

ADH Update on State Stewardship Efforts

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Arkansas Department of Health

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Learning Objectives



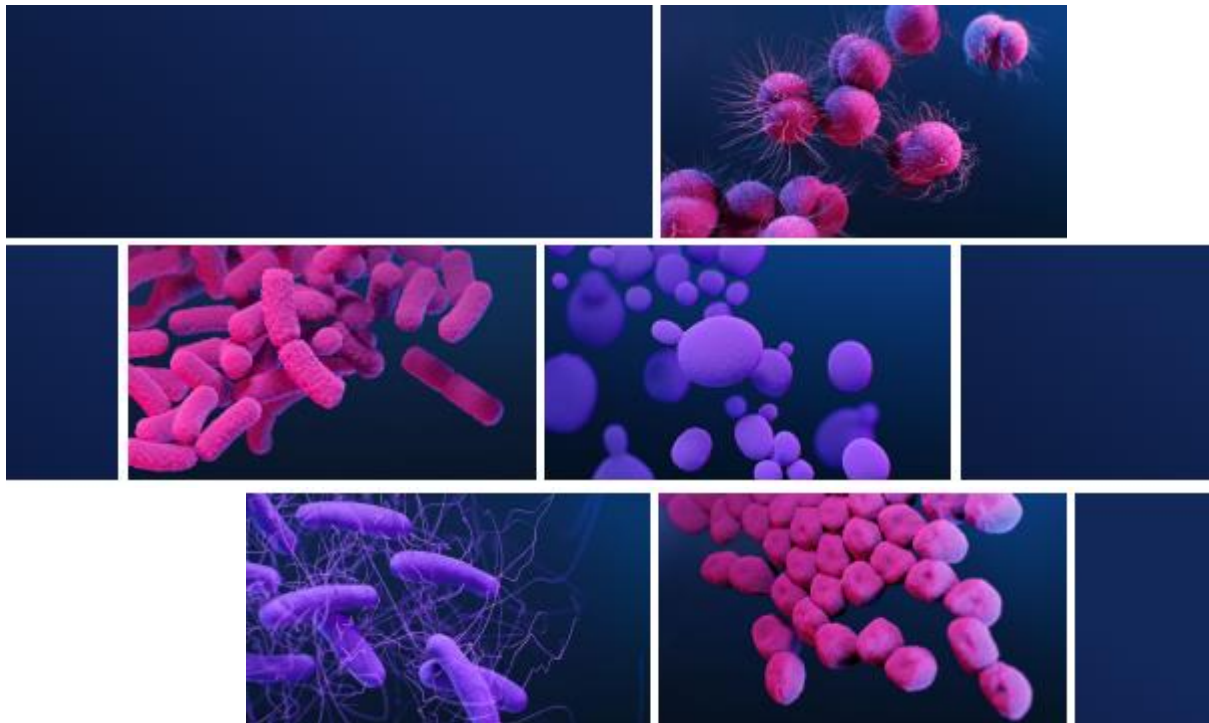
- Gain insights into the initiatives, strategies, and challenges related to antibiotic stewardship efforts in Arkansas.
- Explore the prevalence and trends of Multidrug-Resistant Organisms (MDROs) in the state of Arkansas.

ANTIBIOTIC RESISTANCE THREATS IN THE UNITED STATES



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

2019



Urgent Threats

- Carbapenem-resistant *Acinetobacter* ★
- *Candida auris* (*C. auris*) ★
- *Clostridioides difficile* (*C. difficile*) ★
- Carbapenem-resistant Enterobacteriaceae (CRE) ★
- Drug-resistant *Neisseria gonorrhoeae* (*N. gonorrhoeae*)

Serious Threats

- Drug-resistant *Campylobacter*
- Drug-resistant *Candida* ★
- Extended-spectrum beta-lactamase (ESBL)-producing Enterobacteriaceae ★
- Vancomycin-resistant *Enterococci* (VRE) ★
- Multidrug-resistant *Pseudomonas aeruginosa* (*P. aeruginosa*) ★
- Drug-resistant nontyphoidal *Salmonella*
- Drug-resistant *Salmonella* serotype Typhi
- Drug-resistant *Shigella*
- Methicillin-resistant *Staphylococcus aureus* (MRSA) ★
- Drug-resistant *Streptococcus pneumoniae* (*S. pneumoniae*) ★
- Drug-resistant Tuberculosis (TB)

Concerning Threats

- Erythromycin-resistant group A *Streptococcus*
- Clindamycin-resistant group B *Streptococcus*

Watch List

- Azole-resistant *Aspergillus fumigatus* (*A. fumigatus*)
- Drug-resistant *Mycoplasma genitalium* (*M. genitalium*)
- Drug-resistant *Bordetella pertussis* (*B. pertussis*)

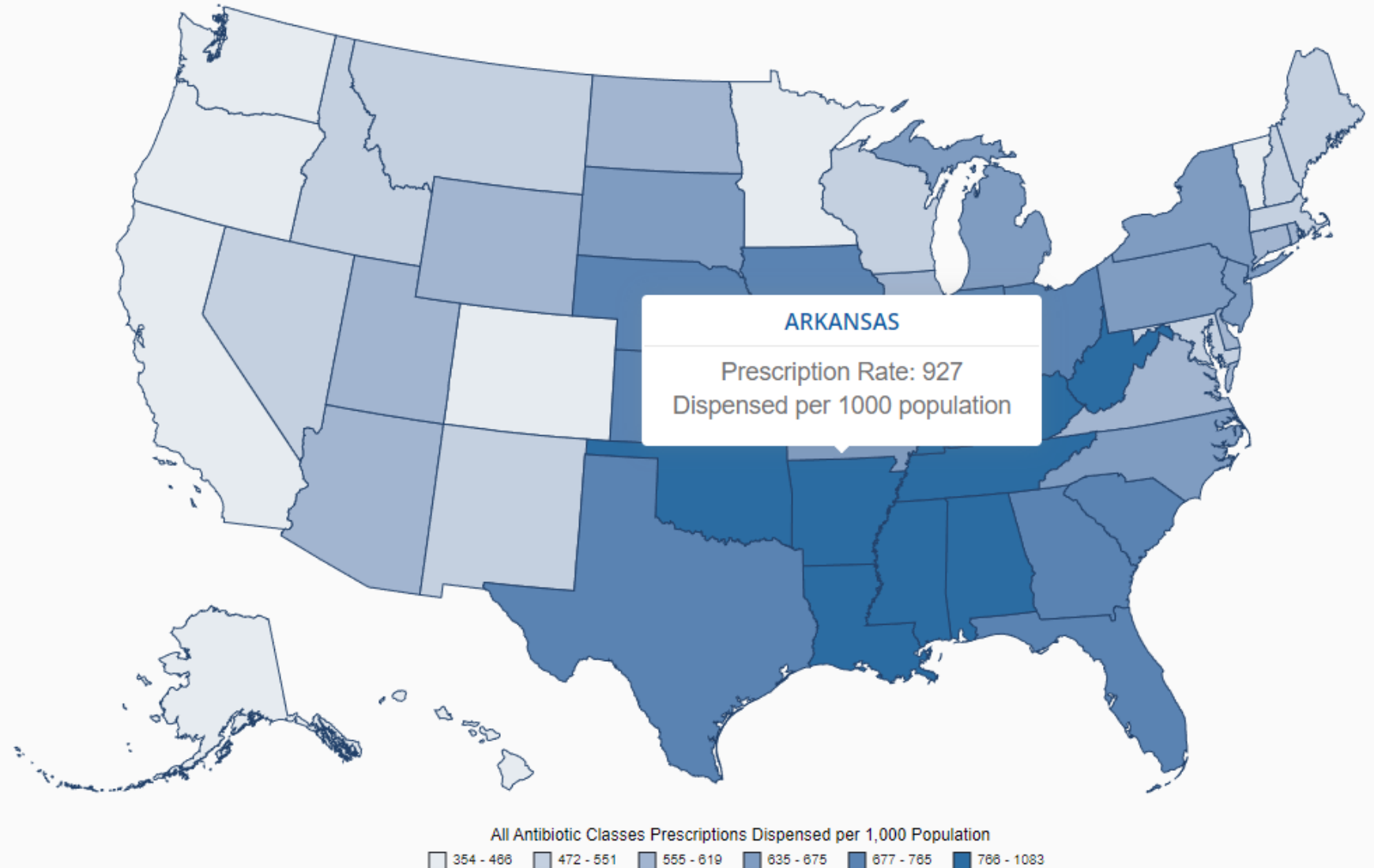
Pathogens listed with a ★ have been identified in Arkansas from HAI reports

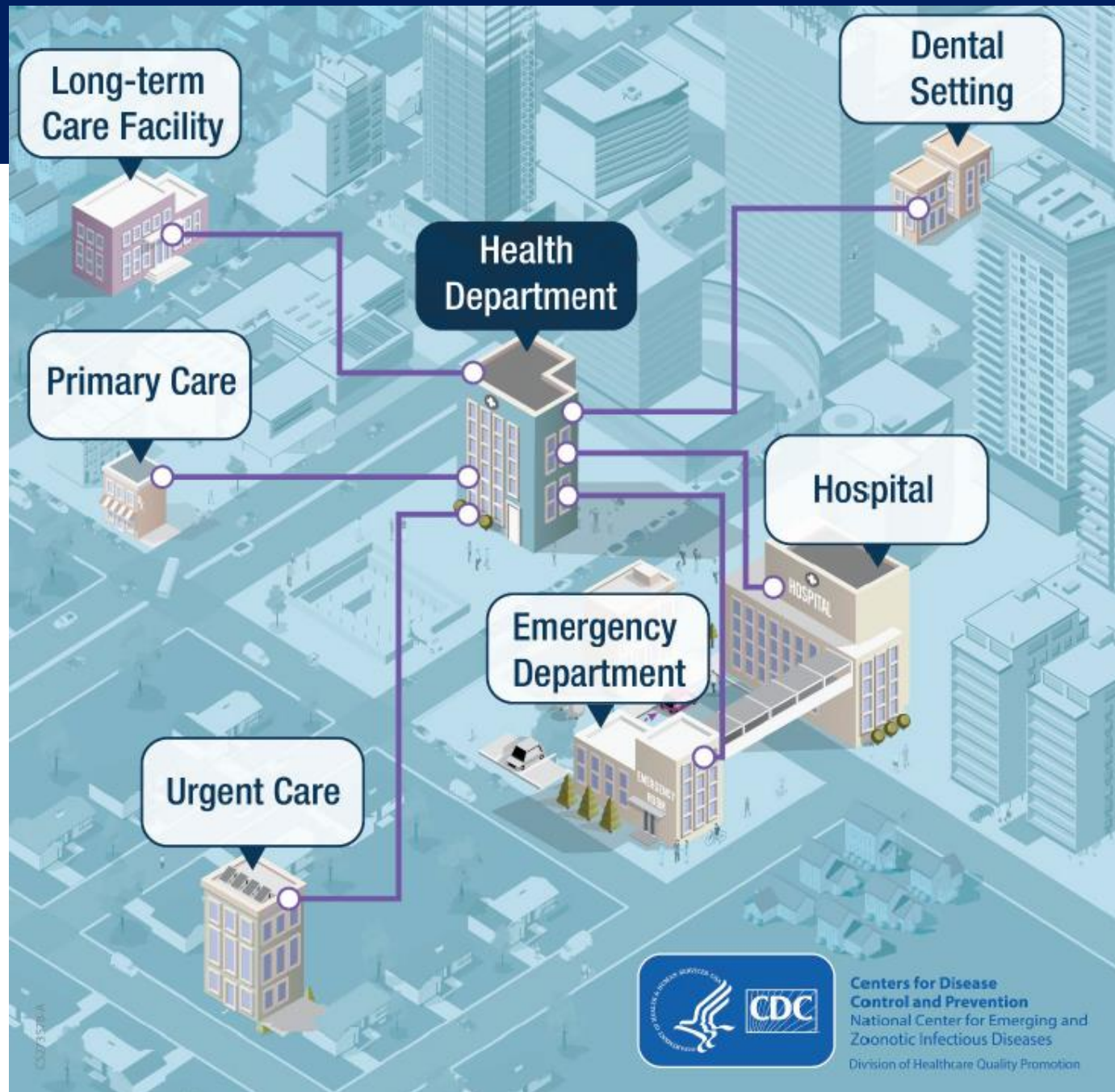


Oral antibiotic prescriptions dispensed in outpatient pharmacies in 2021



- National average: 636
- Arkansas ranks as the 6th highest prescribing state





SHARP Antibiotic Stewardship Hospital Activities



- Analyze Arkansas antibiotic use data and report trends and correlations to describe targeted areas for education.
 - Data pulled from NHSN AUR and Arkansas All-Payer Claims Database (APCD)
- Increase to 50 SASI visits per year focused on Hospital and Long-Term Care setting
 - Priority given to hospitals who report not meeting all 7 core elements on NHSN Annual Survey
 - Serve as resource network connecting stewardship leads to address common barriers

SHARP Antibiotic Stewardship Outpatient Activities



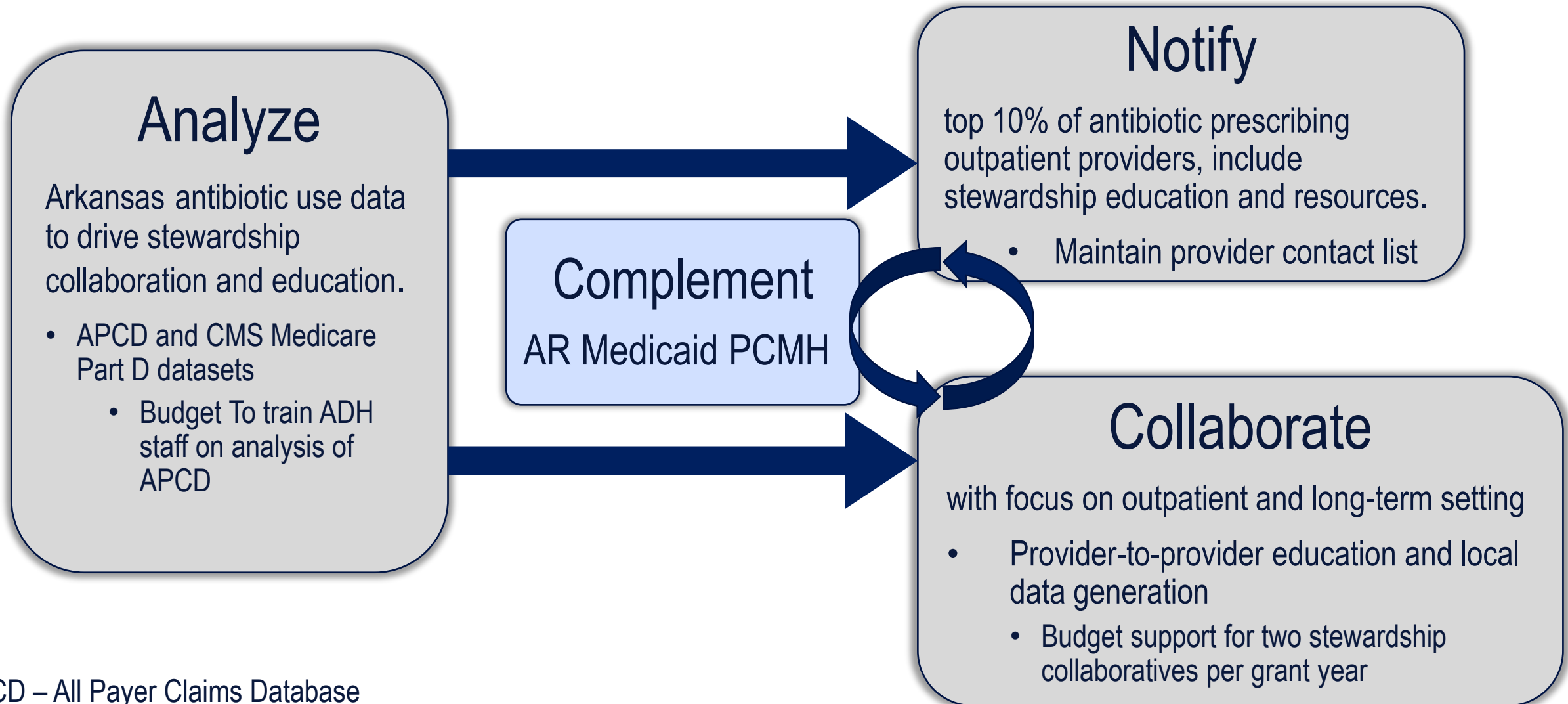
- Analyze Arkansas antibiotic use data and report trends and correlations to describe targeted areas for education.
 - APCD and CMS Medicare Part D datasets
 - Funding received for training of ADH staff on analysis of APCD
- Notify outpatient providers who are identified as the top 5% of antibiotic prescribers and include outpatient stewardship education resources
- Maintain contact list of outpatient providers prescribing antibiotics
 - Initial focus on top 5% of antibiotic prescribers
- Innovative antibiotic stewardship collaboratives focusing on outpatient and long-term care setting
 - Support for two stewardship collaboratives per grant year
 - Each to be awarded \$50,000

SHARP Antibiotic Stewardship Long Term Care Activities



- Conduct survey of Long-Term Care facilities to evaluate status of stewardship implementation
- Increase to 50 SASI visits per year focused on Hospital and Nursing Home settings
 - Priority given to LTC facilities who do not meet all 7 core elements per HAI generated ICAR and survey data.
 - F881 CMS citations and presence of MDRO outbreak will also be used to prioritize visits
- Innovative antibiotic stewardship collaboratives focusing on outpatient and long-term care setting
 - Support two stewardship collaboratives per grant year
 - Each to be awarded \$50,000

Outpatient Antibiotic Stewardship Activities



APCD – All Payer Claims Database

PCMH – Patient Centered Medical Home

Hospital Pharmacist Needs Assessment Survey



- Follows the 2017 needs assessment survey
- Currently in final drafting stages
- Expected release date December '23 – January '24
- Responses are used to guide statewide stewardship efforts

19. Are the pharmacy staff actively engaged in assisting the lead stewardship pharmacist with ASP activities?				<input type="radio"/> Yes <input type="radio"/> No	reset
Activity examples: documentation of indications for antibiotics, automatic changes from IV to oral antibiotic therapy, dose adjustments, dose optimization, duplicative therapy alerts, time-sensitive automatic stop orders, or detection and prevention of antibiotic-related drug-drug interactions.					
Question 20 a-c. Do pharmacists at your institution have the authority to make renal dose adjustments, engage in therapeutic drug monitoring of antibiotics, and/or enter stop dates on antibiotic orders?					
	Can automatically adjust	Only make adjustment recommendations to the physician	None		
20a. Renal Dose Adjustments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		reset
20b. Therapeutic Drug Monitoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		reset
20c. Antibiotic Order Stop Dates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		reset
Question 21 a-b. Do pharmacists at your institution have the authority to order labs for adverse event monitoring and de-escalation purposes?					
	Can automatically order	Only make recommendations to the physician to order	None		
21a. Adverse Event Monitoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		reset
21b. De-escalation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		reset
Question 22 a-k. At your institution, do pharmacists perform these inpatient antimicrobial stewardship activities on a weekly basis?					

Antimicrobial Stewardship - Actions

Assessment Element	Assessment	Notes/Assessment recommendation
<p>1. * Facility-specific treatment recommendations in place, based on national guidelines and local pathogen susceptibilities, to assist with antibiotic selection for common clinical conditions (urinary tract infections, community acquired pneumonia, etc.)</p> <p>a. Facility regularly updates guidelines based on updated antimicrobial susceptibility data or updated national guidelines.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	Click or tap here to enter text.
<p>2. Facility has specific interventions (correct discharge duration of therapy, tailoring therapy to culture results, etc.) to ensure optimal use of antibiotics for treating the most common infections.</p> <p>a. Lower respiratory tract infection</p> <p>b. Urinary tract infections</p> <p>c. Skin and soft tissue infections</p> <p>d. Other</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	Click or tap here to enter text.
<p>3. Facility has a written policy that requires documentation of a dose, duration, and indication for all prescribed antimicrobial orders during order entry.</p> <p>a. If yes, facility regularly monitors and documents adherence to this policy.</p> <p>b. Facility has written policy to require stop dates on prescribed antimicrobial orders.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	Click or tap here to enter text.

Statewide Antimicrobial Stewardship Initiative (SASI) Visits

These visits are:

- ✓ Non-regulatory
- ✓ Confidential
- ✓ Collaborative
- ✓ No Cost
- ✓ 100% voluntary
- ✓ On-site, face to face (approximately 1 – 1.5 hour time commitment)

What are the benefits of participating?

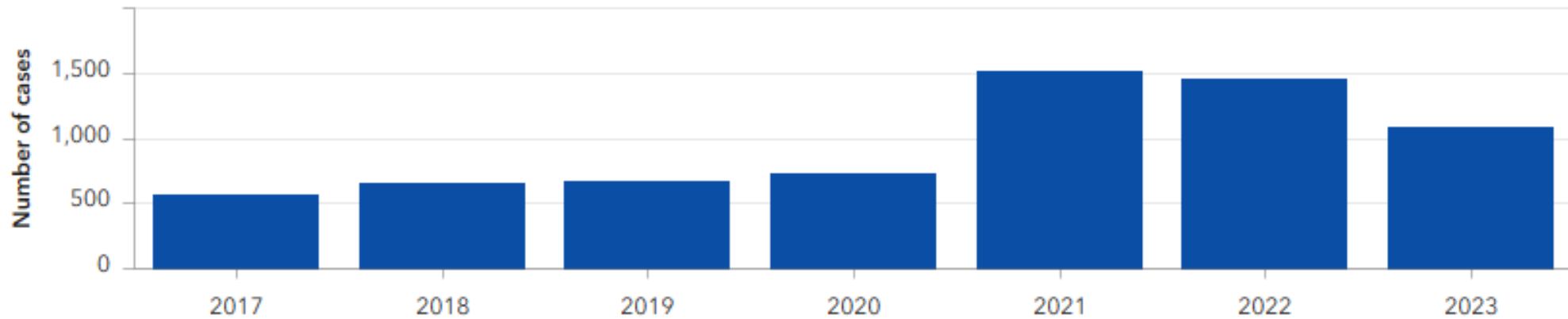
- Antimicrobial stewardship pharmacy consultant will lead the review
- Highlight the strengths of your antimicrobial stewardship program
- Provide any noted recommendations to help your program continue to grow
- Share antimicrobial stewardship resources compiled by our team
- Provide recommendations and opportunities for education with your medical staff
- Provide an outside voice of support for your program



Public Health Awareness - Syphilis



Total Syphilis Cases by Year

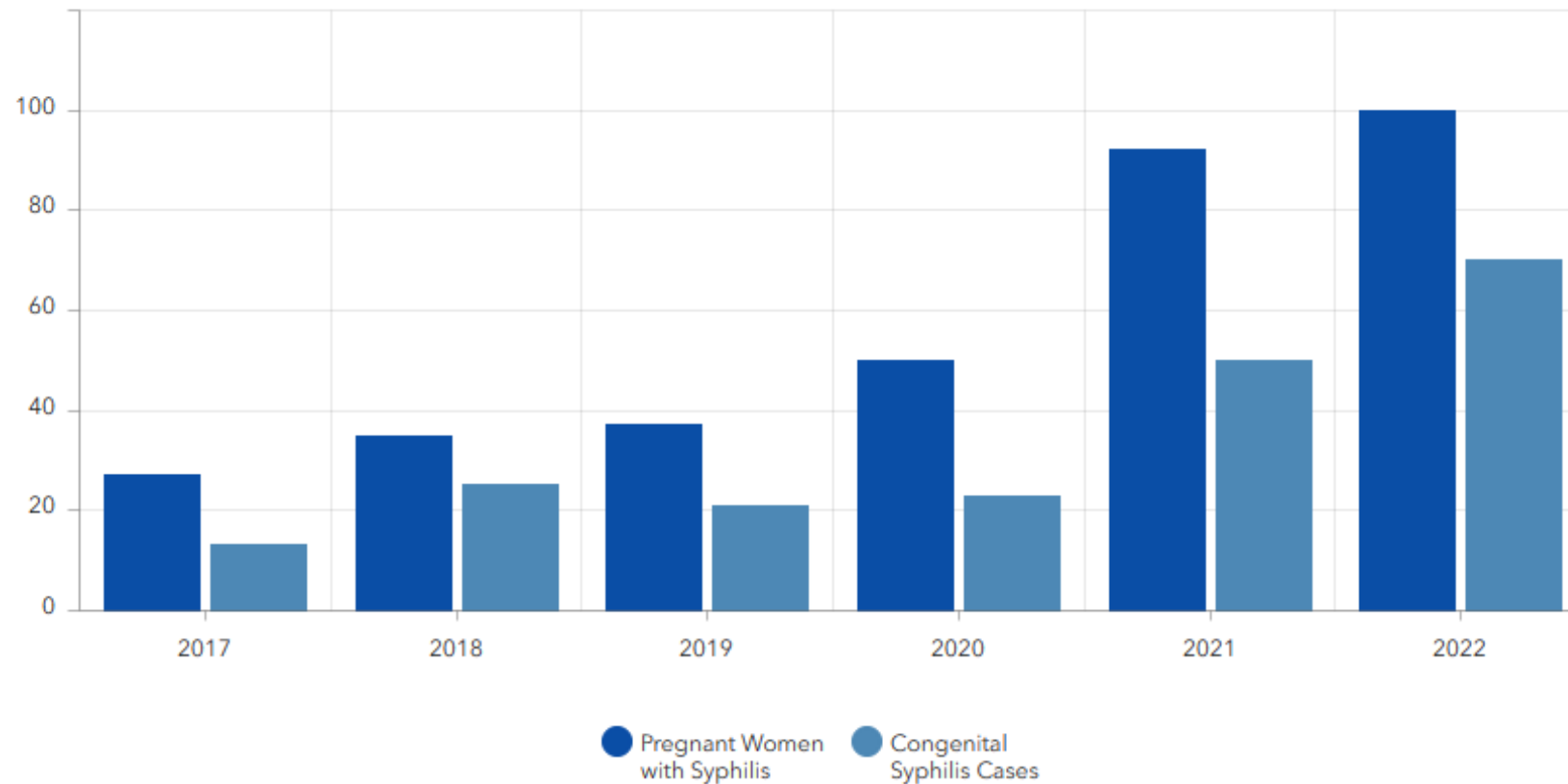


Syphilis Data Updated: October 25, 2023

Public Health Awareness - Syphilis



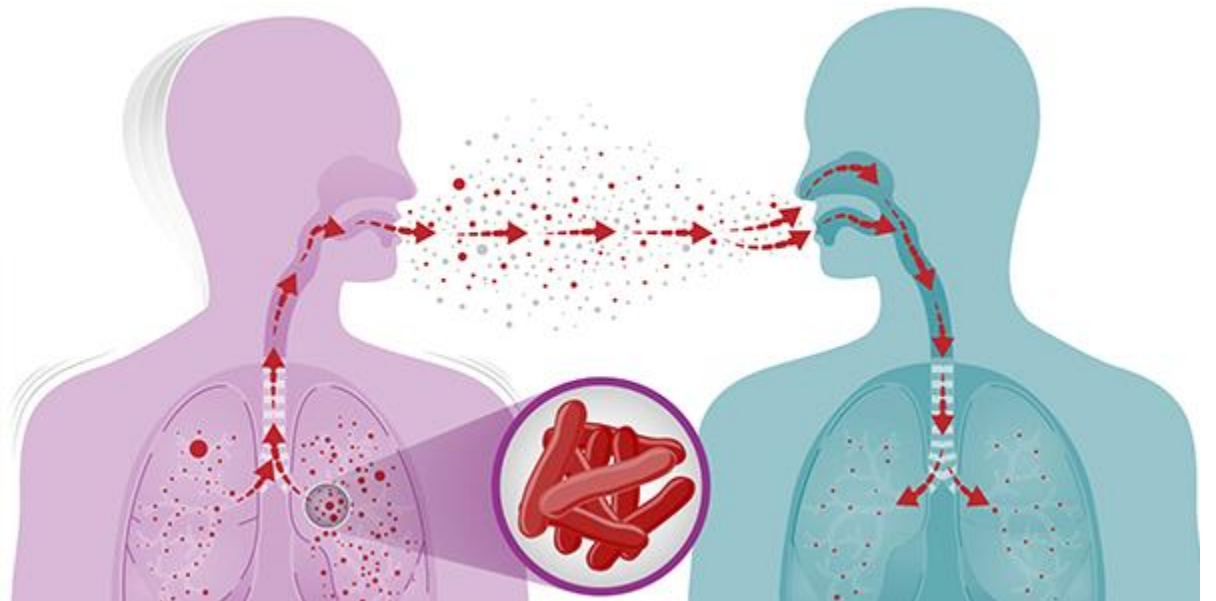
Number of Cases of Early Syphilis among Pregnant Women
and Cases of Congenital Syphilis by Year of Birth



Public Health Awareness -Tuberculosis



- Tuberculosis is a bacterial infection that has never gone away
- Most people think it only affects the lungs, but TB can be in many parts of the body
- TB spreads through droplets in the air when you cough, sneeze, laugh, or sing
- Symptoms:
 - Cough for 3 weeks or longer
 - Coughing up blood
 - Fever
 - Night sweats
 - Chest pain
 - Weight loss
 - Fatigue



TB in Arkansas



- There were 68 active (contagious) TB cases in Arkansas in 2022
- The number of cases in Arkansas is increasing every year



Outbreak data from a single county

- Began in 2021
 - 2021 – 4 active cases
 - 2022 – 4 active cases
 - 2023 – 19 active cases
 - 14 cases have already been hospitalized (4 were pediatric cases)

- If you have TB, the specialists at the Arkansas Department of Health are your medical providers
- Invite ADH to speak to your employees, coworkers, civic groups, and organizations by calling
 - 870-217-2500
 - Susan.Cooley@arkansas.gov

Syphilis

- Clinical consultation contact

Thomasine Kelley RN

Program Nurse Coordinator

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- Data and programmatic contact

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Kylie Chism, MPH

STI Epidemiologist

501-534-6123

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Tuberculosis

- Patients diagnosed with TB

- Treated by specialists at the ADH who server as the medical provider

- Invite ADH to speak on TB

Susan Cooley

Grants/Program Manager

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