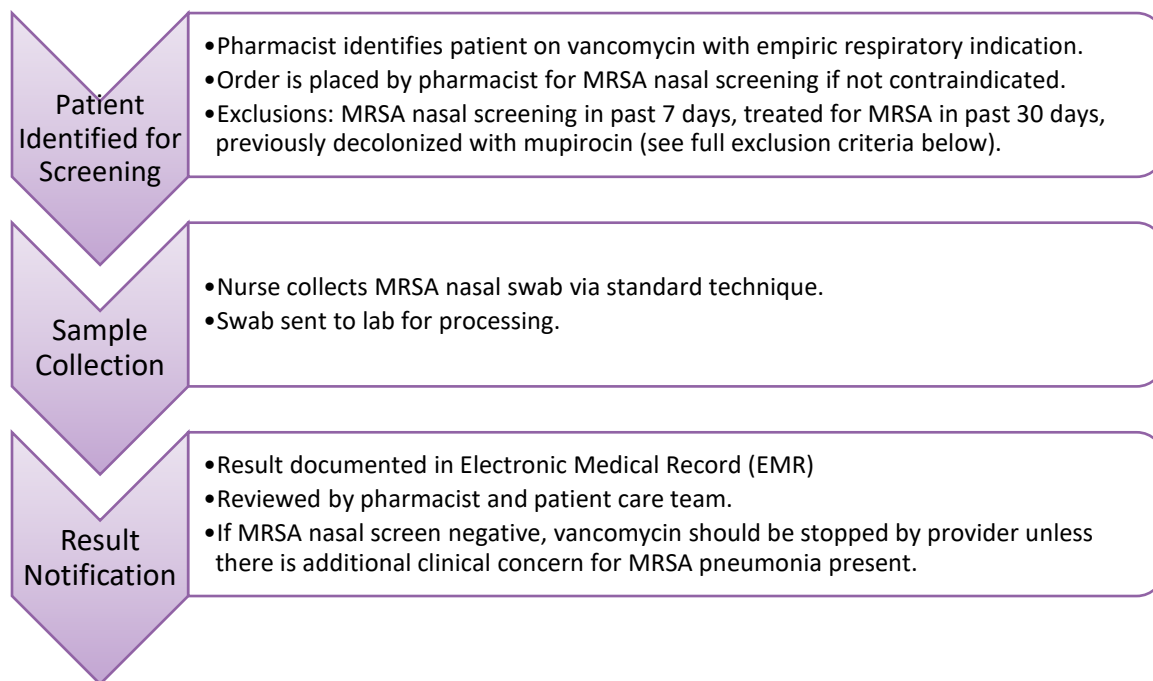


## Pharmacist-Driven MRSA Nasal Screening

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 with no adverse clinical outcomes in patients with a negative nasal MRSA screening and no clinical features to suggest MRSA as the etiology. All patients admitted to a medical, surgical, or critical care 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)
- sepsis with possible pneumonia source
- acute exacerbation of chronic obstructive pulmonary disease (AECOPD)



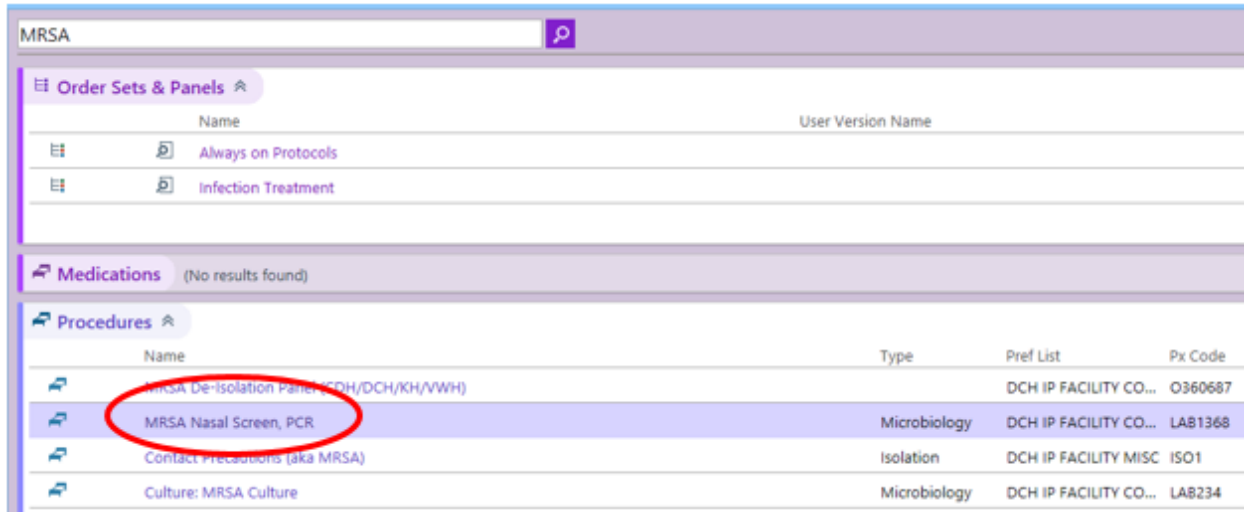
**Exclusion criteria:** Patients will be excluded from nasal MRSA screening if any of the following conditions are met:

- MRSA screening culture 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)
- De-colonized for nasal MRSA with mupirocin in previous 3 months
- Clinical status of patient would preclude discontinuation of vancomycin regardless of MRSA screen result

**MRSA nasal screen should be ordered within 48 hours of initiation of vancomycin therapy for any respiratory indication if no exclusion criteria present.**

## How to Order MRSA Nasal Screen in Epic:

- Type “MRSA” in the search field of Manage Orders in Epic
- Select the “MRSA nasal screen, PCR”:



The screenshot shows the Epic EMR interface with a search for 'MRSA'. The search results are organized into sections: 'Order Sets & Panels', 'Medications', and 'Procedures'. The 'Procedures' section is expanded, showing a list of procedures. The procedure 'MRSA Nasal Screen, PCR' is highlighted with a red circle. The table below represents the data shown in the 'Procedures' section.

Name	Type	Pref List	Px Code
MRSA De-Isolation Panel (CDH/DCH/KH/VWH)		DCH IP FACILITY CO...	O360687
<b>MRSA Nasal Screen, PCR</b>	Microbiology	DCH IP FACILITY CO...	LAB1368
Contact Precautions (aka MRSA)	Isolation	DCH IP FACILITY MISC	ISO1
Culture: MRSA Culture	Microbiology	DCH IP FACILITY CO...	LAB234

- **Frequency:** “Routine 1 time draw in AM”
- Leave default date/time
- Leave priority as “Routine”
- **Specimen src:** “Nasopharyngeal” (will automatically populate if you click on the search icon)
- Accept and sign order:
- **Order mode:** “Per Protocol”
- **Ordering Provider:** the physician managing the vancomycin order

## References:

Dangerfield B, et al. Predictive value of methicillin-resistant *Staphylococcus aureus* (MRSA) nasal swab PCR assay for MRSA pneumonia. *Antimicrob Agents Chemother* 2014; 58(2):859-64. doi: 10.1128/AAC.01805-13.

Doebbeling BN, et al. Long-term efficacy of intranasal mupirocin ointment. A prospective cohort study of *Staphylococcus aureus* carriage. *Arch Intern Med* 1994; 154(13):1505-8. PMID: 8018006

Parente DM, et al. The clinical utility of methicillin-resistant *Staphylococcus aureus* (MRSA) nasal screening to rule out MRSA pneumonia: a diagnostic meta-analysis with antimicrobial stewardship implications. *Clin Infect Dis* 2018; 67(1):1-7. doi: 10.1093/cid/ciy024.