We will begin in a moment

Please join us in our activity before we get started.

Enter **“What is your favorite holiday food?”** in the chat.

Instructions for Contact Hour

1. Update your Zoom name to reflect your full name
2. Zoom name MUST match your evaluation name
3. Enjoy the full program
4. Complete the post-evaluation by December 2, 2022, 5:00 PM (available on last slide)
5. Certificate will be emailed to you by December 15, 2022

COUNTY OF SAN DIEGO HHSA HEALTH AND HUMAN SERVICES AGENCY | LIVE WELL SAN DIEGO | Healthcare Associated Infections Program | PHAB

San Diego Skilled Nursing Facility Infection Prevention Collaborative

Grow - Collaborate - Succeed

Coordinated by the County of San Diego

Healthcare-Associated Infections (HAI) Program

COUNTY OF SAN DIEGO HHSA HEALTH AND HUMAN SERVICES AGENCY | LIVE WELL SAN DIEGO | Healthcare Associated Infections Program

Reminders

Recording is on!

Keep your lines muted

Use the chat box for questions

“Right click" to rename

PHS.HAI.HHSA@ sdcounty.ca.gov

Participate in the polls and chat

Slides will be emailed

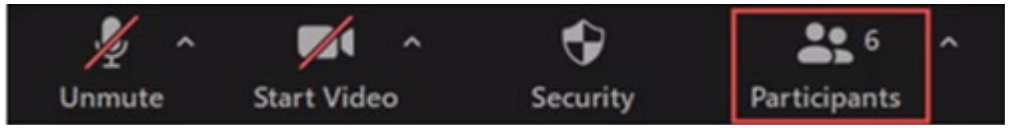
Type into the chat your:

- Name
- Title
- Facility

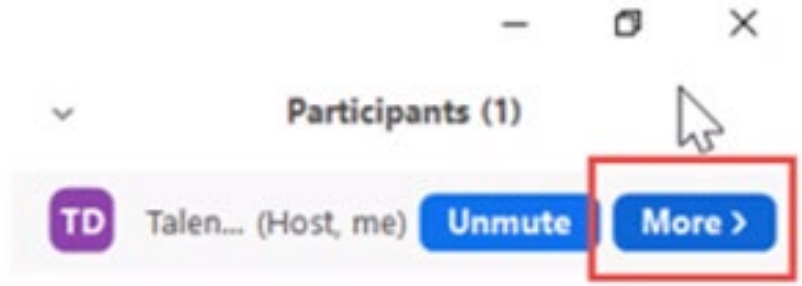
Reminders

Please update your name on the participant list

1. Find your name on the participant list



2. Hover over your name and click “MORE”



3. Click “RENAME:
4. Type your full name

Land Acknowledgement

Public Health Services would like to begin by acknowledging the Indigenous Peoples of all the lands that we are on today. While we are meeting on a virtual platform, I would like to take a moment to acknowledge the importance of the lands, which we each call home. We respectfully acknowledge that we are on the traditional territory of the Kumeyaay. We offer our gratitude to the First Nations for their care for, and teachings about, our earth and our relations. May we honor those teachings.

Agenda

- Welcome
- General Updates
- Featured Topic: Antimicrobial Stewardship Program
- Announcements
- Next Collaborative

General Updates

CDPH Health Advisory

State of California—Health and Human Services Agency
California Department of Public Health

TOMÁS J. ARAGÓN, MD, DrPH
Director and State Public Health Officer

GAVIN NEWSOM
Governor

Health Advisory: Early Respiratory Syncytial Virus and Seasonal Influenza Activity

November 12, 2022

CDPH Health Alert

State of California—Health and Human Services Agency

California Department of Public Health

TOMÁS J. ARAGÓN, MD, DrPH
Director and State Public Health Officer

GAVIN NEWSOM
Governor

Health Alert:
Reminder to Prescribe COVID-19 Therapeutics to Mitigate Impact of Winter Respiratory Surge
November 28, 2022

County of San Diego Update

COUNTY OF SAN DIEGO HHSA HEALTH AND HUMAN SERVICES AGENCY | LIVE WELL SAN DIEGO | Healthcare Associated Infections Program

COUNTY OF SAN DIEGO HHSA HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL SAN DIEGO

Omicron Subvariants in San Diego County Resistant to Monoclonal Antibodies

Tuesday, November 29, 2022

Respiratory Virus Update

San Diego County
Respiratory Virus Surveillance Report

Prepared by Epidemiology and Immunization Services Branch

www.sdepi.org

November 23, 2022

COVID-19

Cases	97,188
Deaths	169
Outbreaks*	162

7/3/2022 – 11/19/2022

Influenza

Cases	10,231
Deaths	5
Outbreaks*	3

7/3/2022 – 11/19/2022

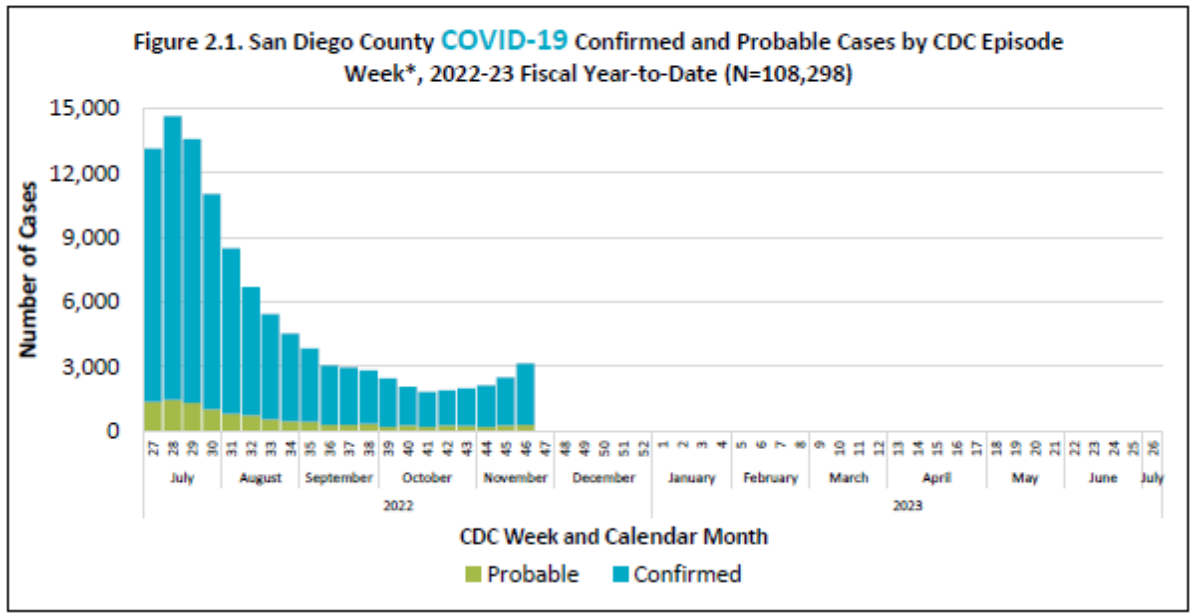
*In residential congregate settings

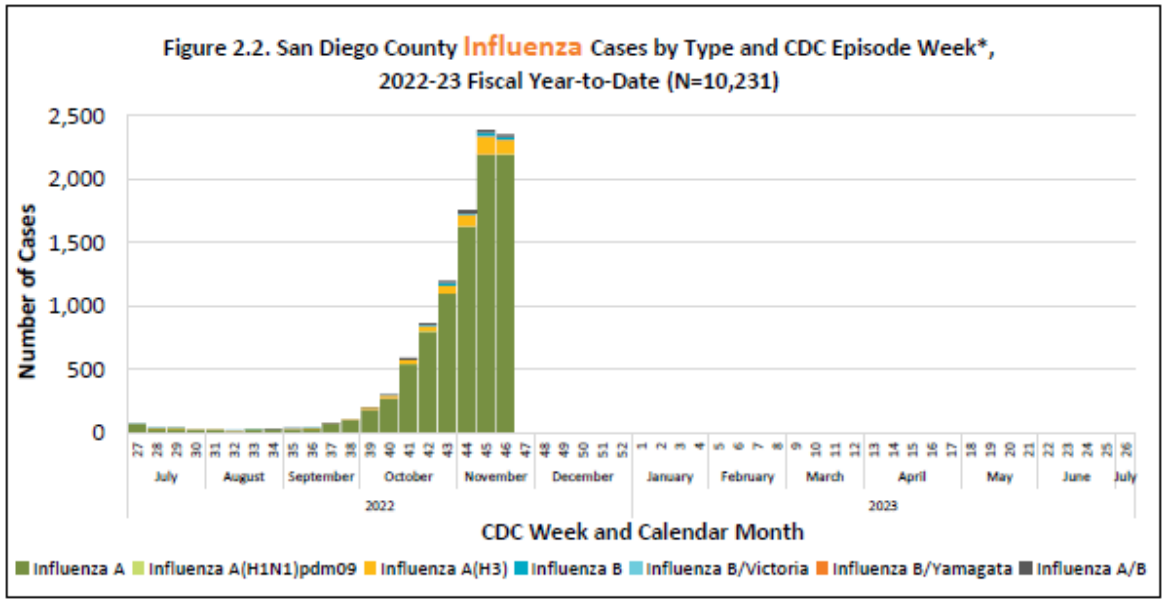
For internal use only, not for distribution

Respiratory Virus Update

COUNTY OF SAN DIEGO HHSA HEALTH AND HUMAN SERVICES AGENCY | LIVE WELL SAN DIEGO | Healthcare Associated Infections Program

COVID-19 and Influenza Cases by Episode Week, Fiscal Year-to-Date





New AFLs

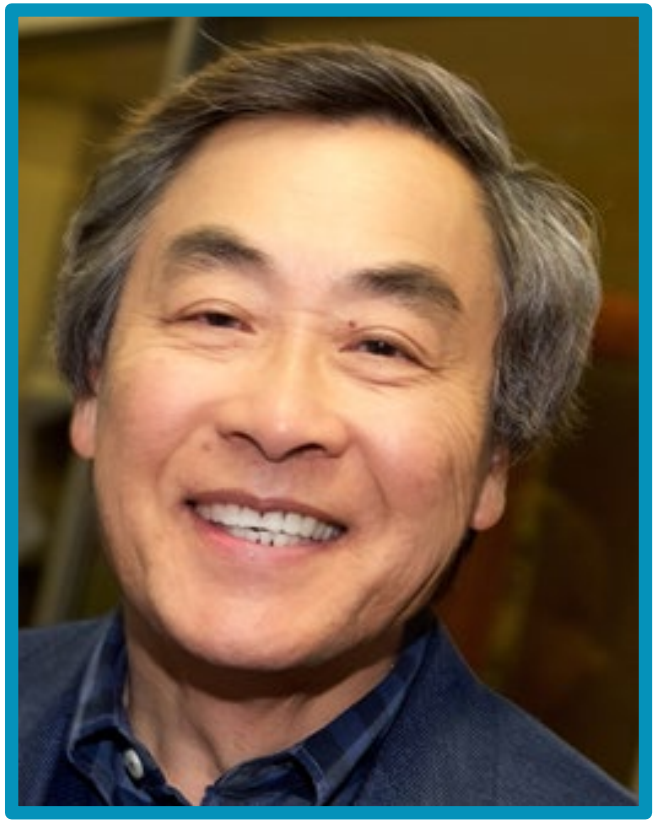
- **AFL 22-23** Guidance for Response to Surge in Respiratory Viruses
- **AFL 22-24** Ebola Virus Disease Information and Preparedness
- **AFL 22-26** Assembly Bill (AB) 2145: Dental Services: Long-Term Care
- **AFL 22-27** Facility Emergency Contact and all Facilities Letter Recipient Information

Contact Hour Instructions

1. **Ensure your full name identifies you on Zoom**
2. **Enjoy the full presentation**
3. **Complete the post-evaluation**

Speaker Introductions

Bridget Olson, RPh
Hospital Clinical Pharmacist,
Infectious Disease Specialty,
Sharp Healthcare, San Diego



Dr. Raymond Chinn, MD, FIDSA, FSHEA
Temporary Expert Professional,
San Diego Public Health Department,
Epidemiology and Immunization Services Branch

Antimicrobial Stewardship Programs (ASP) in Skilled Nursing Facilities

MISSION STATEMENT: TO PARTICIPATE IN A COLLABORATION BETWEEN THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH) AND THE SAN DIEGO COUNTY HEALTH & HUMAN SERVICES (HHSA) IN AN ANTIMICROBIAL STEWARDSHIP PROGRAM (ASP) INITIATIVE, AS PART OF A BROADER REGIONAL EFFORT FOR THE PREVENTION OF HEALTHCARE-ASSOCIATED INFECTION (HAI) AND ANTIMICROBIAL RESISTANCE AMONG FACILITIES.

Bridget Olson, Consultant, Antimicrobial Stewardship Program, CDPH
Raymond Chinn, MD, FIDSA, FSHEA, San Diego HHSA

NOVEMBER 30, 2022

Disclosures

Bridget Olson – no disclosures to declare.

Raymond Chinn – no disclosures to declare.

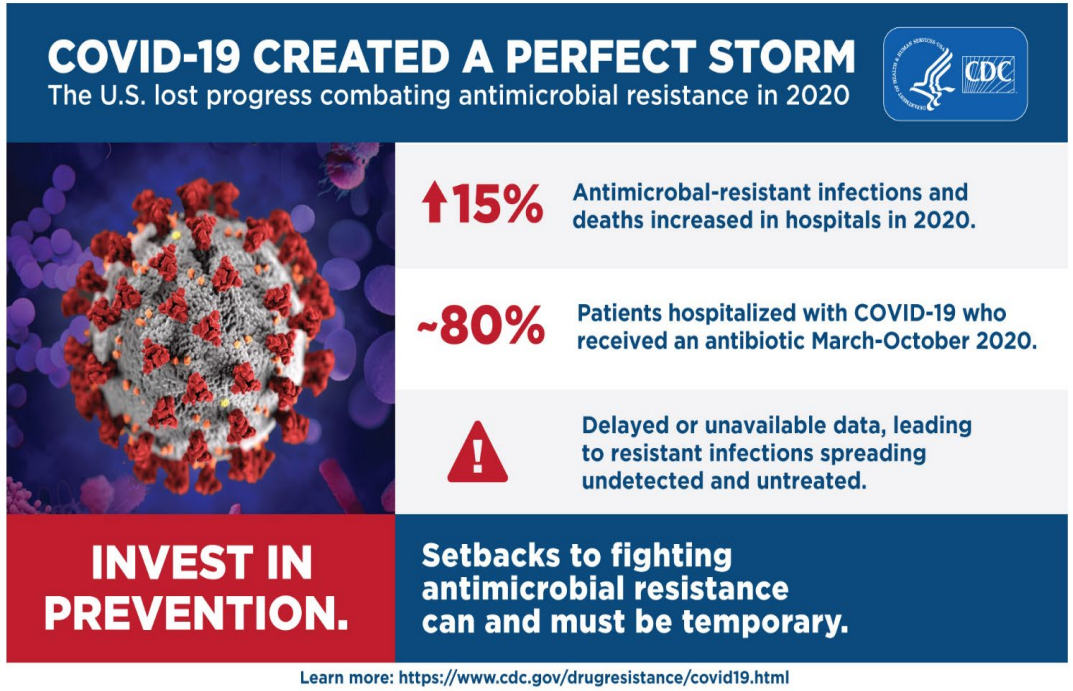
Objectives

- Describe the epidemiology of **multidrug-resistant organisms (MDROs)**
- Provide an introduction to **Antimicrobial Stewardship Programs (ASP)** and how it can decrease the development of antimicrobial resistance.
- Outline **a process to address** antimicrobial resistance in skilled nursing facilities (SNF)
- Characterize the challenge of **unnecessary urine cultures** in a population prone to asymptomatic bacteriuria
- Identify strategies to decrease orders for urine cultures: **“the culture of not culturing”**

Epidemiology

Infections Caused by Multidrug-resistant Organisms (MDRO) During the COVID-19 2020 Peak of Epidemic

What is an MDRO?



- Selected MRDOs and their increase in infections
  - Carbapenem-resistant *Acinetobacter* – 78%
  - Multidrug-resistant *Pseudomonas aeruginosa* – 32%
  - Vancomycin-resistant *Enterococcus* (VRE) – 14%
  - Methicillin-resistant *Staphylococcus aureus* (MRSA) – 13%
- Significant national reductions of MDRO infections in hospitals (rates fell by 27% 2012 to 2017); these reductions continued in hospitals until the pandemic began.
- Antifungal-resistance threats rose, including *Candida auris*—which increased 60%, and all *Candida* species (excluding *Candida auris)*, with a 26% increase in infections in hospitals.

Legislative Requirement: Senate Bill-361 Antimicrobial Stewardship: Education and Policies (2015-2016)

SEC. 2., 1275.4.

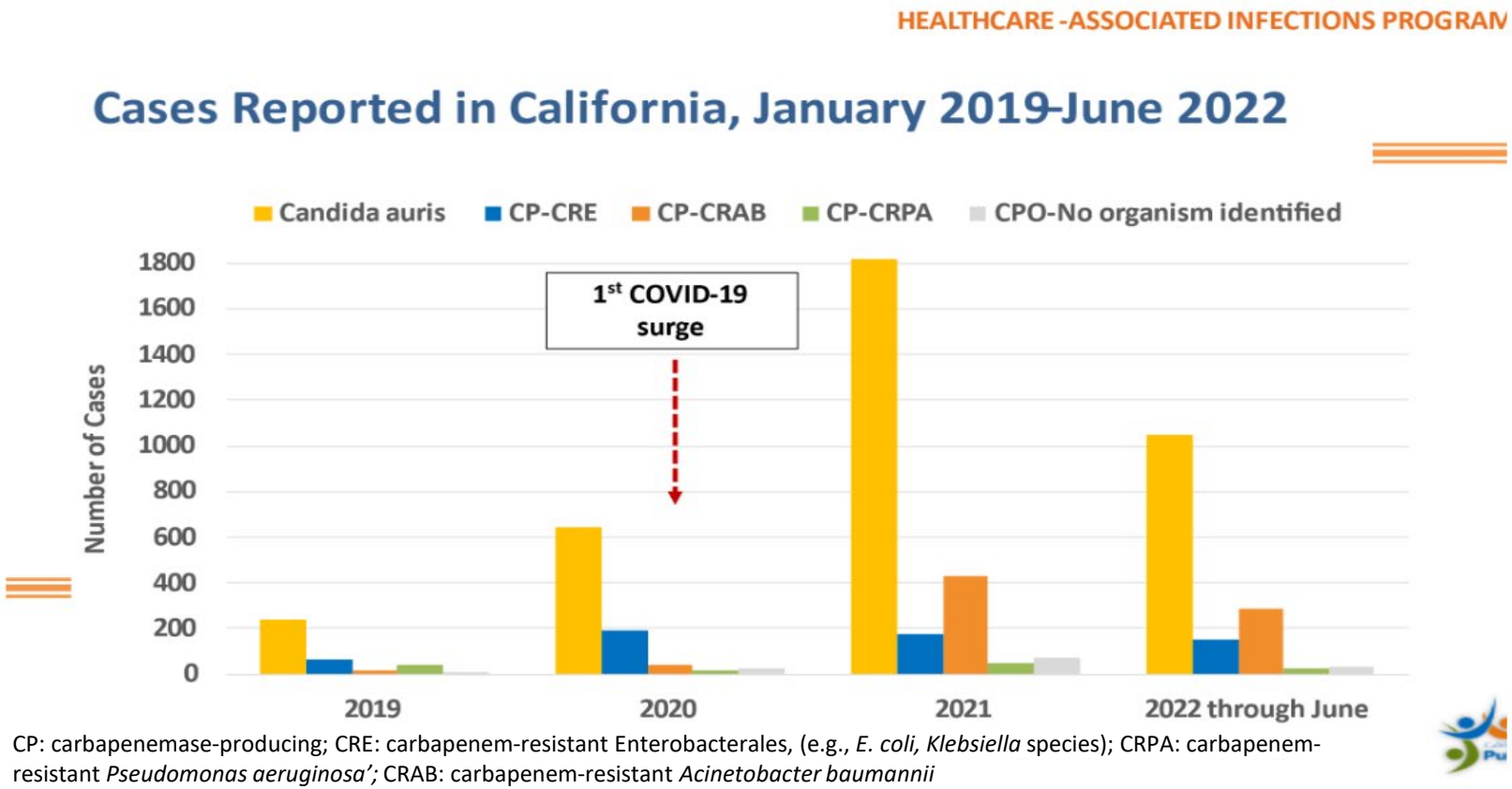
(a) On or before **January 1, 2017**, each skilled nursing facility (SNF) ……. shall adopt and **implement** an antimicrobial stewardship policy that is consistent with antimicrobial stewardship guidelines developed by the federal Centers for Disease Control and Prevention, the federal Centers for Medicare and Medicaid Services, the Society for Healthcare Epidemiology of America, or similar recognized professional organizations.

Caveats:

- Although some SNFs may have written policies regarding ASP, the impact of such a program may be unknown
- Licensing & Certification do not routinely include an assessment of ASP as part of their process
- Impact of a robust ASP can only be achieved by identification of ASP metrics, pre-implementation data collection, implementation of core principles of ASP in a stepwise fashion, and repeating metrics to assess the impact of interventions and to provide feedback

https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB361

Cases of Multidrug-resistant Organisms (MDRO) in California



CP: carbapenemase-producing; CRE: carbapenem-resistant Enterobacterales, (e.g., *E. coli, Klebsiella* species); CRPA: carbapenem-resistant *Pseudomonas aeruginosa';* CRAB: carbapenem-resistant *Acinetobacter baumannii*

Courtesy of Tisha Mitsunaga, DrPH, Center for Health Care Quality California Department of Public Health

Question: What is the Difference between Antimicrobials and Antibiotics?

ANSWER:

ANTIBIOTICS SPECIFICALLY TARGET BACTERIA WHILE **ANTIMICROBIALS** ACT ON DIFFERENT TYPES OF MICROBES: BACTERIA, FUNGI, VIRUSES OR PROTOZOA

The Threat of Antibiotic Resistance

- In the US, more than **2.8 million** antibiotic-resistant infections occur each year and more than **35,000 people** die as a direct result.
- Studies have shown that **more than half** of all antibiotics prescribed in Skilled Nursing facilities (SNF) in the U.S. may be unnecessary or inappropriate.
- The way we use antibiotics today directly impacts how effective they will be tomorrow; they are a shared resource. Some infections caused by multidrug-resistant organisms have **NO** effective therapy.
- Patients getting broad-spectrum antibiotics are up to **3 times more likely** to get another infection from even more resistant bacteria, which are associated with mortality rates up **to 4 times higher** than with susceptible strains.

CDC.gov/antibiotic use, 2022
Rowe T. Inf Control & Hosp Epidemiol 2022;43:417-26.

Poll Question 1

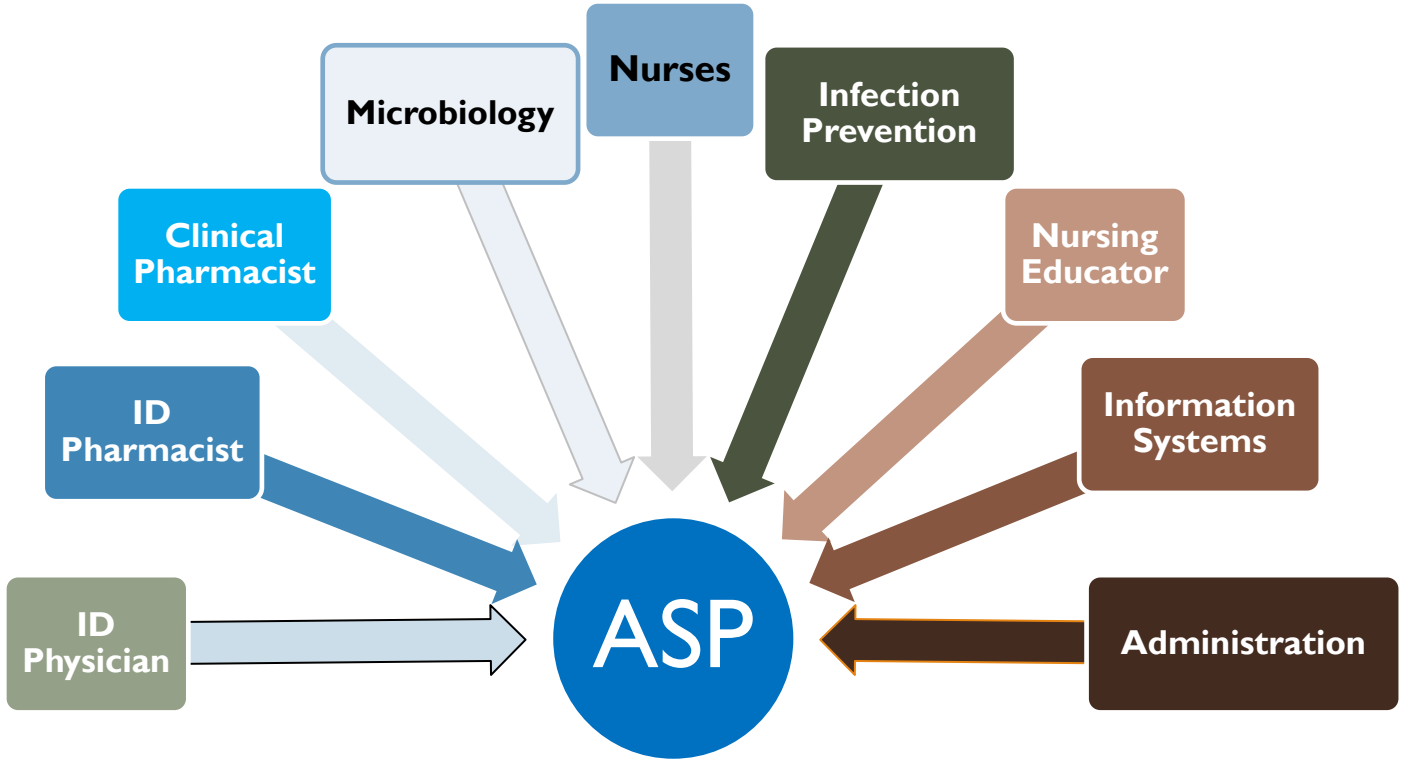
Antimicrobial Stewardship

a. **Is a program to educate and persuade prescribers of antimicrobials to follow evidence-based prescribing**
b. **Aims to protect residents from complications of unnecessary antibiotic use such as adverse reactions to antibiotics and *Clostridriodes difficile* infection**
c. **Can result in cost savings**
d. **All of the above**

What is an Antimicrobial Stewardship Program (ASP)?

ASP is a program to educate healthcare workers and to persuade prescribers of antimicrobial agents to follow evidence-based prescribing, in order to:

- Stem antibiotic overuse
- Decrease the emergence of antimicrobial resistance.
- Reduce likelihood of adverse reactions from exposure to antibiotics and also *Clostridioides difficile* infection



Antimicrobial Stewardship Issues in Skilled Nursing Facilities (SNF)

- SNF residents have multiple co-morbidities, more invasive devices, and are advanced in age
- There is frequent microbial colonizations of infection sites
- There is incomplete resident symptom reporting to physicians
- Evaluation and diagnosis of residents with fever can be difficult since many residents are non-verbal or in persistent vegetative state
- Antimicrobial agents are often phone orders without appropriate resident assessments

- Antimicrobial agents are often prescribed based on culture results with inadequate assessment of the resident's signs or symptoms
- Physicians are not sure of best ***empiric*** treatment choices
- No follow-up of cultures or sign/symptom resolution
- Consequently, there is over-use of antimicrobial agents, resulting in antimicrobial resistance

Benefits and Goals of ASP

- **Optimize** use of antimicrobial agents to improve clinical outcomes
- **Protect** patients from harm caused by unnecessary use of antimicrobial agents
  - Combat antimicrobial resistance
  - Reduce morbidity and mortality from:
    - Side effects from antimicrobial agents
    - Reduce *C.difficile* infections
- **Control** costs of antimicrobial therapy

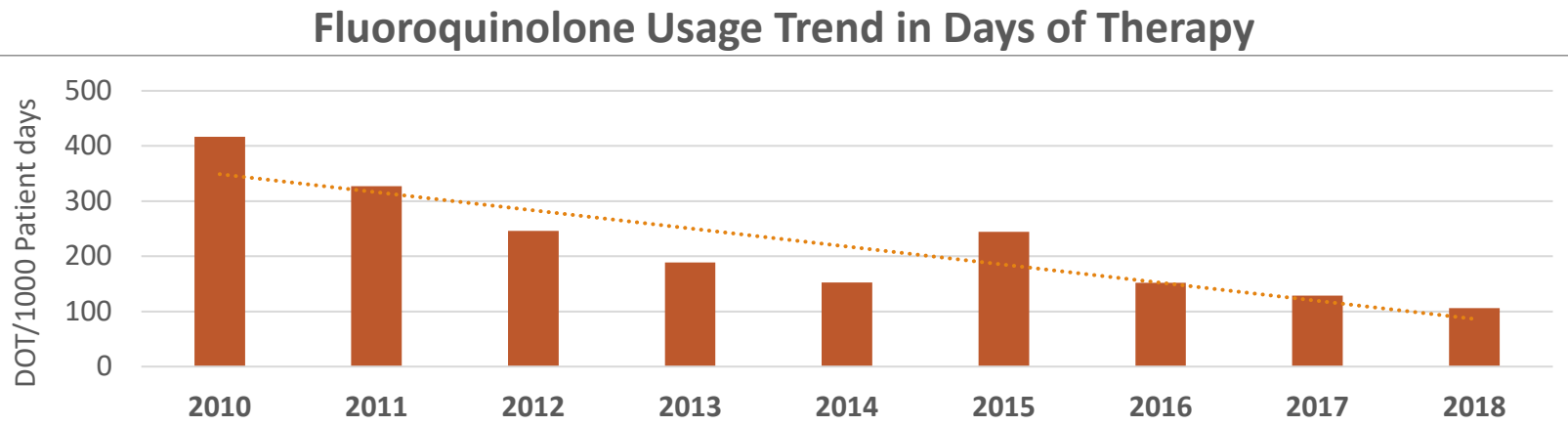
Impact of an *Effective* Antimicrobial Stewardship Program on Drug Resistance

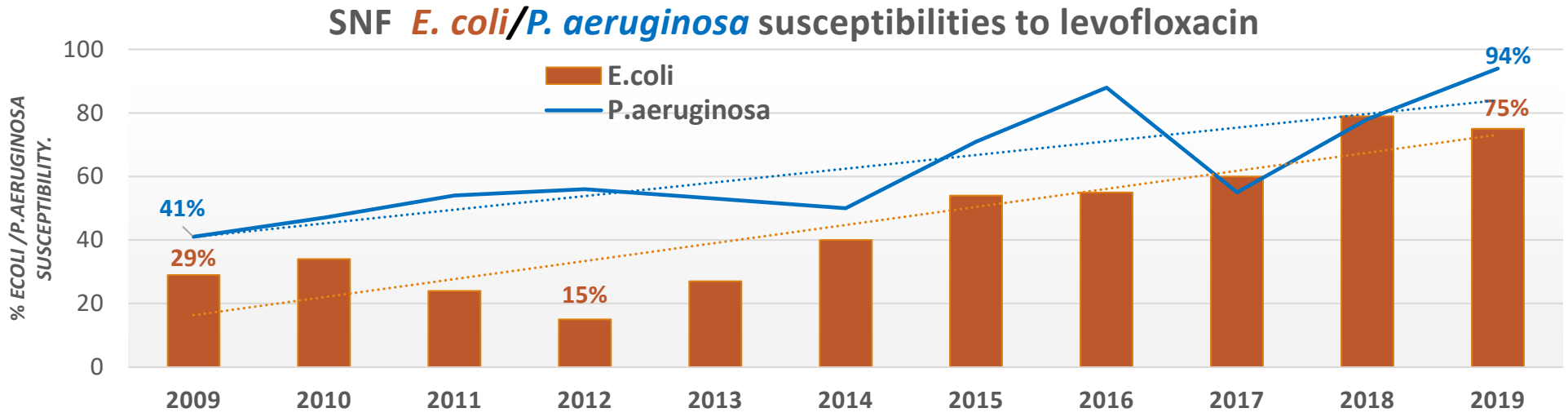
FACILITY A– 122 BEDS, WITH VENTILATOR UNIT ASSOCIATED WITH ACUTE CARE HEALTHCARE SYSTEM

ASP STARTED IN 2009

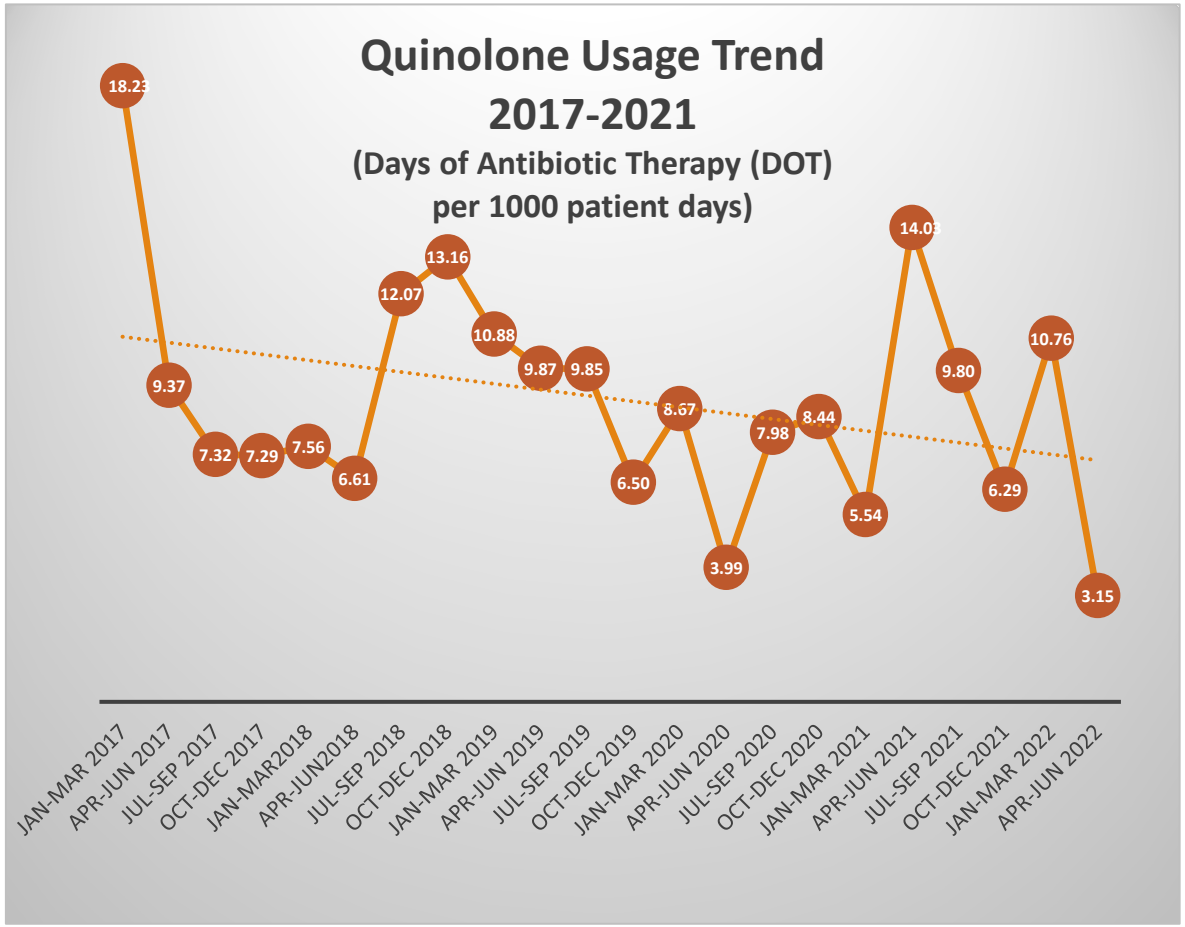
ASP Effects on Antimicrobial Resistance

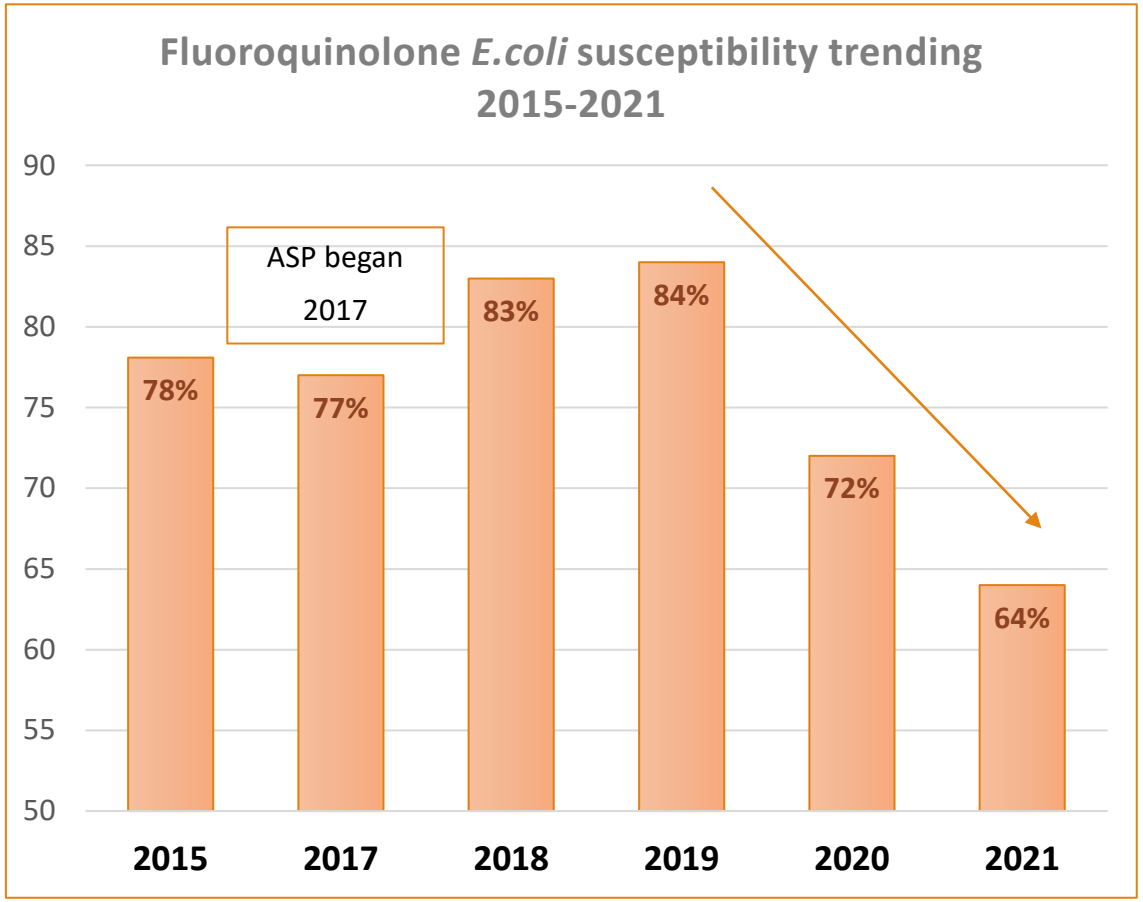
Decreased Fluoroquinolone use → Increased *E.coli* susceptibility





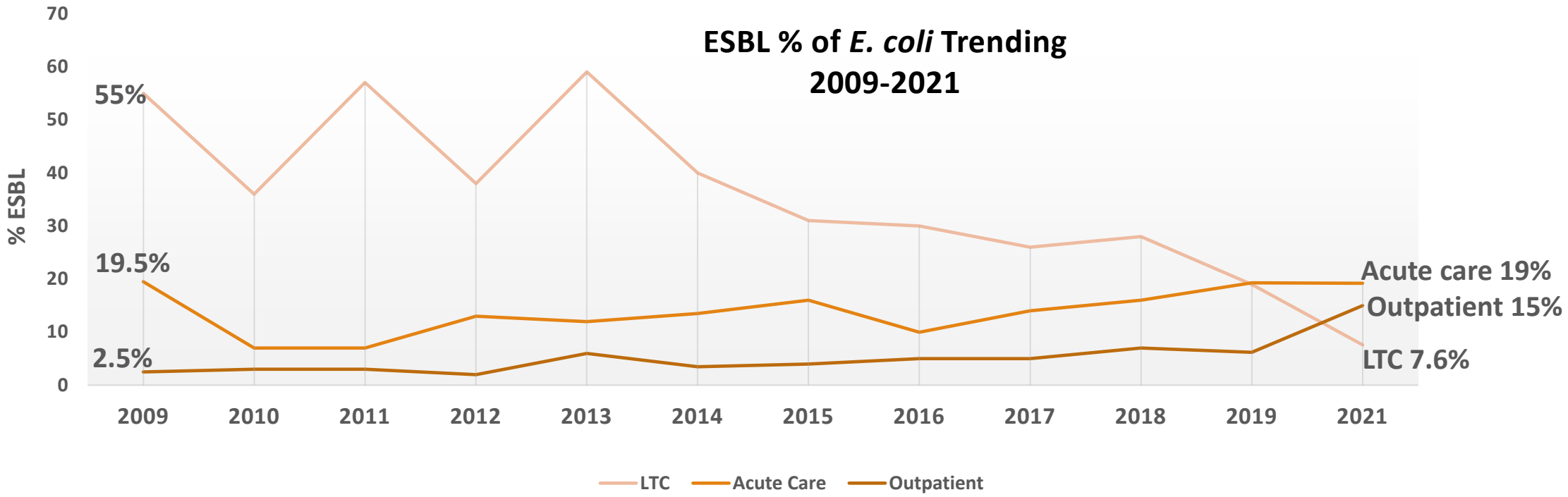
Facility B Fluoroquinolone Usage and *E.coli* Susceptibility Trending





ASP Effects on Antimicrobial Resistance

→ Decreased ESBL* *E.coli*

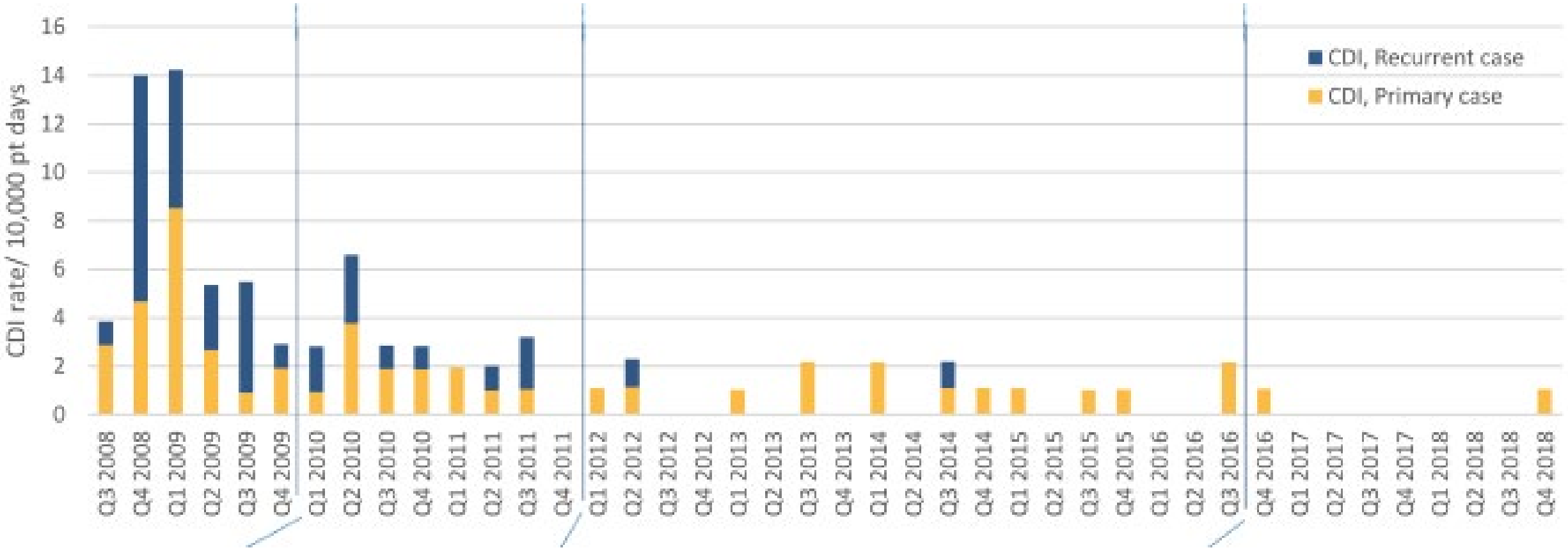


Facility A SNF

2020 data not available with mixing of patient types on units, due to Covid pandemic conditions

*ESBL – extended spectrum beta-lactamase

C. difficile Infection (CDI) Reduction



Facility A 2019

ACTION…

How to start an ASP: General guidelines…

- Begin after establishing administrative support for ASP, by expanding **healthcare worker (HCW) roles** to include **ASP**; designate one HCW as the **ASP lead**
- Implement at least one **policy or practice** to improve antibiotic use, such as, creating a spreadsheet for tracking of antimicrobial use and interventions
- Start by developing **infection-specific** policies, such as, for the evaluation and treatment of urinary tract infections (UTI)
- Work in a step-wise fashion, implementing one or two activities to start, then gradually adding new activities over time and integrating ASP into the workflow pattern of the facility

ASP Steps of Implementation

1. Multidisciplinary ASP Education
2. Improve Patient Assessments for suspected Infections
3. Improve Antibiotic Prescribing
4. Tracking and Reporting

1. Multidisciplinary Education

In addition to ASP principles and goals:

Physicians:

- Infection site-specific antibiotic **prescribing** guidelines & Loeb **criteria for infection**
- **Empiric antibiotic recommendations** based on facility-specific micro and antibiotic sensitivities
- **CDI Reduction** plan

Nursing:

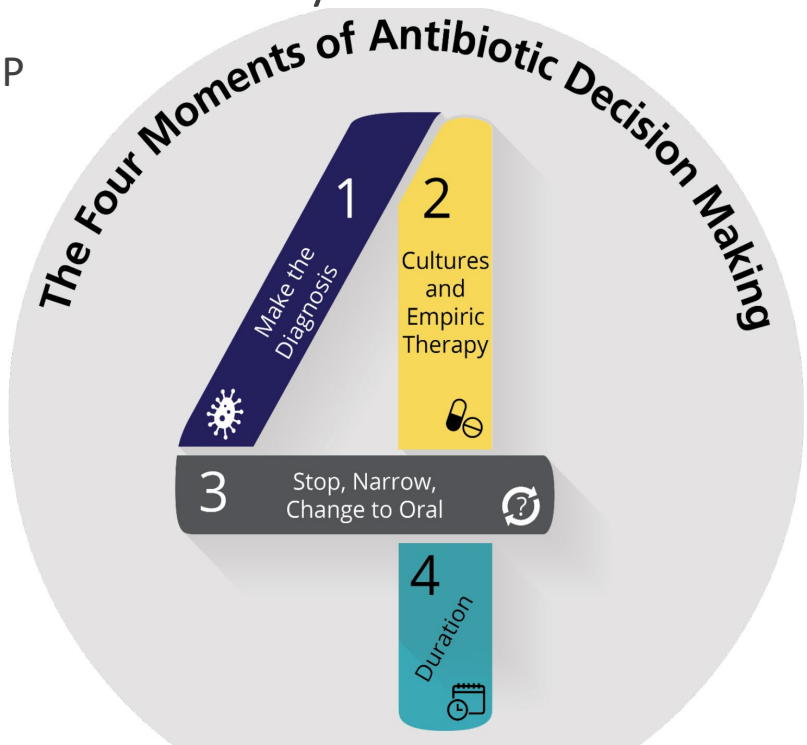
- Resident **assessments**
- Differences between **colonization vs. infection**
- Use of **empiric** vs. **targeted** antibiotics
- **Loeb Criteria** for initiation of antimicrobials
- Consideration of **other causes** for symptoms (vs. infection)
- **SBAR** format for reporting to physicians
- Appropriate **culturing**
- Preferred **empiric** antibiotic therapies, including **durations**

Education, Resources, & Tools

Agency for Healthcare Research and Quality

To improve antibiotic use in SNF, AHRQ equips frontline providers with tools and resources to incorporate ASP principles into their facility culture. The Safety Program provides SNFs with the novel framework of the Four Moments of Antibiotic Decision Making coupled with education on the best practices in the diagnosis and treatment of common infections in SNF settings, to support integration of ASP principles into the daily care of residents.

- Toolkits for implementing, monitoring and sustaining an ASP
  - Example: Suspected UTI SBAR toolkit (slide 33)
- Educational Webinars/toolkits for staff
- Identification and implementation of ASP interventions
- How to collect and submit data for benchmarking reports



https://www.ahrq.gov/nhguide/index.html

2. Improve Patient Assessments for suspected Infections:

- Develop **Patient Assessment forms** for suspected infections with standardized practices for evaluating patients exhibiting symptoms of infection
- Familiarize staff with the **Loeb Criteria** for identifying infections in SNF patients
- Improve assessment reporting to physician/NP/PA with **SBAR** communication tool

Poll Question #2

True or False

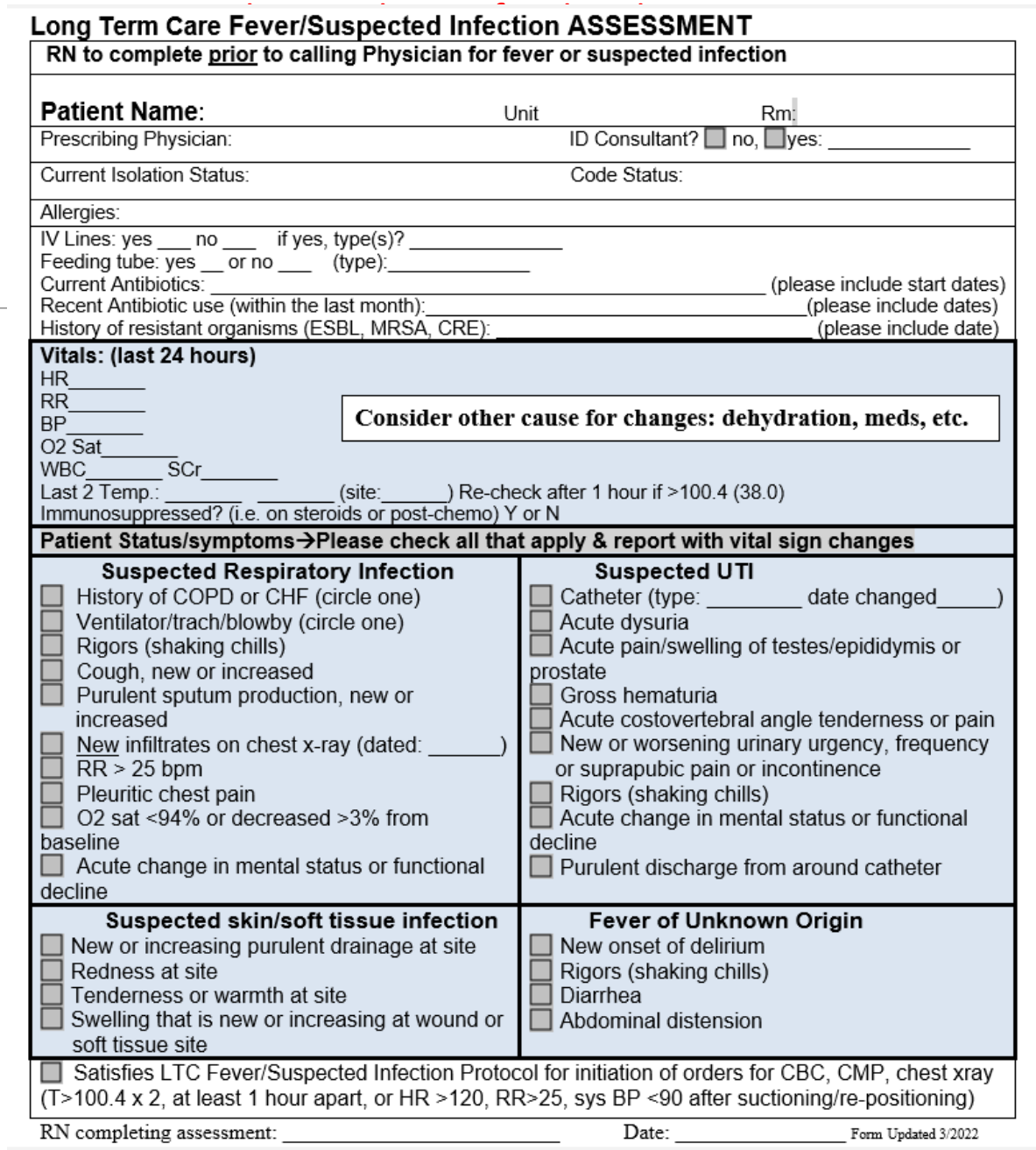
It doesn't really matter what the nurse says, the doctor will order antibiotics if he/she feels they are indicated

Importance of Nursing Assessments:

- Based on their assessments and reporting, nurses play a major role in whether antibiotics are initiated.
- They are the eyes and ears for the physicians
- RN to do patient assessment prior to calling physician or pharmacist, using a checklist.
- Optimally the RN should discuss patient assessment and symptoms with the pharmacist or IP to help evaluate for other causes, whether antibiotics will be recommended vs. watchful waiting, prior to calling the MD.
- Monitor resident condition changes

Patient Assessment Forms for Suspected infection

- Overall comprehensive survey of symptoms in a checklist format, categorized by the Loeb Criteria for infection in SNF patients
- Focus on changes from the patient's baseline, and consider other causes (dehydration, medication, blood glucose, electrolyte changes, etc.)
- Pertinent patient information: diagnoses, allergies, code/transfer status
- Vital signs, observed changes in mental or behavioral status
- Presence of foleys or other catheters, IV lines, feeding tubes, tracheostomies, ventilators, or other invasive devices



Long Term Care Fever/Suspected Infection ASSESSMENT

RN to complete prior to calling Physician for fever or suspected infection

Patient Name: Unit Rm:

Prescribing Physician: ID Consultant? ☐ no, ☐ yes: _____

Current Isolation Status: Code Status:

Allergies:

IV Lines: yes ___ no ___ if yes, type(s)? _____

Feeding tube: yes __ or no ___ (type):_____

Current Antibiotics: _____ (please include start dates)

Recent Antibiotic use (within the last month):_____(please include dates)

History of resistant organisms (ESBL, MRSA, CRE): _____(please include date)

Vitals: (last 24 hours)

HR_____

RR_____

BP_____

O2 Sat_____

WBC_____ SCr_____

Last 2 Temp.: _____ _____(site:_____) Re-check after 1 hour if >100.4 (38.0)

Immunosuppressed? (i.e. on steroids or post-chemo) Y or N

Consider other cause for changes: dehydration, meds, etc.

Patient Status/symptoms→Please check all that apply & report with vital sign changes

Suspected Respiratory Infection

- ☐ History of COPD or CHF (circle one)
- ☐ Ventilator/trach/blowby (circle one)
- ☐ Rigors (shaking chills)
- ☐ Cough, new or increased
- ☐ Purulent sputum production, new or increased
- ☐ New infiltrates on chest x-ray (dated: _____)
- ☐ RR > 25 bpm
- ☐ Pleuritic chest pain
- ☐ O2 sat <94% or decreased >3% from baseline
- ☐ Acute change in mental status or functional decline

Suspected UTI

- ☐ Catheter (type: _____ date changed_____)
- ☐ Acute dysuria
- ☐ Acute pain/swelling of testes/epididymis or prostate
- ☐ Gross hematuria
- ☐ Acute costovertebral angle tenderness or pain
- ☐ New or worsening urinary urgency, frequency or suprapubic pain or incontinence
- ☐ Rigors (shaking chills)
- ☐ Acute change in mental status or functional decline
- ☐ Purulent discharge from around catheter

Suspected skin/soft tissue infection

- ☐ New or increasing purulent drainage at site
- ☐ Redness at site
- ☐ Tenderness or warmth at site
- ☐ Swelling that is new or increasing at wound or soft tissue site

Fever of Unknown Origin

- ☐ New onset of delirium
- ☐ Rigors (shaking chills)
- ☐ Diarrhea
- ☐ Abdominal distension

☐ Satisfies LTC Fever/Suspected Infection Protocol for initiation of orders for CBC, CMP, chest xray (T>100.4 x 2, at least 1 hour apart, or HR >120, RR>25, sys BP <90 after suctioning/re-positioning)

RN completing assessment: _____ Date: _____ Form Updated 3/2022

Facility A SNF

3. Improve Antimicrobial Prescribing

- Obtain **Lab** reports of **microbiology and antibiogram** to show organisms cultured and relative antibiotic sensitivities
- Establish site specific **empiric therapy:** infectious disease pharmacist or ID Specialist Physician with education of prescribers
- Implement a **CDI reduction** plan: ASP, probiotics, reduction of acid suppression, and infection prevention policies
- **Tracking with evaluation of antibiotic starts** with **follow-up** on Day 3 of therapy for culture review, patient status, continued need for antibiotics, or possible de-escalation of therapy.

Low Hanging Fruit? Improving the Diagnosis of Urinary Tract Infection (UTI)

NHSN REPORTED UTI TREATMENT PRACTICES

COMMON MYTHS IN DIAGNOSIS OF UTI

Poll Question #3

True or False

Asymptomatic bacteriuria should be treated because by doing so, complications can be avoided

Indwelling Urinary Catheter Use

"….and catheters function as a 1-point restraint that tethers patients to their beds, preventing them from carrying out the activities of daily living like getting them to the toilet and doing physical therapy, which could lead to other hospital-acquired conditions like deep vein thrombosis, pressure sores, and falls….."

Sanjay Saint, MD, MPH, FACP, Chief of Medicine VA Ann Arbor Healthcare Systems, Ann Arbor, Michigan

Urinary Tract Infection (UTI) treatment practices in nursing homes reporting to the National Healthcare Safety Network (NHSN), 2017

A study of the difference between the number of UTI events meeting surveillance definitions for infection vs. UTI treatment courses were compared for 298 nursing homes reporting UTI data to NHSN in 2017:

- There were almost **4 times** as many antimicrobial agent starts vs. UTI events reported. (UTI treatment ratio= 4.0, goal = 1.0)
- 46% of nursing homes reported no UTIs meeting criteria, but reported 1479 antibiotic starts for UTI.
- High variability in urine culture testing practices in facilities, with higher culturing rates → higher antibiotic use → higher *C.difficile* rates

Conclusion: Opportunities exist for **Antimicrobial Stewardship** and improvement of UTI reporting

Kabbani S. Infect Control Hosp Epidemiol 2022; 43:238-40.

Common Myths Regarding the Diagnosis of Urinary Tract Infections

Myths in the Diagnosis of Urinary Tract Infections

Myth 1: Urine is cloudy and smells bad → UTI

Myth 2: Urine has bacteria → UTI

Myth 3: Urine has a positive leukocyte esterase (for WBCs) → UTI

Myth 4: Urine contains WBCs → UTI

Myth 5: Urine has nitrates (for bacteria) → UTI

Myth 6: Bacteria in a catheterized urine sample → UTI

Myth 7: Asymptomatic bacteriuria will progress to UTI

Myth 8: Falls and acute altered mental status changes in the elderly → UTI – look for another cause first

Adapted from: Schulz L. J Emerg Med 2016;51:25-30

Suspected UTI **SBAR**

Complete this form before contacting the resident's physician.

Date/Time _____

Nursing Home Name _____

Resident Name _____ Date of Birth _____

Physician/NP/PA _____ Phone _____

Fax _____

Nurse _____ Facility Phone _____

Submitted by ☐ Phone ☐ Fax ☐ In Person ☐ Other _____

S Situation

I am contacting you about a suspected UTI for the above resident.

Vital Signs BP _____ / _____ HR _____ Resp. rate _____ Temp. _____

B Background

Active diagnoses or other symptoms (especially, bladder, kidney/genitourinary conditions)

Specify _____

☐ No ☐ Yes The resident has an indwelling catheter

☐ No ☐ Yes Patient is on dialysis

☐ No ☐ Yes The resident is incontinent **If yes,** new/worsening? ☐ No ☐ Yes

☐ No ☐ Yes Advance directives for limiting treatment related to antibiotics and/or hospitalizations

Specify _____

_____

☐ No ☐ Yes Medication Allergies

Specify _____

_____

☐ No ☐ Yes The resident is on Warfarin (Coumadin®)

Agency for Healthcare Research and Quality
Advancing Excellence in Health Care ● www.ahrq.gov

www.ahrq.gov/NH-ASPGuide · June 2014
AHRQ Pub. No. 14-0010-2-EF

For internal use only, not for distribution

Nursing Home Name _____ Facility Fax _____

Resident Name _____

A Assessment Input (check all boxes that apply)

Resident WITH indwelling catheter

The criteria are met to initiate antibiotics if one of the below are selected

No Yes

☐ ☐ Fever of 100°F (38°C) or repeated temperatures of 99°F (37°C)*

☐ ☐ New back or flank pain

☐ ☐ Acute pain

☐ ☐ Rigors /shaking chills

☐ ☐ New dramatic change in mental status

☐ ☐ Hypotension (significant change from baseline BP or a systolic BP <90)

Resident WITHOUT indwelling catheter

Criteria are met if one of the three situations are met

No Yes

☐ ☐ 1. Acute dysuria alone

OR

☐ ☐ 2. Single temperature of 100°F (38°C) **and** at least one new or worsening of the following:

☐ urgency ☐ suprapubic pain

☐ frequency ☐ gross hematuria

☐ back or flank pain ☐ urinary incontinence

OR

☐ ☐ 3. No fever, but two or more of the following symptoms:

☐ urgency ☐ suprapubic pain

☐ frequency ☐ gross hematuria

☐ incontinence

Nurses: Please check box to indicate whether or not criteria are met

☐ **Nursing home protocol criteria are met.** Resident may require UA with C&S or an antibiotic.†

☐ **Nursing home protocol criteria are NOT met.** The resident does NOT need an immediate prescription for an antibiotic, but may need additional observation.††

R Request for Physician/NP/PA Orders

Orders were provided by clinician through ☐ Phone ☐ Fax ☐ In Person ☐ Other _____

☐ Order UA

☐ Urine culture

☐ Encourage _____ ounces of liquid intake _____ times daily until urine is light yellow in color.

☐ Record fluid intake.

☐ Assess vital signs for _____ days, including temp, every _____ hours for _____ hours.

☐ Notify Physician/NP/PA if symptoms worsen or if unresolved in _____ hours.

☐ Initiate the following antibiotic

Antibiotic: _____ Dose: _____ Route: _____ Duration: _____

☐ No ☐ Yes Pharmacist to adjust for renal function

☐ Other _____

Physician/NP/PA signature _____ Date/Time _____

Telephone order received by _____ Date/Time _____

Family/POA notified (name) _____ Date/Time _____

* For residents that regularly run a lower temperature, use a temperature of 2°F (1°C) above the baseline as a definition of a fever.
† This is according to our understanding of best practices and our facility protocols. Minimum criteria for a UTI must meet 1 of 3 criteria listed in box.
†† This is according to our understanding of best practices and our facility protocols. The information is insufficient to indicate an active UTI infection.

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AHRQ tool for assessment of patients with suspected UTI

UTI criteria built into assessment

https://www.ahrq.gov/nhguide/index.html

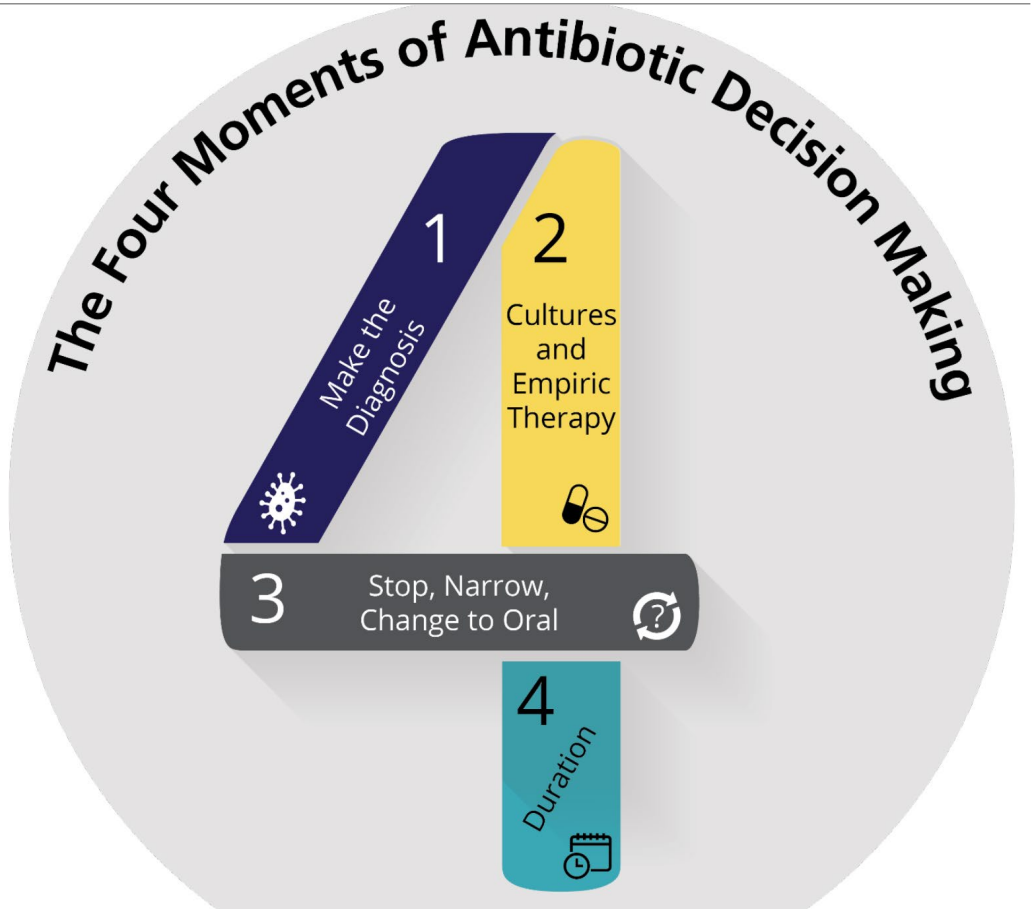
"Other Low-hanging Fruits"

Item	HCW responsible
1. Create a spreadsheet to collect data on antimicrobial use	Facility to designate HCW to complete
2. Assess each new resident on antimicrobials for correct indication, route, duration, dose	HCW with ASP pharmacist support
3. Assess new orders for antimicrobials at 48 hours for correct indication, route, duration, and dose	HCW with ASP pharmacist support
4. Obtain days of therapy on fluoroquinolones and selected antimicrobials for past year; carve out a section specific to the treatment of urinary tract infections	ASP pharmacist
5. Obtain antibiogram (what antimicrobials microorganisms are susceptible to) for the past year	ASP pharmacist, facility designated laboratory
6. Obtain the number (rate) of orders for urine culture and urinary tract infections for the past year	Laboratory, infection preventionist
7. Obtain rates of *C. difficile* infection for the past year	Laboratory, infection preventionist

4. Tracking/Reporting

a) Tracking of Antimicrobial agents:

- Keep an electronic log of antibiotic courses to include:
  - Symptoms – do they meet criteria for infection?
  - Culture possible site of infection
  - Antibiotic and #days of therapy
  - Day 3 follow-up section, to include:
    - Resident status, resolution of symptoms?
    - Culture results
    - Interventions?
      - Follow-up of cultures
      - DC antibiotic?
      - Change **antibiotic** or **route** or **duration** of therapy?
- We have created a spreadsheet you can use



https://www.ahrq.gov/nhguide/index.html

ASP
Antibiotic Tracking Sheet

Antimicrobial Stewardship Program --Antibiotic Tracking Sheet

Patient	MRN	Room	Age	Prescribing MD/NP	Symptoms exhibited	Temp ≥2 1 hr apart	vital signs (HR,RR, bp,O2)	WBC	UA WBC	Hx resistant orgs (MRSA, ESBL, CRE, MDRO)	Antibiotic ordered	Antibiotic dose	Prior facility start date	Days of therapy	Indication or site of inf	Urinary Catheter ?	Probiotic ordered?	Interventions	Changes to therapy	Initials	Day 3 (48-72hr) follow-up date	Patient status	Site(s) cultured	UA wbc if applicable	Organism (s) cultured	Culture review/ Sensitivity	Interventions	New orders	Initials
Doe, Jane	323223	202	75	Oen	dysuria, frequency, AMS, diaphoretic	100.6 101.0	HR 126, RR 20 bp 143/83, O2 96	14.1	>100	MRSA + nares	Rocephin	2g iv q24h	n/a	7 days	UTI	suprapubic	no	Add probiotic	probiotic added	cc RN	12/10/2020	Fever resolved, vss	Blood Urine	>100,000	negative P. mirabilis	S ceftr, S cefu	De-escalation to po abx	Changed to po Ceftin 500mg bid x 5d (7d total abx)	dh RPh

4. b) **Reporting** to Quality Assurance (QA) Committee:

A baseline must be established for future comparisons in interval reviews for trending of:

- Antibiotic Days of therapy
- CDI, UTI and catheter rates
- Antibiotic resistance trends
- ASP Interventions and acceptance

This helps to see progress, along with identifying areas that need focus for improvements

To Qualify for CDPH/HHSA help with your ASP…

…**your facility must commit to:**

1. Attendance at initial ASP Presentation
2. Dedicated time for an ASP lead at your facility
3. Electronic tracking of antibiotic patients
4. Supplying pharmacy reports of antibiotic Rx
5. Remote computer access for consultant ASP Pharmacist
6. QA ASP reporting
7. Staff attendance at ASP Educational in-services

Summary of CDC Core Elements for Antimicrobial Stewardship in SNFs

Leadership commitment: Demonstrate support and commitment to safe and appropriate antibiotic use in your facility

Accountability: Identify physician, nursing and pharmacy leads responsible for promoting and overseeing antibiotic stewardship activities in your facility

Drug expertise: Establish access to consultant pharmacists or other individuals with experience or training in antibiotic stewardship for your facility

Action: Implement at least one policy or practice to improve antibiotic use

Tracking: Monitor at least one process measure of antibiotic use and at least one outcome from antibiotic use in your facility

Reporting: Provide regular feedback on antibiotic use and resistance to prescribing clinicians, nursing staff and other relevant staff

Education: Provide resources to clinicians, nursing staff, residents and families about antibiotic resistance and opportunities for improving antibiotic use

End of ASP Presentation

Bridget.Olson@cdph.ca.gov
858-232-2716 cell

Questions?

Education Courses and Resources:

Making a Difference in Infectious Disease (MAD-ID): training course in infectious disease pharmacotherapy and antimicrobial stewardship practice https://mad-id.org

CDC's Core Elements of Antimicrobial Stewardship for Nursing homes
https://www.dcd.gov/longtermcare/prevention/antibiotic-stewardship.html

California Department of Public Health SNF ASP Implementation Toolkit
https://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/SNF_ASP_toolkit.aspx

- Guidelines for ASP Implementation in SNF
- Webinars for Antimicrobial Stewardship Actions and Intervention in the Nursing Home setting
- Examples of antibiograms, interventions, antibiotic initiation guidelines, Empiric treatment guidelines, antibiotic tracking

County/CDPH Briefings

- **County LTC Sector COVID Monthly Telebriefing:**
  - 4th Thursday @ 2PM-3PM
  - Next briefing is on 12/22/2022

- **CDPH Healthcare Facility Call:**
  - Bi-weekly Tuesday @ 8AM-9AM
  - Next call is on 12/6/2022

- **CDPH/HSAG SNF IP Webinars:**
  - 2nd/4th Wednesday @ 3PM-4PM
  - Next webinar is on 12/14/2022

Next Collaborative

January* 25, 2023

11:00AM – 12:00PM

ZOOM

Featured Topic:

“Staff Engagement/Staff Education to Achieve ICP Progress”

1 Contact Hour Offered

Registration Link

Submit questions about Staff Engagement/Staff Education

or

Feedback about today’s collaborative meeting to:

PHS.HAI.HHSA@sdcounty.ca.gov

Resources

County and State Resources

CDPH AFLs 2022
https://www.cdph.ca.gov/Programs/CHCQ/LCP/Pages/LNCAFL22.aspx

CDPH COVID-19 Treatment FAQ:
https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Questions-and-Answers-Treatment-Information-for-Providers-and-Facilities.aspx

CDPH/HSAG IP Webinars
https://www.hsag.com/cdph-ip-webinars

NIH Recommended Treatment Options:
https://www.covid19treatmentguidelines.nih.gov/therapies/statement-on-omicron-subvariants/

Subscribe to CAHANs:
https://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/cahan_san_diego/subscribe.html

Respiratory Virus Surveillance Report
https://www.sandiegocounty.gov/content/dam/sdc/hhsa/programs/phs/Epidemiology/SDC_Respiratory_Virus_Surveillance_Report.pdf

County of San Diego Epidemiology Website
Sdepi.org

County LTC Sector Webpage
https://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/community_epidemiology/dc/2019-nCoV/CommunitySectors/Residential_Facilities.html

ASP References

AHRQ Four Moments
https://www.ahrq.gov/antibiotic-use/long-term-care/four-moments/index.html

AHRQ Nursing Home Antimicrobial Stewardship Guide
https://www.ahrq.gov/nhguide/index.html

AHRQ Suspected UTI SBAR Toolkit
https://www.ahrq.gov/nhguide/toolkits/determine-whether-to-treat/toolkit1-suspected-uti-sbar.html

CDC Core Elements for Antimicrobial Stewardship
https://www.cdc.gov/antibiotic-use/core-elements/nursing-homes.html

CDC Core Elements
https://www.dcd.gov/longtermcare/prevention/antibiotic-stewardship.html

CDPH SNF ASP Implementation Toolkit
https://www.cdph.ca.gov/Programs/CHCQ/HAI/Pages/SNF_ASP_toolkit.aspx

MAD-ID
https://mad-id.org/

Senate Bill-361 Antimicrobial Stewardship
https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB361

THANK YOU!

phs.hai.hhsa@sdcounty.ca.gov