Pneumonia Decision Support Tool Survey

Please complete the survey below.

Thank you!

Thank you for taking the time to complete this survey about your experience with the Pneumonia Decision Support Tool.

Your responses will provide valuable information to help us improve the tool and hopefully work better, faster, and more efficiently. Thanks again for your time.

1) How many years have you worked in the Emergency Department?
   ____________________________________

2) What is your age?
   [ ] 20-30  [ ] 31-40  [ ] 41-50  [ ] 51-60  [ ] 61-70  [ ] 70+

3) Gender:
   [ ] Male  [ ] Female

4) Click which Emergency Department you work the majority of your shifts in:
   [ ] Alta View Hospital  [ ] Intermountain Medical Center  [ ] LDS Hospital  [ ] Riverton Hospital
   [ ] Other

5) Estimate the number of patients you have managed with the Pneumonia Decision Support Tool:
   [ ] 0  [ ] 1-5  [ ] 6-10  [ ] 11-15  [ ] 16-20  [ ] More than 20

6) Rank your overall experience level using the Pneumonia Decision Support Tool:
   [ ] Beginner  [ ] Intermediate  [ ] Veteran  [ ] Expert

7) How many times have you used the “red cap” icon to access the Pneumonia Decision Support Tool?
   [ ] 0  [ ] 1-5  [ ] 6-10  [ ] 11-15  [ ] 16-20  [ ] More than 20 times

8) How were you most often notified that your patient was screened by the Pneumonia Decision Support Tool?
   [ ] PTS Board  [ ] RN  [ ] Scribe  [ ] Resident  [ ] Student  [ ] HUC  [ ] Other

9) Does the “P” alert on the PTS board help you to identify pneumonia patients earlier? 1 = not at all and 5 = very much so
   [ ] 1  [ ] 2  [ ] 3  [ ] 4  [ ] 5
10) Does "P" alert on the PTS board remind you to start and use the Pneumonia Decision Support Tool? 1 = not at all and 5 = very much so

☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5

11) How SENSITIVE do you think the screening tool is? That is 100% sensitivity = 100% of all pneumonia cases were captured by the screening tool

☐ 0%  ☐ 20%  ☐ 40%  ☐ 60%  ☐ 80%  ☐ 100%

12) How SPECIFIC do you think the screening tool is? That is 100% specific = all of the cases detected by the screening tool truly had pneumonia

☐ 0%  ☐ 20%  ☐ 40%  ☐ 60%  ☐ 80%  ☐ 100%

13) Do you feel the Pneumonia Decision Support Tool helped you to appropriately triage your patients? 1 = not at all and 5 = very much so

☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5

14) Do you feel the Pneumonia Decision Support Tool helped you to order the appropriate diagnostic studies for your patients? 1 = not at all and 5 = very much so

☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5

15) How useful was the Pneumonia Decision Support Tool in helping you to prescribe appropriate antibiotics for OUTPATIENTS? 1 = not at all useful and 5 = very useful

☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5

16) How useful was the Pneumonia Decision Support Tool in helping you to prescribe appropriate antibiotics for INPATIENTS? 1 = not at all useful and 5 = very useful

☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5

17) How frequently do you experience technical difficulties when using the Pneumonia Decision Support Tool? 1 = no technical difficulties and 5 = frequent technical difficulties

☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5

18) Did the Pneumonia Decision Support Tool negatively impact your ability to perform other tasks? 1 = not at all and 5 = very much so

☐ 1  ☐ 2  ☐ 3  ☐ 4  ☐ 5

19) Thank you for taking the time to complete this survey and for your valuable feedback! If you wish to be entered in the drawing for one of the 6 REI $50 gift certificates, please type your email. (Your contact information will not be connected to your survey response.)

____________________________________

20) Please provide comments or suggestions for improving the tool in the space provided. We intend to release version 1.5 with further improvements to the tool in 4 to 6 months.
Survey Methods and Results

Participants and Measurements

In November 2011, we emailed an online survey to 100 physicians practicing at one or more of the four participating emergency departments (EDs). The survey was available for 3 weeks through REDCap (Research Electronic Data Capture), a secure and confidential online questionnaire tool hosted by the University of Utah. The survey included categorical demographic questions, Likert-style questions, and an unstructured textbox question for comments and suggestions. The questions captured on a scale of 1 (“not at all”) to 5 (“very much so”) whether physicians found the alert mechanism and tool helpful for diagnosis, site-of-care, diagnostic testing, and antibiotic selection decisions. The survey captured whether the provider had technical difficulties or whether it negatively impacted their ability to perform other tasks. Physicians also provided estimates of the sensitivity and specificity of ePneumonia’s screening component. The entire survey is attached as a PDF.

Results

Survey results from ED physicians. Response rate 80%, final N = 72. Responses on a Likert scale (1 = not at all, 5 = very much so). Full questions and numbers are in Appendix A.

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Mean</th>
<th>Median</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening tool/alert system was helpful for:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifying pneumonia earlier</td>
<td>9</td>
<td>2.5</td>
<td>2</td>
</tr>
<tr>
<td>Reminding provider to use the tool</td>
<td>10</td>
<td>3.5</td>
<td>4</td>
</tr>
<tr>
<td>Sensitivity of alert system (%)</td>
<td>11</td>
<td>46%</td>
<td>40%</td>
</tr>
<tr>
<td>Specificity of alert system (%)</td>
<td>12</td>
<td>44%</td>
<td>50%</td>
</tr>
<tr>
<td>Overall usefulness of ePneumonia</td>
<td>13, 15, 16</td>
<td>3.8</td>
<td>4.0</td>
</tr>
<tr>
<td>ePneumonia was helpful for:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Ordering diagnostic studies</td>
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<td>3.10</td>
<td>3</td>
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<tr>
<td>Site-of-care decision</td>
<td>13</td>
<td>3.6</td>
<td>4</td>
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<tr>
<td>Outpatient antibiotics selection</td>
<td>15</td>
<td>3.5</td>
<td>4</td>
</tr>
<tr>
<td>Inpatient antibiotics selection</td>
<td>16</td>
<td>4.2</td>
<td>4</td>
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<tr>
<td>Provider experienced technical difficulties</td>
<td>17</td>
<td>2.3</td>
<td>2</td>
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<tr>
<td>Tool had a negative impact on other work</td>
<td>18</td>
<td>1.5</td>
<td>1</td>
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References