Pharmacy Protocol: MRSA Nasal Screen for De-escalation of Anti-MRSA Therapy for Pneumonia

Purpose: Reduce days of therapy and contact to providers by ordering a MRSA nasal screen as a de-escalation tool in patients being treated empirically with anti-MRSA antibiotics for pneumonia

Inclusion criteria:

- Active anti-MRSA therapy for pneumonia including vancomycin or linezolid

Exclusion criteria:

- MRSA nasal screen obtained within the last 5 days
- Active systemic MRSA therapy administered for >72 hours
- Concomitant application of mupirocin cream to nares for MRSA decolonization, or within the past 48 hours
- Pediatric patients

Process:

- Provider orders vancomycin or linezolid for pneumonia
- At order verification, or during review, pharmacist will screen patient for inclusion/exclusion criteria and order MRSA nasal screen by PCR
- Route order "per protocol" to provider who entered the medication
- Per facility workflow, MRSA nasal screen result can be followed up by clinical teams for de-escalation as appropriate

Clinical pearls:

- Patients that previously received anti-MRSA therapy, testing sensitivity is likely reduced, and it may be prudent to consider respiratory cultures and patient's clinical response rather than MRSA nasal screen result alone
- A negative MRSA nasal screen cannot be extrapolated to definitively rule out infection outside of the respiratory tract
- In patients that are critically ill, it is reasonable to wait 48 hours for additional culture results or clinical improvement to guide de-escalation
- MRSA nasal screen has NOT been shown to have a high positive predictor value because of low correlation between rates of colonization and current MRSA infection

References:

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