

**Appendix Table 1. PERCH Quality Indicators that were evaluated monthly for each site**

<b>All Specimens</b>
1.0.1 Percentage of cases with all core specimens collected. (Core specimens for cases consist of blood, NP/OP swabs, urine, and induced sputum or gastric aspirate.)
1.0.1.1 Percentage of cases with all core specimens other than urine collected.
1.0.2 Percentage of controls with all core specimens collected. (Core specimens for controls consist of blood, urine, and NP/OP swabs.)
<b>Induced Sputum/Gastric Aspirates</b>
1.1.1 Percentage of cases with induced sputum collected within 24hrs among those without a contraindication.
1.1.2 Percent of induced sputum specimens that are of high quality.
<b>Blood Collection</b>
1.2.1 Percentage of cases with enrollment blood samples collected.
1.2.2 Percentage of cases enrolled 45+ days ago who had convalescent blood samples collected.
1.2.3.1 Percentage of cases with 30-day follow-up completed who had convalescent blood samples collected.
1.2.4 Percentage of controls with enrollment blood sample collected.
1.2.5 Percentage of blood cultures that were contaminated.
1.2.6 Percentage of blood cultures that were collected before antibiotics were administered at study hospital.
<b>NP/OP Swabs</b>
1.3.1 Percentage of cases with NP flocced, NP rayon, and oral swabs collected.
1.3.2 Percentage of controls with NP flocced, NP rayon and oral swabs collected.
<b>Lung Aspirate</b>
1.4.1 Percentage of cases whose CXR indicates eligible for lung aspirate, who have had lung aspirate collected (for sites collecting lung aspirate specimens).
1.4.2 Percentage of lung aspirates that yielded a bacterial pathogen by culture.
<b>Post Mortem Specimen</b>
1.5.1 Percentage of fatal cases that had a post mortem specimen collected <= 4hrs after death (for sites collecting post mortem specimens).
<b>Urine</b>
1.6.1 Percentage of cases that had urine specimens collected.
1.6.2 Percentage of controls that had urine specimens collected.
<b>CXR Quality Indicators</b>
1.7.1 Percentage of cases with chest x-ray done.
1.7.2 Percentage of films that were sufficient quality for a radiologist reading.

<b>Follow Up Assessments</b>
1.8.1 Percentage of cases discharged 24+ hrs after enrollment who have had 24hr limited clinical assessment completed.
1.8.2 Percentage of cases discharged 48+ hrs after enrollment who have had 48hr limited clinical assessment completed.
1.8.3 Percentage of cases admitted >30 days ago whose Case Discharge form indicates discharge alive, who have had 30 day vital status follow up form submitted.
1.8.4 Percentage of cases admitted >30 days ago whose Case Discharge form indicates discharge alive, who have had 30 day follow up interview conducted.
<b>Case logs and enrollment yield</b>
2.0.1 Percentage of patients meeting pre-screening criteria who are screened for PERCH.
2.0.2 Percentage of eligible severe pneumonia patients enrolled.
2.0.3 Percentage of eligible very severe pneumonia patients enrolled.
<b>Control logs and enrollment yield</b>
3.0.1 Percentage of minimum controls enrolled in the last 30 days.
<b>Specimen transport and handling</b>
4.0.1 Percent of Blood culture bottles inoculated and put into incubator within 24 h.
4.0.2 Percent of NP flocked + NP rayon + OP swabs collected and transported to laboratory within 8 h: Cases.
4.0.3.1 Percent of NP flocked + NP rayon + OP swabs collected and transported to laboratory within 8 h: Controls.
4.0.4 Percent of IS specimens collected and transported to laboratory within 24 h.
4.0.5 Percent of gastric aspirate specimens collected and transported to laboratory within 96 h.
4.0.6 Percent of lung aspirate specimens collected and transported to laboratory within 24 h.
4.0.7 Percent of pleural fluid specimens collected and transported to laboratory within 24 h.
4.0.8 Percent of NA extractions completed within 3 days of EDTA collection.
<b>Laboratory QA/QC</b>
5.0.1 Percent of clinical specimens rejected upon receipt at the laboratory (for reasons such as mislabeling, leakage, inappropriate transport etc.).
5.0.2 Pneumococci isolated from blood cultures.
5.0.3 Average volume of induced sputum specimen.
<b>Blood volumes</b>
5.1.1 Percent of blood culture bottles for which adequate volume for weight is obtained (1 mL if child's weight $\leq$ 1 kg; 2 mL if child's weight $>$ 1 kg).
5.1.2 Percent of cases with adequate volume of blood collected in EDTA-plasma tube #1 (0.5 mL expected).
5.1.2.1 Percent of cases with adequate volume of blood collected in EDTA-plasma tube #2 (1 mL if child's weight $<$ 3 kg; 1.5 mL if child's weight $\geq$ 3 kg).
5.1.3 Percent of controls with adequate volume of blood collected in EDTA-plasma tube #1 (2 mL expected).

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5.1.4 Percent of cases with adequate volume of blood collected in plain/red-top tube (0.5 mL if child's weight $\leq$ 1 kg; 1 mL if child's weight $>$ 1 kg).
5.1.5 Percent of controls with adequate volume of blood collected in plain/red-top tube (2 mL expected).
5.1.6 Percent of cases for which adequate convalescent (follow-up) serum volume is obtained (2 mL expected).
5.2.1 Percent of cases with a Pneumococcal positive blood culture who have serotype data available.
<b>Reporting of data and feedback plans</b>
6.0.1 Number of CRF 01s entered into EDC within one week of subject enrollment.
6.0.2 Percent of key clinical and lab CRFs entered into EDC within 2 weeks of subject enrollment.

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