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*Governor*



**Richard Whitley**  
*Director*

# State of Nevada Department of Health and Human Services

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Preventing the Emergence of Multidrug Resistance  
Through Antimicrobial Stewardship

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*Helping people. It's who we are and what we do.*

# Antibiotic Resistance

- Nevada has developed the Nevada Antimicrobial Stewardship Program (NV ASP) to tackle this issue. They are a collaborative group that is committed to helping organizations throughout Nevada on the journey of Antimicrobial Stewardship development. <https://www.nvasp.net/>.
- The Division of Public and Behavioral Health Healthcare Associated Infection (HAI) program also works with NV ASP to promote appropriate antibiotic use through trainings, and the development of an evaluation tool for healthcare facilities to monitor if they are meeting the CDC Core Elements, and providing education on carbapenem-resistant Enterobacteriaceae (CRE).
  - Regulations are also in development to make CRE a state-reportable condition in order to help us understand our rate of infection and increase efforts to decrease the spread of this extremely multidrug resistant organism in Nevada.

# Antibiotic Resistance Continued

- Nevada has developed systems to track antibiograms through state and local public health programs and the University of Nevada, Reno (UNR), School of Community Health Sciences. In partnership to antibiogram development, with funding from the Centers for Medicare and Medicaid Services (CMS), UNR developed tools to help skilled nursing facilities and other health care facilities assess the most appropriate antibiotic for the patient by age, diagnosis, and geographic region.
- The Nevada Division of Public and Behavioral Health's behavioral health hospitals have developed Antimicrobial Stewardship programs that align with the Joint Commission standards

# Antibiotic Resistance Continued

- Nevada conducted outpatient antibiotic stewardship outreach using Healthcare Effectiveness Data Information System (HEDIS) data to target the top 5% overprescribing prescribers for acute bronchitis infections and upper respiratory infections. Visits to outpatient facilities, dissemination of best practices and strategies recommended by the CDC were completed to aid in further reduction of antibiotics overprescribing.
  - 30 providers reached (6 in-person visits)
  - 15 for inappropriate prescribing of antibiotics for URI
  - 15 for inappropriate prescribing of antibiotics for Acute Bronchitis

# Antibiotic Resistance Continued

- One of the most innovative policies developed by DHHS to address antibiotic stewardship was the development of new policy for Medicaid in 2019. The policy requires prior authorization for third generation Cephalosporins, Fluoroquinolones, and Oxazolidinones. A summary can be found here: [https://www.medicaid.nv.gov/Downloads/provider/web\\_announcement\\_1751\\_20181121.pdf](https://www.medicaid.nv.gov/Downloads/provider/web_announcement_1751_20181121.pdf)

# The Medicaid Policy Opportunity for Antibiotic Stewardship

- Currently, we are overusing these classes of antibiotics and seeing serious levels of resistance. There is concern we may lose the ability to use these antibiotics when we truly need them.
- Appropriate prescribing of antibiotics help protect their availability for use in seriously ill patients.
- Our overall goal is that together, we can preserve our ability to save lives with antibiotics and begin to turn the tide of antibiotic resistance for Medicaid recipients.

# Why Outpatient Settings?

- U.S. National Action Plan for Combating Antibiotic Resistant Bacteria goal: reduce inappropriate antibiotic use in the outpatient setting by 50% by 2020.
- Estimates show 1 adverse drug event resulting in an emergency department visit occurs for every 1,000 outpatient antibiotic prescriptions.
- In 2015, 838 antibiotic prescriptions per 1,000 population were dispensed from U.S. community pharmacies.
- CDC's Core Elements of Outpatient Antibiotic Stewardship include Commitment, Action for Policy and Practice, Tracking and Reporting and Education.

# Why these antibiotic classes?

- Reductions in fluoroquinolones and cephalosporins are more likely to prevent C difficile infection.
  - A 10% decrease in outpatient prescription rates could result in a 17% decrease in C difficile infection rates.
- Fluoroquinolones are commonly used inappropriately in outpatient settings.
- In 2016, FDA updated warning on fluoroquinolones because they can have disabling and permanent side effects.
  - Recommended that fluoroquinolones be avoided in acute sinusitis, acute bronchitis and uncomplicated UTIs.
- Oxazolidinones - need to keep a close watch to see if there is any erosion in this class.
  - Reduce the development of drug-resistant bacteria and effectiveness of antibacterial drugs



# How This Plan Was Initiated



## *A Proclamation by the Governor*

**WHEREAS**, antibiotics are an important weapon against infectious bacterial diseases that can harm people of all ages and walks of life, and

**WHEREAS**, inappropriate use of antibiotics for viral infections and antibiotic overuse in the treatment of bacterial infections and colonization has led to an increase in multiple drug-resistant organisms, and

**WHEREAS**, antibiotic resistance has become a global threat to the health of all people, and infections with antibiotic resistant bacteria dramatically increase the cost and complexity of treating infections which previously were easily treated, and

**WHEREAS**, the U.S. Centers for Disease Control and Prevention, partnering with the European Union Antibiotic Awareness Day, the Nevada Division of Public and Behavioral Health, and the Nevada Antimicrobial Stewardship Program, are devoting resources to enhance public and healthcare professional awareness regarding the appropriate use of antibiotics; and

**WHEREAS**, the Nevada Antimicrobial Stewardship Program, in partnership with physician organizations, consumer groups, health plans, state and local public health organizations and pharmaceutical companies, is educating health professionals and consumers about the appropriate use of antibiotics; and

**WHEREAS**, these collaborative efforts seek to increase awareness about the overuse and misuse of antibiotics and work to prevent the increase and spread of antibiotic-resistant bacteria;

**NOW, THEREFORE, I, BRIAN SANDOVAL, GOVERNOR OF THE STATE OF NEVADA, do hereby proclaim** November 14-20, 2016

**GET SMART ABOUT ANTIBIOTICS WEEK IN NEVADA**

*In Witness Whereof, I have hereunto set my hand and caused the Great Seal of the State of Nevada to be affixed at the State Capitol in Carson City, this 24th day of October, 2016.*



A handwritten signature in blue ink, appearing to read "Brian Sandoval".



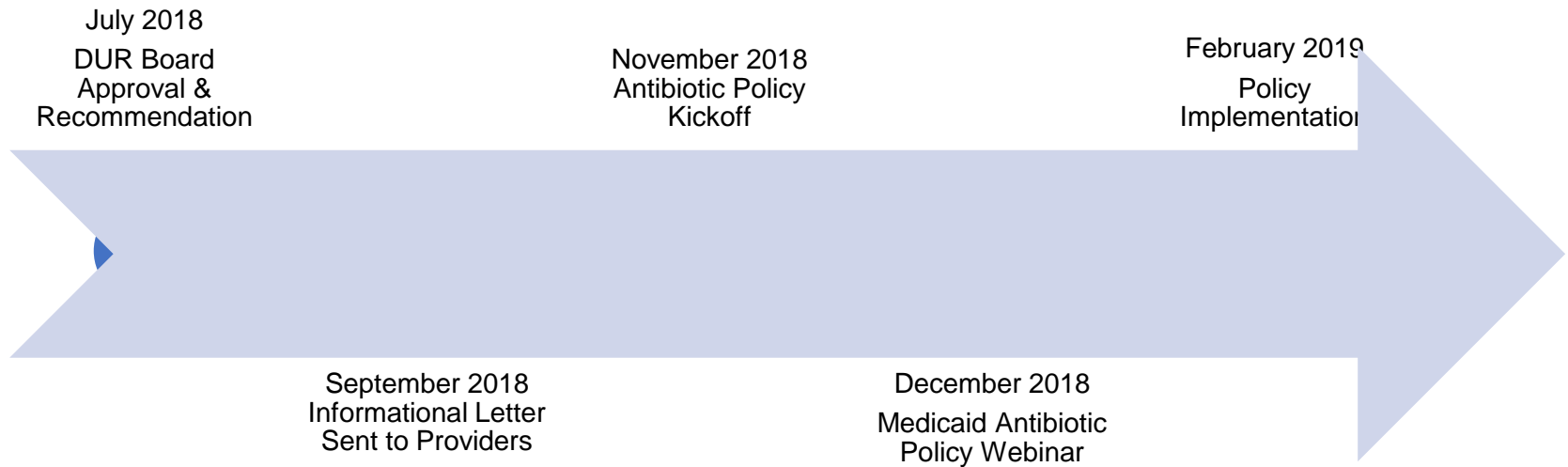
Centers for Disease Control and Prevention  
CDC 24/7: Saving Lives, Protecting People™



Nevada Division of Public and Behavioral Health (DPBH)



# Policy Implementation Timeline



# Antibiotic Policy/Antimicrobial Stewardship in Other States

- Oregon
  - AWARE
- Pennsylvania
  - Antibiotic Resistance Awareness Initiative
- New York
  - NY Be Antibiotics Awareness Team
- Idaho
- Massachusetts
- Illinois
- Vermont
  - Get Smart Vermont: Antibiotics Aren't Always the Answer
- Georgia
- South Dakota
- Utah
  - Utah Alliance Working for Antibiotic Resistance Education
- Texas

# Nevada Medicaid Antibiotic Policy

In 2019, Nevada Medicaid will require prior authorization for the following (outpatient antibiotic classes):

- 3rd generation cephalosporins – cefixime, cefdinir and cefpodoxime
- Fluoroquinolones – ciprofloxacin, levofloxacin, delafloxacin, moxifloxacin, and ofloxacin
- Oxazolidinones – tedizolid and linezolid

# Exception Criteria

- If prescribed by an infectious disease specialist or by an emergency department provider
- Ceftriaxone prescribed as first line treatment for gonorrhea, pelvic inflammatory disease, epididymo-orchitis and as an alternative to benzylpenicillin to treat meningitis for those with severe penicillin allergy
- If the recipient resides in acute care, long-term acute care (LTAC), or a skilled nursing facility (SNF).

# Antibiotic PA Form Example

Member Information (required)		Provider Information (required)	
Member Name:		Provider Name:	
Member ID#:		NPI #:	Specialty:
Date of Birth:		Office Phone:	
Street Address:		Office Fax:	
City:	State:	Zip:	Office Street Address:
Phone:		City:	State: Zip:
Medication Information (required)			
Medication Name:		Strength:	Dosage Form:
<input type="checkbox"/> Check if requesting brand <input type="checkbox"/> Check if request is for continuation of therapy		Directions for Use:	
Clinical Information (required)			
Select the diagnosis below:			
<input type="checkbox"/> Uncomplicated gonorrhea <input type="checkbox"/> Acute Bacterial Skin and Skin Structure Infection <input type="checkbox"/> Vancomycin-resistant enterococcus (VRE) faecium <input type="checkbox"/> Methicillin-resistant Staphylococcus aureus (MRSA) <input type="checkbox"/> Other diagnosis: _____ ICD-10 Code: _____			
<b>Clinical Information:</b>			
Does a culture and sensitivity (C&S) suggest susceptibilities to requested agent? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If Yes to the above, list the date of C&S: _____			
Is resistance to other first-line agents shown? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If Yes to the above, list other agents: _____			
Have other agents been used in prior therapy? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If Yes to the above, list other agents: _____			
Does the member have contraindications to alternative antibiotics? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Was treatment started with intravenous antibiotic(s) in the hospital and the recipient requires continued outpatient therapy? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Where will the recipient reside while on treatment? <input type="checkbox"/> Skilled Nursing Facility (SNF)			
<input type="checkbox"/> Acute Care <input type="checkbox"/> Long-term Acute Care (LTAC) <input type="checkbox"/> Outpatient or Other:			
Are there any other comments, diagnoses, symptoms, medications tried or failed, and/or any other information the prescriber feels is important to this review?			

# Prior Authorization Approval

## 3<sup>rd</sup> Generation Cephalosporins and Fluoroquinolones:

Approval will be provided if culture and sensitivity-proven susceptibilities and resistance to other agents suggest the requested antibiotic is necessary.

*\*\*Approval will be for a single course*

# Prior Authorization Approval

Oxazolidinones:

Approval will be provided if:

- Sivextro (tedizolid)
  - Appropriate diagnosis (ABSSSI)
  - Infection is caused by MRSA
  - Documented trial of or has a contraindication to an alternative antibiotic that the organism is susceptible to
  - Or the individual started treatment with intravenous antibiotics in the hospital and requires continued outpatient therapy
- Zyvox (linezolid)
  - Appropriate diagnosis (VRE or MRSA)
  - Documented trial of or has a contraindication to an alternative antibiotic to which the organism is susceptible; or
  - The individual started treatment with intravenous antibiotics in the hospital and requires continued outpatient therapy.

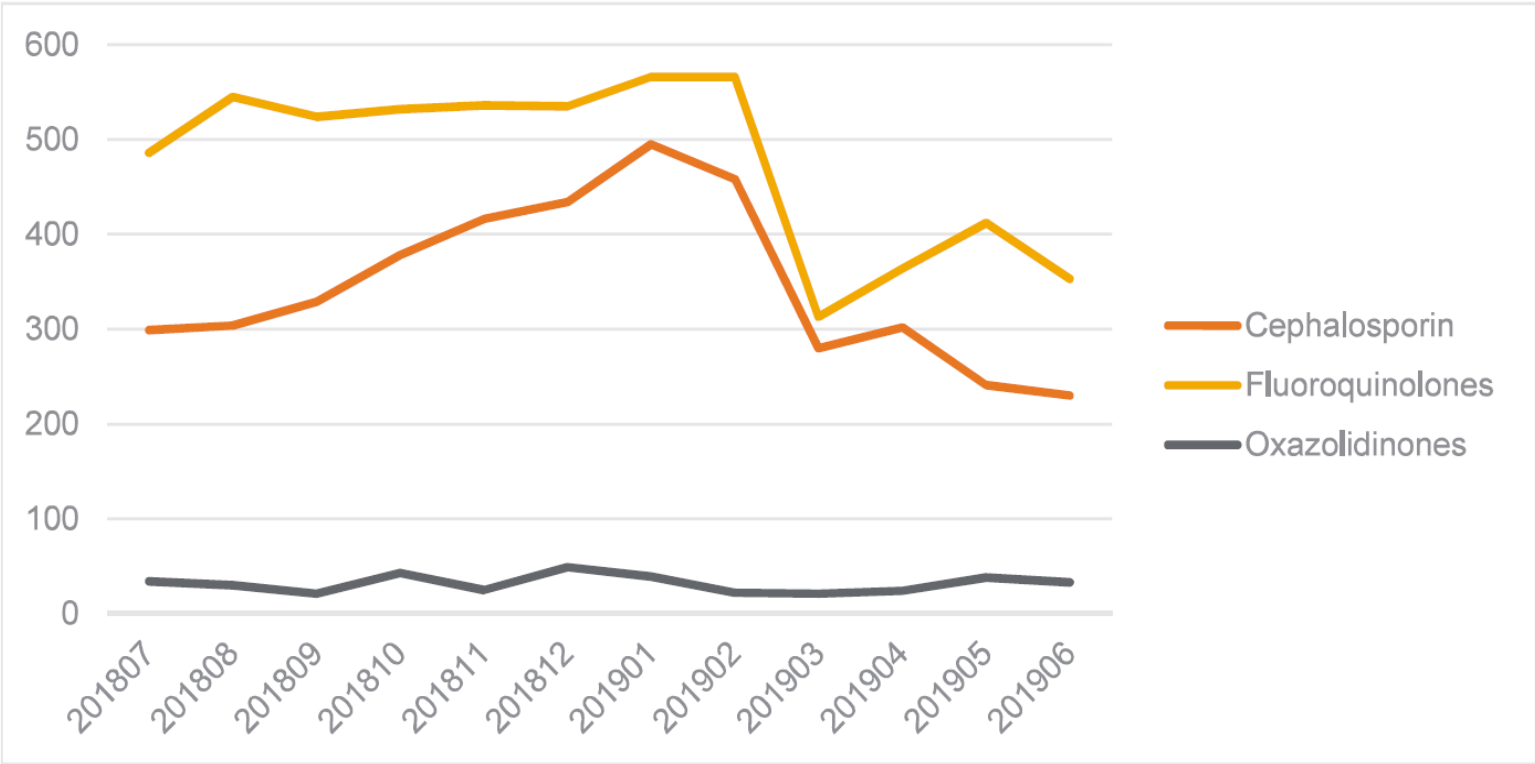
\*\*Approval will be for a single course



# Next Steps

- Capture baseline antibiotic utilization data
  - Continue to monitor quarterly
- Establish utilization monitoring tool
  - Prescribing rate separated by antibiotic class
    - Yearly average number of antibiotic prescription per member
    - Total days supplied for antibiotic prescriptions
- Evaluate policy for needed updates
  - DUR Board
- Establish antimicrobial resources and contacts

# Antibiotic Utilization: Fee-for-Services Medicaid, July 1, 2018 to June 30, 2019



\* PA Criteria effective March 4, 2019

# 6|18 Opportunity

Nevada was just awarded for technical assistance with support from the Robert Wood Johnson Foundation, the Center for Health Care Strategies (CHCS) and the Association for State and Territorial Health Officials (ASTHO) for Medicaid agencies and public health departments to indicate interest in receiving technical assistance to implement the CDC's 6|18 Initiative. This technical assistance (TA) offers a unique opportunity to help Medicaid and public health officials collaborate on cost-effective prevention interventions that have improved health and controlled costs on four high-burden health conditions: asthma, high blood pressure, inappropriate antibiotic use, and tobacco use.

# 6|18 Goals

- Decrease the use of antibiotics for Medicaid beneficiaries in both fee-for-service and managed care programs.
- Develop language for the managed care contracts that clearly define requirements for antibiotic use and payment criteria.
- Develop metrics for both the fee-for-service and managed care programs for tracking of antibiotic use.
- Develop a population-based measure to assess prescribing (ex: Healthy People 2020 goal of prescriptions per 100,000 population; or a visit-based prescribing rate, such as prescriptions per 100 outpatient visits).
- Assess the quality of antibiotic stewardship policies and programs within Nevada state-licensed health care facilities.

# CDC's Focus and Concerns

- Dedicated prevention and infection control efforts have helped reduce the number of infections and deaths caused by antibiotic-resistant germs in the United States.
- CDC used stronger methods and data sources to calculate several estimates, specifically for healthcare-associated germs. CDC has leveraged data to estimate the national burden of antibiotic resistance.
- CDC is concerned about rising resistant infections in the community. Rising infections in the community puts more people at risk and makes spread more difficult to identify and contain—and threatens the progress made to protect patients in health care. Rapid detection and prevention strategies have helped protect people from two community-associated germs (i.e. drug-resistant tuberculosis, drug-resistant *Streptococcus pneumoniae*), but a stronger focus and interventions are needed.
- The emergence and spread of new forms of resistance continues to alarm CDC experts, especially resistance shared among germs through genetic mobile elements (antibiotic-resistant germs can share their resistance genes with other germs and can make them untreatable). ESBL-producing Enterobacteriaceae, for example—which are on the rise in the community—can transfer resistance within the Enterobacteriaceae family, which includes germs that can cause common infections, such as urinary tract infections. Increased infection prevention domestically and abroad will help slow these new threats.

# CDC's Recommendations

- To stop antibiotic resistance, our nation must:
  - Stop referring to a coming post-antibiotic era—it's already here. You and I are living in a time when some miracle drugs no longer perform miracles and families are being ripped apart by a microscopic enemy. *The time for action is now and we can be part of the solution.*
  - Stop playing the blame game. Each person, industry and country can affect the development of antibiotic resistance. We each have a role to play and should be held accountable to make meaningful progress against this threat.
  - Stop relying only on new antibiotics that are slow getting to market and that, sadly, these germs will one day render ineffective. We need to adopt aggressive strategies that keep the germs away and infections from occurring in the first place.
  - Stop believing that antibiotic resistance is a problem “over there” in someone else's hospital, state or country—and not in our own backyard. *Antibiotic resistance has been found in every U.S. state and in every country across the globe. There is no safe place from antibiotic resistance, but everyone can take action against it.*  
Take action where you can, from handwashing to improving antibiotic use.

# Policy Options to Consider

- Expiration on antibiotic prescriptions
- Reporting of all prescriptions
  - Board of Pharmacy Prescription Monitoring Program
  - All Payer Claims Database (APCD)
- Public Health Improvement Fund/Flexible Public Health Funding

# Questions?



# Contact Information

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