



SmartPA Criteria Proposal

Drug/Drug Class:	Penicillin Agents PDL Edit	
First Implementation Date:	October 5, 2017	
Proposed Date:	September 15, 2022	
Prepared For:	MO HealthNet	
Prepared By:	MO HealthNet/Conduent	
Criteria Status:	☑ Existing Criteria☐ Revision of Existing Criteria☐ New Criteria	

Executive Summary

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

Why Issue Selected: Penicillins are β-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 β-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:

С	Preferred Agents	Non-Preferred Agents
1:	Amoxicillin	 Amox/Clav 250-62.5 mg/5 mL Susp
	Amox/Clav Susp/Tabs (excluding 250-	Amox/Clav Chew Tabs
	62.5 mg/5 mL Susp)	Amox/Clav XR Tabs
	Ampicillin	Augmentin® Susp
	Bicillin® C-R Inj	Augmentin XR®
	Dicloxacillin	
	Penicillin VK	

Type of Criteria:	☐ Increased risk of ADE☐ Appropriate Indications	☑ Preferred Drug List☐ Clinical Edit		
Data Sources:	☐ Only Administrative Databases	☑ Databases + Prescriber-Supplied		
Setting & Popula	ation			
_	review: Penicillin Agents I appropriate MO HealthNet participants			
Approval Criteri	a			
 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				
	ate trial on required preferred agents e denied if all approval criteria are not met			
Required Docun	nentation			
Laboratory Resu MedWatch Form				
Disposition of Edit				
Denial: Exception Code "0160" (Preferred Drug List) Rule Type: PDL				
Default Approva	l Period			
1 year				

References

- Evidence-Based Medicine Analysis: "Penicillin and Related Agents", UMKC-DIC; June 2022.
- Evidence-Based Medicine and Fiscal Analysis: "Penicillins Therapeutic Class Review"-, Conduent Business Services, L.L.C., Richmond, VA; June 2021.
- USPDI, Micromedex; 2022.
- Facts and Comparisons eAnswers (online); 2022 Clinical Drug Information, LLC.