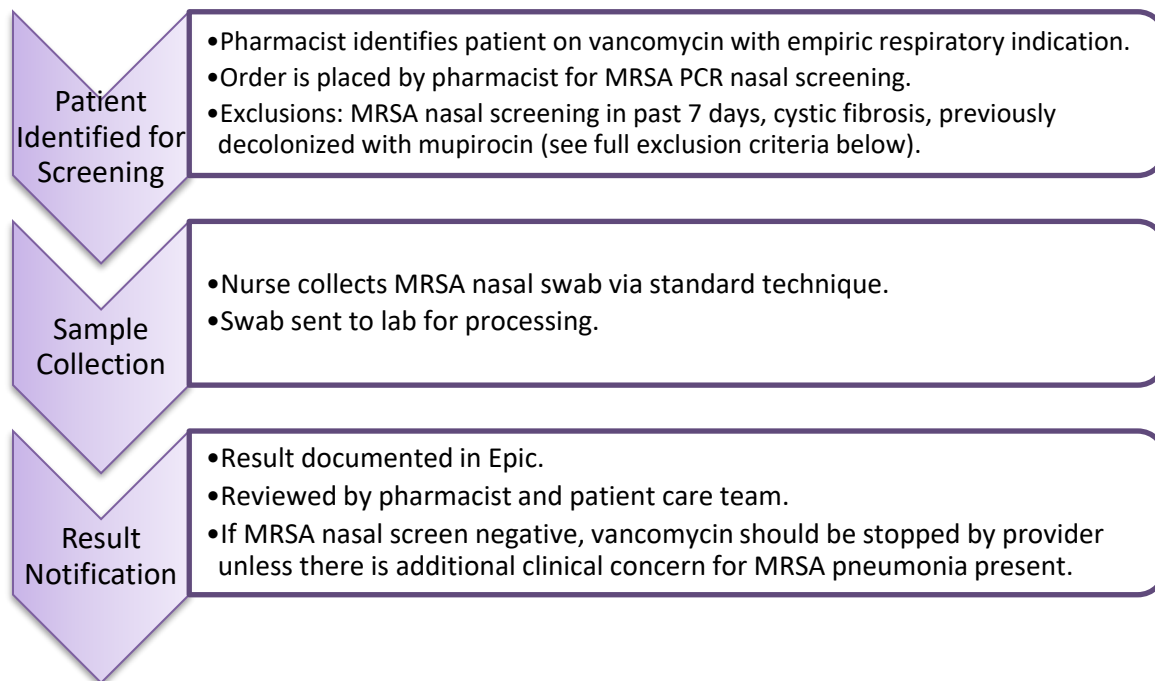


Pharmacist-driven MRSA PCR nasal screening for de-escalation of empiric vancomycin

Multiple studies have shown that MRSA pneumonia is highly unlikely in the absence of detectable MRSA in the nares, with a negative predictive value of >98%. Vancomycin can be safely discontinued in patients with a negative nasal MRSA screening with no clinical features to suggest MRSA as the etiology, with no adverse clinical outcomes. All patients admitted to medical or surgical unit will be screened for nasal MRSA if receiving vancomycin for suspected or confirmed pulmonary indication including but not limited to:

- hospital-acquired pneumonia (HAP),
- community-acquired pneumonia (CAP) or
- acute exacerbation of chronic obstructive pulmonary disease (AECOPD)



Exclusion criteria: Patients will be excluded from MRSA PCR nasal screening if any of the following conditions are met:

- MRSA screening in the previous 7 days
- Treated for MRSA infection in the last 30 days
- Structural lung disease (cystic fibrosis, bronchiectasis, etc.)
- Clinical presentation with high risk for MRSA (empyema, necrotizing lung infection)
- Previously de-colonized for nasal MRSA with mupirocin

MRSA nasal screen should be ordered within 48 hours of initiation of vancomycin therapy for any respiratory indication.

New start vancomycin with respiratory indication



Identify empiric vancomycin use for suspected MRSA pneumonia

Exclusion Criteria

- MRSA screening in the previous 7 days
- Treated for MRSA infection in the last 30 days
- Structural lung disease (cystic fibrosis, bronchiectasis, etc.)
- Clinical presentation with high risk for MRSA (empyema, necrotizing lung infection)
- Previously de-colonized for nasal MRSA with mupirocin

Inclusion Criteria

- Active vancomycin order
- Pulmonary Indication: CAP, HAP, or COPD exacerbation

Must meet all of the above criteria



Assessment for MRSA pneumonia

- Prior IV antibiotic use within previous 90 days of pneumonia
- Consider contacting provider to discuss need for empiric anti-MRSA therapy*

Anti-MRSA therapy unnecessary

Recommend to discontinue empiric anti-MRSA therapy



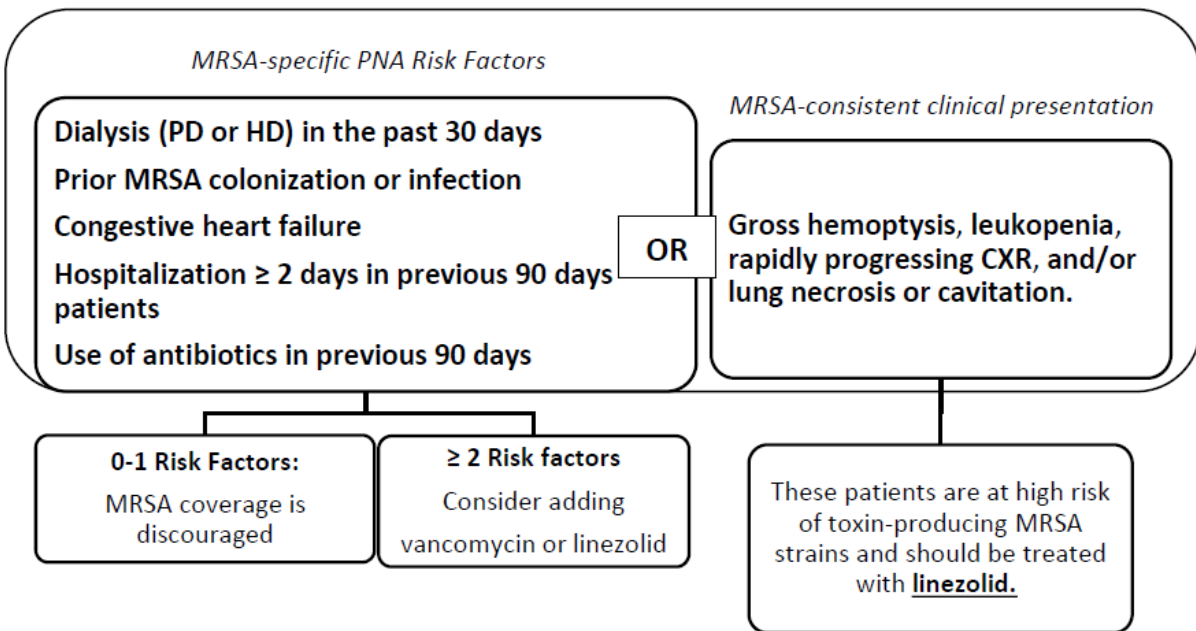
Order nasal MRSA PCR
if within 48 hours of initiating vancomycin
(Turn-around time: < 1 day)

Negative

- Recommend to provider to de-escalate empiric anti-MRSA therapy if clinical disposition does not suggest MRSA pneumonia
- Document intervention

Positive

- Continue empiric anti-MRSA therapy
- Follow-up pertinent labs and studies to re-assess need and duration of anti-MRSA therapy



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