → reduced HO-CDI rates
- Associated with antimicrobial resistance
  - MRSA/VRE, MDR Gram-negative infections
  - Neighborhood antibiotic consumption → resistant *E. coli*
- Prescribed to half of hospitalized patients

[1] Low M. et al. *Lancet ID*. 2019; Tamma PD. *JAMA Internal Medicine*. 2017 . [2] Fridkin S. *MMWR*. 2014

AGENDA

- ASP issues during COVID
- Co-infections
- Burnout
- Visitor Restrictions

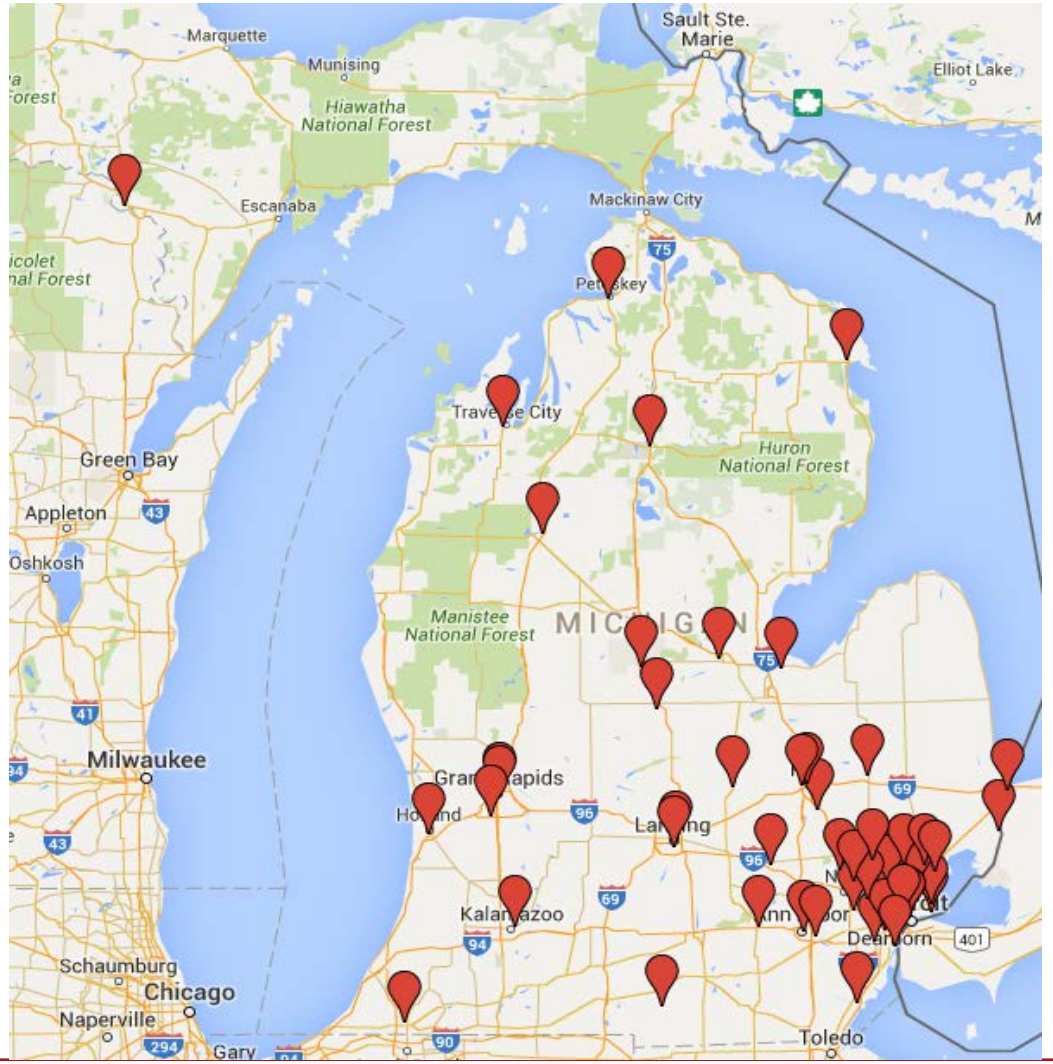
Do patients with COVID-19 need empiric antibiotics when they come to the hospital?

- Potentially high risk of bacterial co-infection
- Most fatalities in 1918 influenza pandemic were due to subsequent bacterial infection, particularly *Streptococcus pneumoniae*
- Up to half who die from COVID-19 have a bacterial co-infection
- Clinically, symptoms of COVID are similar to bacterial pneumonia

[1] Morens DM. *J Infect Dis*. 2008; [2] MacIntyre CR. BMC Infect Dis. 2018; [3] Zhou F. Lancet. 2020

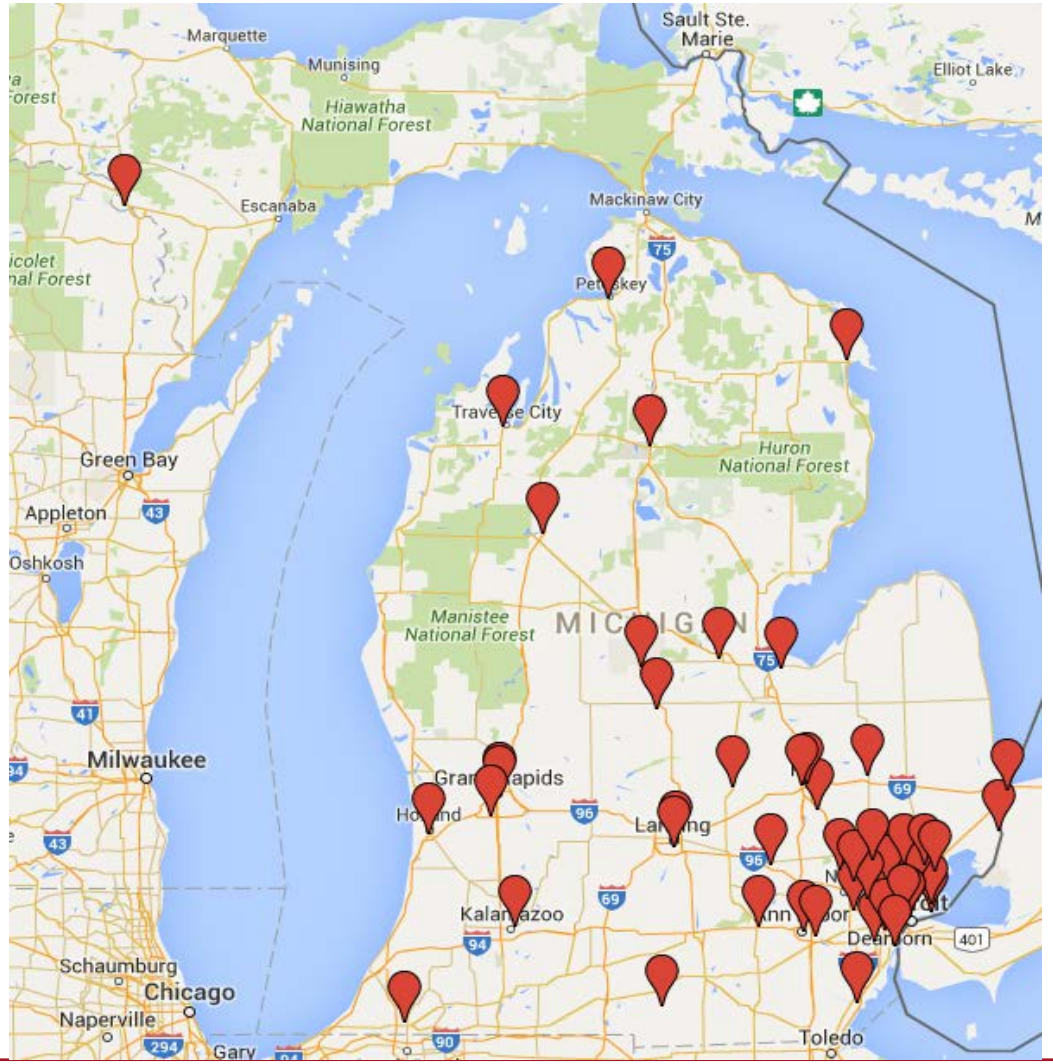
Michigan Hospital Medicine Safety Consortium

- >50 hospitals
- Quality Improvement
  - Data; sharing best practices
  - Facilitated implementation

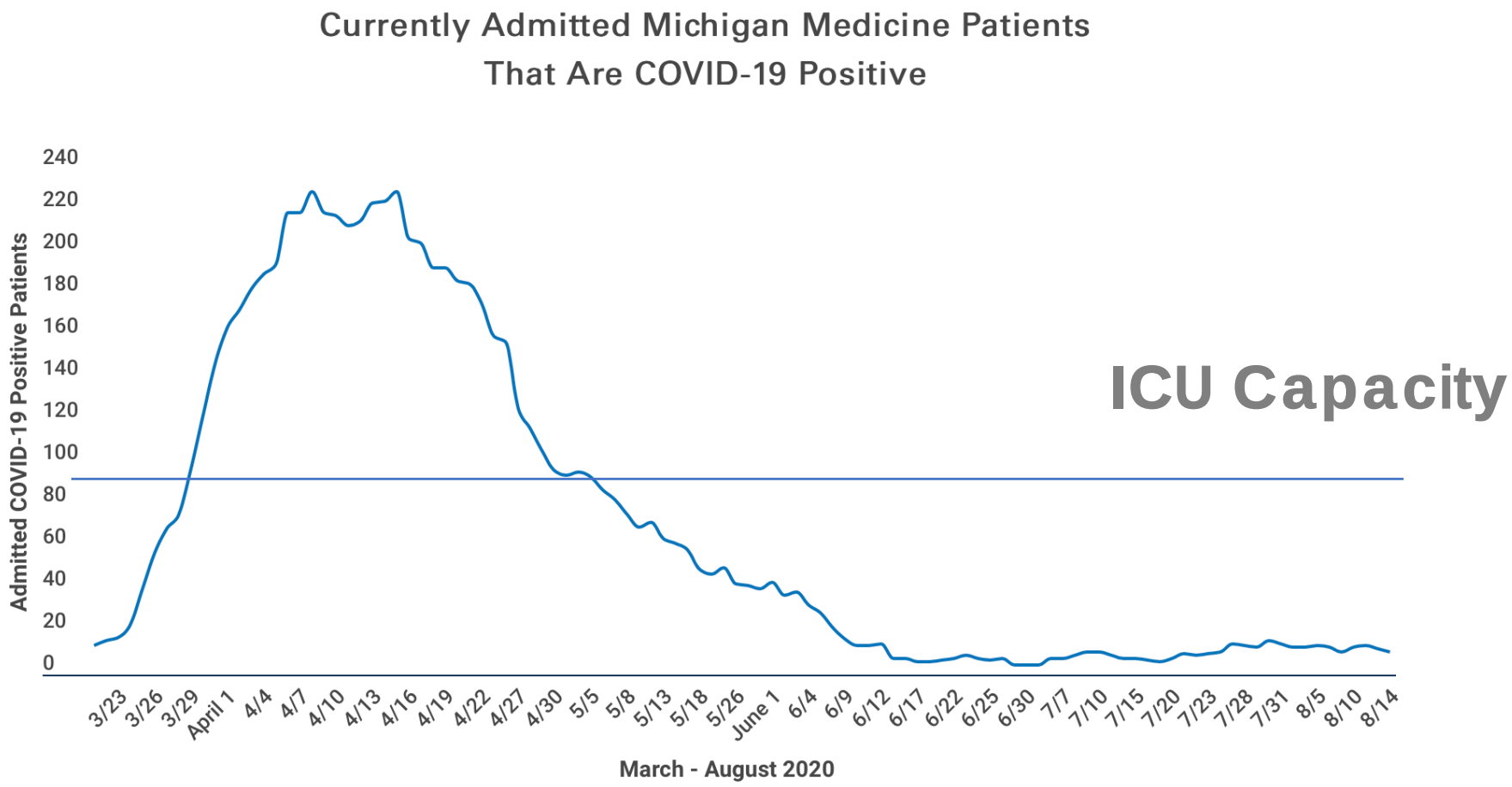


HMS Antimicrobial use initiative

- Started in 2015
- Our goal—improve antibiotic use in patients hospitalized with pneumonia or urinary tract infection



COVID-19 PATIENT ADMISSIONS



Antimicrobial Use & COVID-19

- **Key Questions**
  - How often are empiric antibiotics prescribed when patients are first hospitalized?
  - How common are community-onset and hospital-onset bacterial co-infections?
  - What clinical situations warrant empiric antibiotic use in patients with COVID-19?

Clinical Infectious Diseases

Empiric Antibacterial Therapy and Community-onset Bacterial Co-infection in Patients Hospitalized with COVID-19: A Multi-Hospital Cohort Study

Valerie M Vaughn, MD, MSc ✉, Tejal Gandhi, MD, Lindsay A Petty, MD, Payal K Patel, MD, MPH, Hallie C Prescott, MD, MSc, Anurag N Malani, MD, David Ratz, MS, Elizabeth McLaughlin, MS, RN, Vineet Chopra, MD, MSc, Scott A Flanders, MD

Clinical Infectious Diseases, ciaa1239, https://doi.org/10.1093/cid/ciaa1239

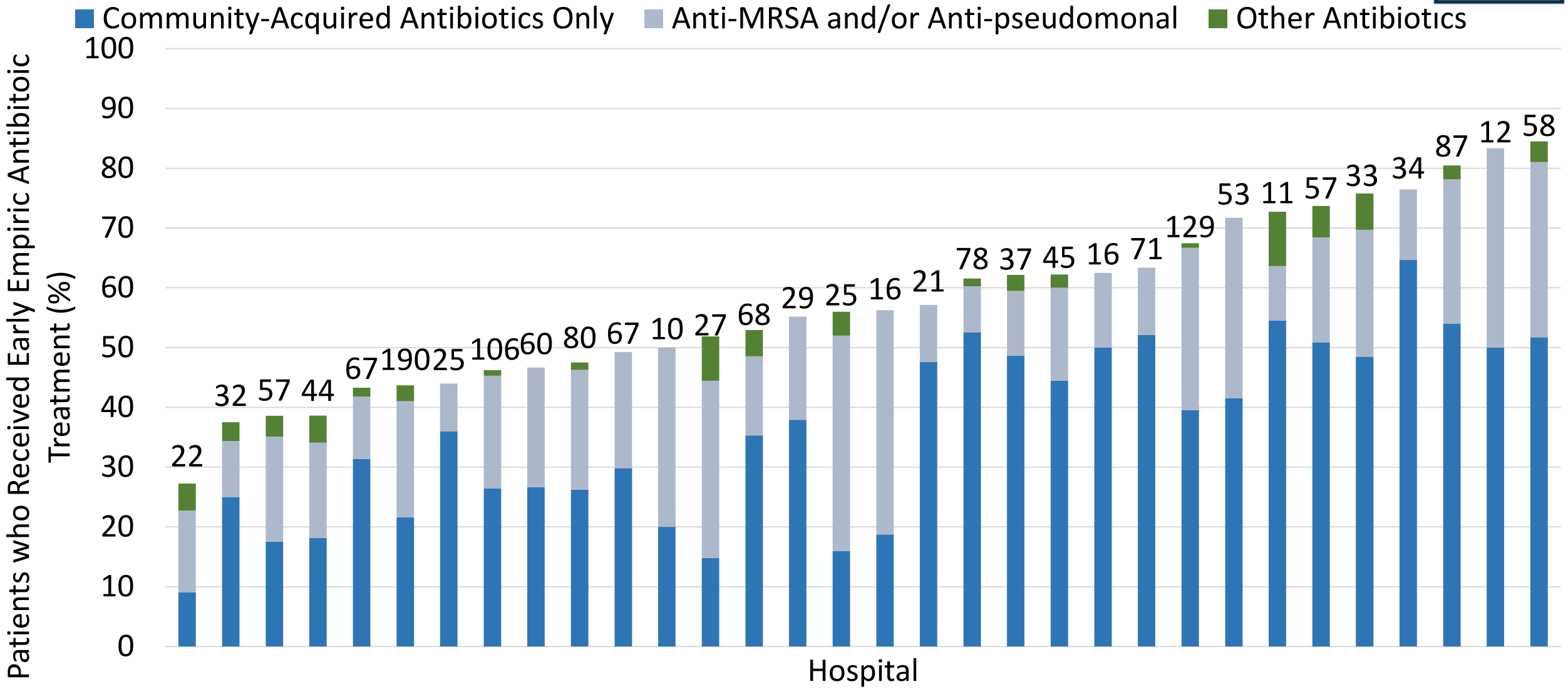
Published: 21 August 2020 **Article history** ▾

Antimicrobial Use & COVID-19

56.6% (965/1705) of hospitalized patients with COVID-19 received **empiric antibiotic therapy** (in first 2 days of hospitalization)

Vaughn V.M. et al,Clinical Infectious Diseases 2020, ciaa1239, https://doi.org/10.1093/cid/ciaa1239

Early Empiric Antibiotic Treatment in Hospitalized Patients with COVID-19, by Hospital (N=32 hospitals; 1,667 patients)



Vaughn V.M. et al, Clinical Infectious Diseases 2020, ciaa1239, https://doi.org/10.1093/cid/ciaa1239

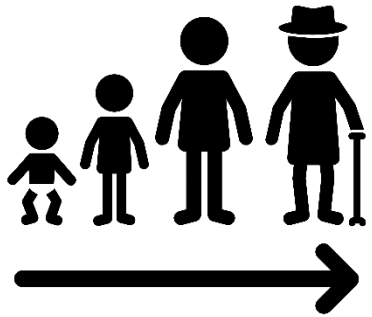
Community-onset bacterial co-infections were Rare

1.8% Blood

1.7% Respiratory

Vaughn V.M. et al,Clinical Infectious Diseases 2020, ciaa1239, https://doi.org/10.1093/cid/ciaa1239

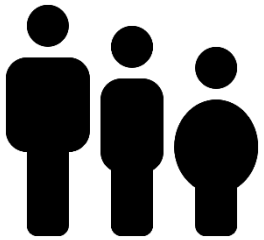
Predictors of Community-Onset Co-infections



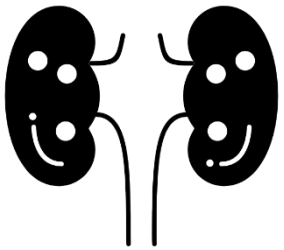
Age

Severe Disease

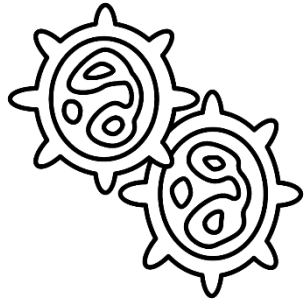
Nursing Home



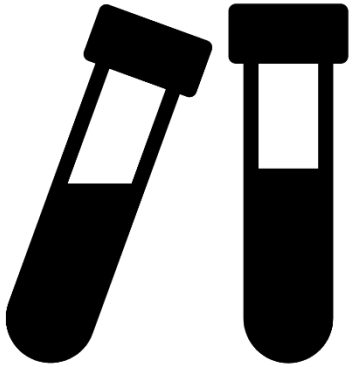
Lower BMI



Kidney Disease



Higher White Blood Cell Count



Procalcitonin
PCT <0.1 ng/mL → NPV
PCT >0.5 ng/mL → PPV

Vaughn V.M. et al,Clinical Infectious Diseases 2020, ciaa1239, https://doi.org/10.1093/cid/ciaa1239

Procalcitonin in COVID-19

Initial procalcitonin value ng/mL; N=910	Confirmed co-infection N=59	No confirmed co-infection, N=1646
0-0.1; N (%)	5 (14.7%)	283 (32.3%)
0.1-0.25; N (%)	9 (26.5%)	269 (30.7%)
0.25-0.5; N (%)	1 (2.9%)	138 (15.8%)
>0.5; N (%)	19 (55.9%)	186 (21.2%)

PPV >0.5 ng/mL=**9.3%**

NPV <0.1ng/mL=**98.3%**

Vaughn V.M. et al,Clinical Infectious Diseases 2020, ciaa1239, https://doi.org/10.1093/cid/ciaa1239

Vaughn V.M. et al,Clinical Infectious Diseases 2020, ciaa1239, https://doi.org/10.1093/cid/ciaa1239

Back to Our Original Case

- 72 year old man comes into the hospital with COVID19
  - He has a fever to 39°C
  - Heart rate 110
  - Respiratory rate 25, and 86% on room air
  - Shortness of breath and dry cough
  - Looks unwell
  - Chest X-ray is consistent with multifocal pneumonia

Would you prescribe antibiotics?

- If he doesn't need the ICU, additional diagnostic testing not needed. No antibiotics.

- If alternative reason to suspect he might have a bacterial infection (e.g., elevated WBC), consider obtaining diagnostic testing (while withholding antibiotics)

  →procalcitonin reassuring if negative

  (useless if positive)

CLINICAL CASE 2

- 72-year-old man comes into the hospital with COVID-19
  - After 7 days of hospitalization, he begins to deteriorate
  - He is intubated and transferred to ICU
  - He has a fever to 39° C
  - Heart rate 110 and is requiring 80% FiO2 on ventilator
  - His Chest X-ray is consistent with multifocal pneumonia

Infection Control & Hospital Epidemiology (2021), 1–10
doi:10.1017/ice.2021.341

SHEA
The Society for Healthcare Epidemiology of America

Original Article

Risk factors and outcomes associated with community-onset and hospital-acquired coinfection in patients hospitalized for coronavirus disease 2019 (COVID-19): A multihospital cohort study

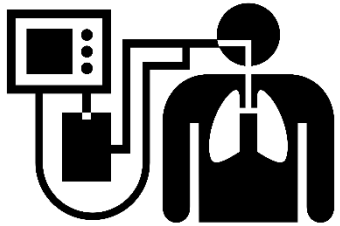
Lindsay A. Petty MD[1], Scott A. Flanders MD[2], Valerie M. Vaughn MD, MSc[3], David Ratz MS[2], Megan O'Malley PhD[2], Anurag N. Malani MD[4], Laraine Washer MD[1], Tae Kim MHSA[5], Keith E. Kocher MD, MPH[6], Scott Kaatz DO, MSc[7], Tawny Czilok MHI, BSN, RN[2], Elizabeth McLaughlin MS, RN[2], Hallie C. Prescott MD, MSc[8], Vineet Chopra MD[2] and Tejal Gandhi MD[1]

Predictors of Hospital-Onset Co-infections

ONLY 3.4% Had a **CONFIRMED** Hospital-Onset Co-Infection
Days of hospitalization prior to infection: **8 days** (5-12)

Fever

Of those with a hospital-acquired coinfection, 51 (68.9%) of 74 had a fever within 3 days prior to culture.



Advanced Respiratory Support

Among patients who received invasive mechanical ventilation, the coinfection rate was 20.9% (72 of 345)

Petty LA et al, Infection Control & Hospital Epidemiology. 2021

CLINICAL CASE 2

- Empirically start antibiotics upon decompensation
- De-escalate if
  - Procalcitonin negative
  - Off vancomycin if MRSA nares negative
  - Off antibiotics if respiratory and blood cultures negative

SUMMARY

1. Most patients with COVID do NOT have bacterial pneumonia when initially hospitalized
2. Most patients with COVID who are not critically ill do NOT need empiric antibiotics
3. Consider empiric antibiotics and then **de-escalating** when patients require ICU or worsen after hospitalization

AGENDA

- ASP issues during COVID
- Co-infections
- Burnout
- Visitor Restrictions

Duties, Resources, and Burnout of Antibiotic Stewards During the COVID-19 Pandemic

Mi-COVID 19 INITIATIVE
A JOINT CQI VENTURE

Survey results of antibiotic stewardship leaders at 51 Michigan hospitals

Antibiotic stewards reported:

- More duties: median 5 (3-8) new duties related to COVID
- Similar/less stewardship FTE (74% similar/18% decreased)
- More work hours

COVID-19 Decreased Team's Ability to Perform Traditional Antibiotic Stewardship Activities

73%
Somewhat decreased
(n=37)

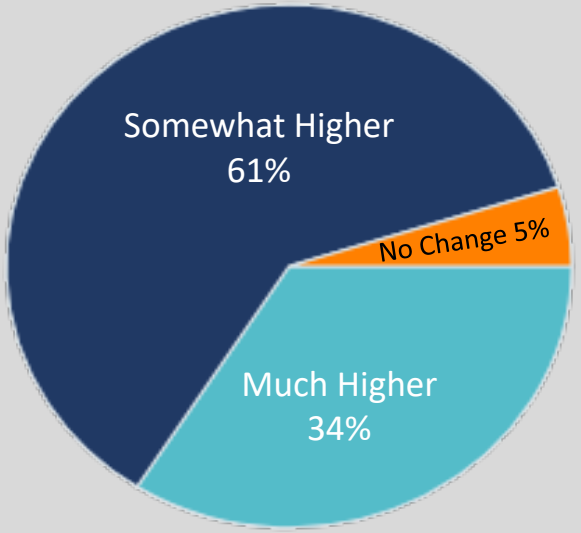
26%
Strongly decreased
(n=13)

New COVID-19 Antibiotic Stewardship Activities include:

- Monitoring antibiotic use (82%)
- Intervening on antibiotic use (49%)

Burnout Symptoms Higher Than Before the COVID-19 Pandemic

71% screened positive for burnout



Take-Home: Antibiotic stewardship leaders are struggling and in need of additional support

Blue Cross Blue Shield Blue Care Network of Michigan
A nonprofit corporation and independent licensee
Of the Blue Cross and Blue Shield Association

Vaughn VM, et al. *ASHE*. 2021.
(in press)

AGENDA

- ASP issues during COVID
- Co-infections
- Burnout
- Visitor Restrictions

Mental health outcomes after hospitalization with or without COVID-19

Mi-COVID 19 INITIATIVE
A JOINT CQI VENTURE

Results from post-hospitalization phone calls of COVID-positive & COVID-negative patients

COVID-19 is an independent predictor* of:

- Anxiety
- Loneliness
- PTSD

AFTER Hospitalization

*controlling for age, co-morbidities, sex, length of stay, and pre-existing psychiatric diagnosis

COVID-positive patients have higher levels of anxiety, PTSD, & loneliness after discharge resulting from:

- Isolation-related psychological distress during hospitalization
- Post-hospitalization isolation

After discharge, patients hospitalized with COVID-19 should be screened for anxiety, loneliness, and PTSD

Spencer-Segal J, et al. *General Hospital Psychiatry*. 2021.

SUMMARY

1. Most patients with COVID do NOT have bacterial pneumonia when initially hospitalized
   a) Most patients with COVID who are not critically ill do NOT need empiric antibiotics
   b) Consider empiric antibiotics and then **de-escalating** when patients require ICU or worsen after hospitalization
2. Like all frontline providers, antibiotic stewardship teams have been incredibly strained during COVID-19
   a) Fewer resources, more duties, less ability to do ASP, more burnout
3. Isolation during and after hospitalization may be contributing to higher anxiety and PTSD in patients with COVID-19
   a) Allow visitation where able
   b) On discharge, don‘t over-isolate patients from their families

Antimicrobial Stewardship and COVID-19
MidMichigan Health

Robert Neetz, PharmD, BCPS

MidMichigan Health
UNIVERSITY OF MICHIGAN HEALTH SYSTEM

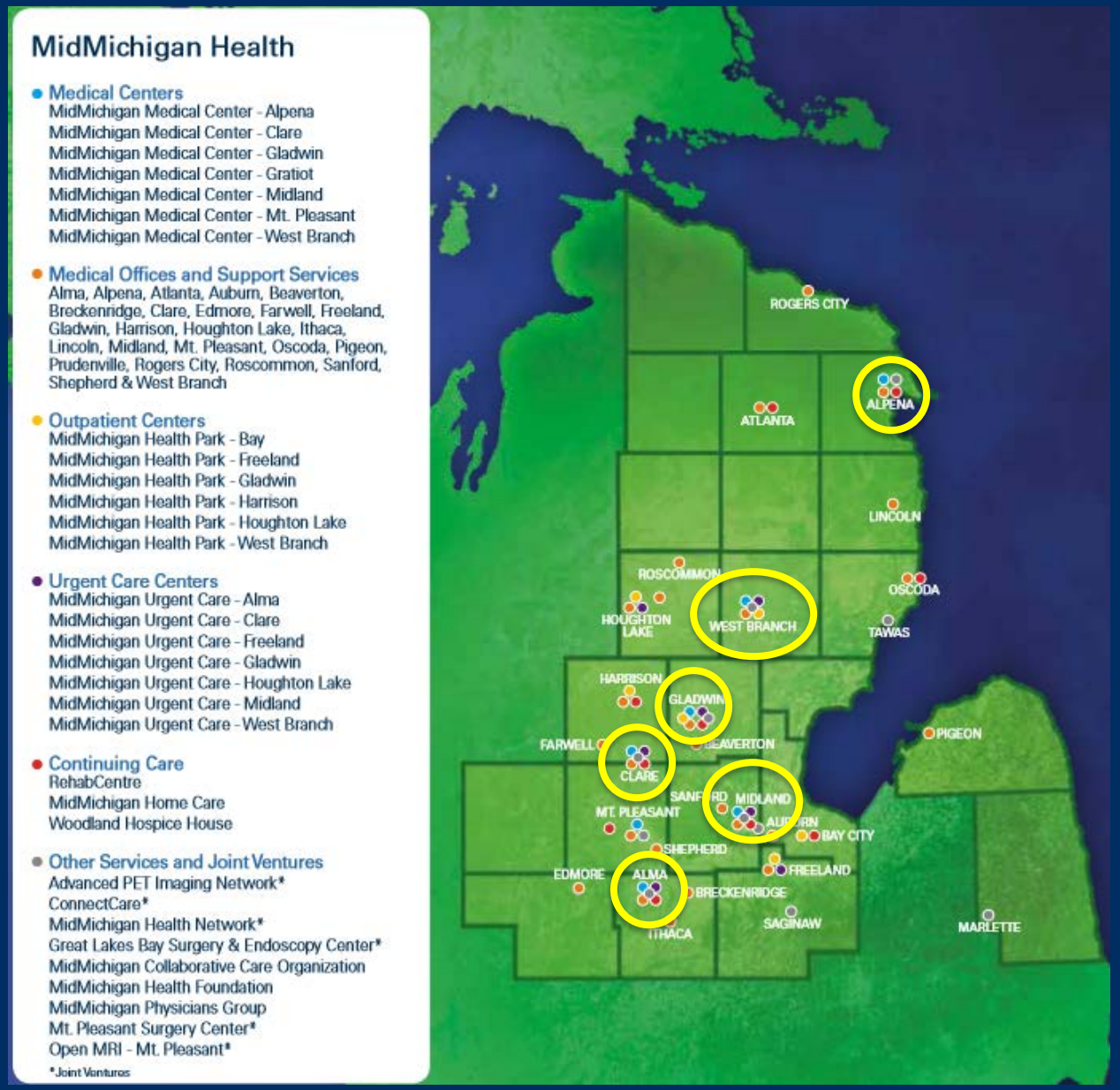
About MidMichigan Health System

- Six inpatient hospitals across east/northeast Michigan – 722 total beds
  - Alpena – 139 beds
  - Clare – 49 beds
  - Gladwin – 25 beds
  - Gratiot – 97 beds
  - Midland – 324 beds
  - West Branch – 86 beds

MidMichigan Health

- **Medical Centers**
  - MidMichigan Medical Center - Alpena
  - MidMichigan Medical Center - Clare
  - MidMichigan Medical Center - Gladwin
  - MidMichigan Medical Center - Gratiot
  - MidMichigan Medical Center - Midland
  - MidMichigan Medical Center - Mt. Pleasant
  - MidMichigan Medical Center - West Branch
- **Medical Offices and Support Services**
  - Alma, Alpena, Atlanta, Auburn, Beaverton, Breckenridge, Clare, Edmore, Farwell, Freeland, Gladwin, Harrison, Houghton Lake, Ithaca, Lincoln, Midland, Mt. Pleasant, Oscoda, Pigeon, Prudenville, Rogers City, Roscommon, Sanford, Shepherd & West Branch
- **Outpatient Centers**
  - MidMichigan Health Park - Bay
  - MidMichigan Health Park - Freeland
  - MidMichigan Health Park - Gladwin
  - MidMichigan Health Park - Harrison
  - MidMichigan Health Park - Houghton Lake
  - MidMichigan Health Park - West Branch
- **Urgent Care Centers**
  - MidMichigan Urgent Care - Alma
  - MidMichigan Urgent Care - Clare
  - MidMichigan Urgent Care - Freeland
  - MidMichigan Urgent Care - Gladwin
  - MidMichigan Urgent Care - Houghton Lake
  - MidMichigan Urgent Care - Midland
  - MidMichigan Urgent Care - West Branch
- **Continuing Care**
  - RehabCentre
  - MidMichigan Home Care
  - Woodland Hospice House
- **Other Services and Joint Ventures**
  - Advanced PET Imaging Network*
  - ConnectCare*
  - MidMichigan Health Network*
  - Great Lakes Bay Surgery & Endoscopy Center*
  - MidMichigan Collaborative Care Organization
  - MidMichigan Health Foundation
  - MidMichigan Physicians Group
  - Mt. Pleasant Surgery Center*
  - Open MRI - Mt. Pleasant*

*Joint Ventures



Starting off

- First real wave October 2020
- Recognized issue with antibiotics and COVID-19
- Gathered studies to support withholding empiric antibiotics for COVID-19 patients
- Identified opportunity to improve our patient care and stewardship efforts

Challenges faced

- Seven different locations
- Unknown territory – first true wave
- COVID patients managed by non-ID specialists

Action taken

- Set up meeting with pulmonary/intensivist team
  - Pulm was being consulted on all COVID patients
  - Leaders in the hospital system
- Also included ASP ID physician, lead hospitalist, infection prevention manager, and quality and safety manager
- Presented the evidence available and discussed

Action taken

- "Handshake stewardship"
  - Agreed that most non-ICU COVID-19 patients did not need antibiotics
  - Focus on de-escalation/discontinue antibiotics
  - Pulmonary team would lead the way to promote stewardship
  - ASP team would send out current studies and recommendations

Action taken

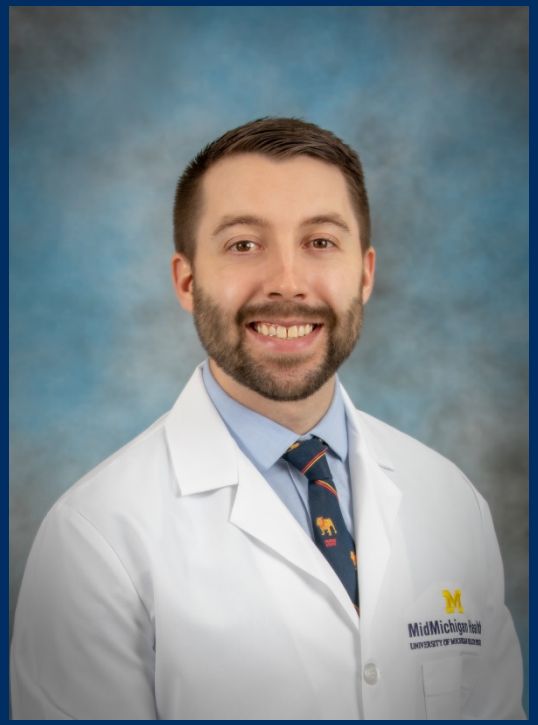
- Pharmacist involvement
  - All our pharmacists play a role in stewardship
  - Focus on giving them the tools to succeed
- ASP team audit and feedback
  - Reinforcing email message
  - Was happening consistently…but then monoclonal antibodies and vaccines came!

Lessons learned

- It's hard to get everyone on the same page!
  - Identify the leaders in the system that others look to
  - Provide the tools to help get the job done
  - Audit and feedback
  - Patience, it takes time
- Data gathering can be tough, but don't let perfect be the enemy of good!

Thank you!

- Questions?
- Contact information:
  - Robert.Neetz@midmichigan.org
  - 989-839-3768



MidMichigan Health
UNIVERSITY OF MICHIGAN HEALTH SYSTEM

Interactive Discussion: Speakers & Attendees

- What are some **challenges, barriers & best practice strategies** with antibiotic stewardship in general & with COVID Pandemic?
- How can HQICs **best support hospitals** going forward?
- How can hospitals **partner with patient & families** to support antibiotic stewardship?
- How do we best **identify** & **close any disparity/gaps in care** related to antibiotic stewardship?
- Do you think you can **implement** any of the **strategies** you heard today by next Tuesday?

Enter in Chat:

- Thoughts
- Experiences
- Questions

Key Takeaways

- Most non-critically ill COVID patients do NOT need empiric antibiotics
  - Consider empiric antibiotics & then de-escalating for critically ill patients
- AS teams incredibly strained during COVID & need additonal support
- Isolation may contribute to higher anxiety & PTSD in COVID patients
  - Allow visitation as able during & after hospitalization
- Getting everyone on same page is hard work…but don't let perfect be the enemy of good!
  - Identify leaders, provide tools, audit & feedback…be patient…it takes time

Wrap-up & Highlights of Upcoming Events

Wrap-up

- Presentation slides & links to resources will be shared after today's event
- Posted on IPRO HQIC website & Resource Library

Save the Date

November 23, 2021 2:00 – 2:30 PM ET

Joint HQIC Health Equity & Social Determinants of Health LAN

- Registration link and flyer will be forthcoming

Thank You for Attending Today's Event

We value your input!
Please complete the brief survey after exiting event.

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This material was prepared by the IPRO NQIIC, a Network of Quality Improvement and Innovation Contractor, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. Publication #IPRO-HQIC-Tsk54-21-143

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