

# SmartPA Criteria Proposal

<b>Drug/Drug Class:</b>	Penicillin Agents PDL Edit
<b>First Implementation Date:</b>	October 5, 2017
<b>Proposed Date:</b>	June 17, 2021
<b>Prepared For:</b>	MO HealthNet
<b>Prepared By:</b>	MO HealthNet/Conduent
<b>Criteria Status:</b>	<input checked="" type="checkbox"/> Existing Criteria <input type="checkbox"/> Revision of Existing Criteria <input type="checkbox"/> New Criteria

## Executive Summary

**Purpose:** The MO HealthNet Pharmacy Program will implement a state-specific preferred drug list.

**Why Issue Selected:** Penicillins are  $\beta$ -lactam antibiotics that are bactericidal by unknown mechanisms but perhaps by activating autolytic enzymes that destroy the cell wall in some bacteria. In general, penicillins are active against gram-positive bacteria (e.g. staphylococci, streptococci) and some gram-negative cocci (e.g. meningococci). Benzathine penicillin G intramuscularly is used to treat syphilis, while amoxicillin is a good all-purpose choice for treatment of susceptible infections in both adults and children. The second generation penicillins (ampicillin and amoxicillin) are broad spectrum penicillins distinguished by their coverage against gram negative bacilli. Amoxicillin is generally preferred over ampicillin because it is better absorbed, tastes good, has fewer gastrointestinal effects, and can be given less frequently. Some bacteria produce  $\beta$ -lactamases, which can inactivate these antibiotics; the addition of clavulanate helps retain the effectiveness of certain penicillins. Clavulanate extends the coverage spectrum of amoxicillin, making it more effective for more serious and resistant bacterial infections such as sinusitis, otitis, and lower respiratory tract infections. Dicloxacillin is especially useful in the treatment of penicillinase-producing staphylococci, such as methicillin-susceptible staphylococcus aureus. The Infectious Disease Society of America guidelines recommend various penicillin agents for different bacterial infections based on likely pathogens for the site of infection and range of coverage and possible resistance of those pathogens.

Total program savings for the PDL classes will be regularly reviewed.

Program-Specific Information:	Preferred Agents	Non-Preferred Agents
	<ul style="list-style-type: none"> <li>Amoxicillin</li> <li>Amox/Clav Susp/Tabs (excluding 250-62.5 mg/5 mL Susp)</li> <li>Ampicillin</li> <li>Bicillin® C-R Inj</li> <li>Penicillin VK</li> </ul>	<ul style="list-style-type: none"> <li>Amox/Clav 250-62.5 mg/5 mL Susp</li> <li>Amox/Clav Chew Tabs</li> <li>Amox/Clav XR Tabs</li> <li>Augmentin® Susp</li> <li>Augmentin XR®</li> <li>Dicloxacillin</li> </ul>

Type of Criteria:  Increased risk of ADE  
 Appropriate Indications

Preferred Drug List  
 Clinical Edit

Data Sources:  Only Administrative Databases

Databases + Prescriber-Supplied

## Setting & Population

- Drug class for review: Penicillin Agents
- Age range: All appropriate MO HealthNet participants

## Approval Criteria

- Failure to achieve desired therapeutic outcomes with trial on 3 or more preferred agents
  - Documented trial period for preferred agents **OR**
  - Documented ADE/ADR to preferred agents

## Denial Criteria

- Lack of adequate trial on required preferred agents
- Therapy will be denied if all approval criteria are not met

## Required Documentation

Laboratory Results:   
MedWatch Form:

Progress Notes:   
Other:

## Disposition of Edit

Denial: Exception Code "0160" (Preferred Drug List)  
Rule Type: PDL

## Default Approval Period

1 year

## References

1. Evidence-Based Medicine and Fiscal Analysis: "Penicillins – Therapeutic Class Review", Conduent Business Services, L.L.C., Richmond, VA; June 2021.
2. Evidence-Based Medicine Analysis: "Penicillin and Related Agents", UMKC-DIC; April 2021.
3. USPDI, Micromedex; 2021.
4. Facts and Comparisons eAnswers (online); 2021 Clinical Drug Information, LLC.