SmartPA Criteria

Proposal

Drug/Drug Class:	Antibiotics, Mupirocin Topical PDL Edit
First Implementation Date:	October 14, 2021
Revised Date:	January 12, 2023
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: The antibiotic mupirocin, also known as pseudomonic acid A, was first extracted from *Pseudomonas fluorescens*, a gram-negative, rod-shaped bacterium in 1971. Mupirocin exerts its effect of bacterial protein synthesis inhibition via reversible binding to bacterial isoleucyl-transfer RNA (tRNA) synthetase. It is most highly active against gram-positive bacteria including staphylococci and streptococci and has little activity against gram-negative bacteria. In 1987 mupirocin was initially available as Bactroban® ointment. All brand name Bactroban products have since been discontinued including the nasal ointment formulation which was available in single-use tubes for the eradication of nasal colonization with methicillin-resistant Staphylococcus aureus (MRSA) to reduce the risk of infection among high-risk patients during institutional outbreaks. Remaining available formulations include creams and ointments which are commonly used for the treatment of impetigo and other skin and skin structure infections due to susceptible strains of *Staphylococcus aureus* or *Streptococcus pyogenes*. Documentation of resistance has been noted and limiting duration of therapy to 10 days in most cases is recommended.

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

Program-Specific Information:

Preferred Agents	Non-Preferred Agents
• Mupirocin Oint	• Centany® • Centany® AT Oint Kit • Mupirocin Crm

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: Antibiotics, Mupirocin Topical
- Age range: All appropriate MO HealthNet participants

Approval Criteria

- Failure to achieve desired therapeutic outcomes with trial of 1 preferred agent in the past 3 months
  - Documented trial period of preferred agents
  - 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:	☐	Progress Notes:	☐
MedWatch Form:	☐	Other:	☐

Disposition of Edit

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

Default Approval Period

1 year

References

- Evidence-Based Medicine Analysis: “Antibiotic, Mupirocin Topical”, UMKC-DIC; April 2022.
- Evidence-Based Medicine and Fiscal Analysis: “Topical Antibiotics Mupirocin – Therapeutic Class Review”, Conduent Business Services, L.L.C., Richmond, VA; June 2021.
- Khoshnood, S., Heidary, M., Asadi, A., et. al. “A review on mechanism of action, resistance, synergism, and clinical implications of mupirocin against *Staphylococcus aureus*. Biomedicine and Pharmacotherapy. 109(2019) 1809-1818.
- Facts and Comparisons eAnswers (online); 2021 Clinical Drug Information, LLC.
- Clinical Pharmacology [online]. Tampa (FL): Elsevier. 2021. Available from: http://www.clinicalpharmacology.com