Advantages of using a nasal wash aspirate for viral specimens

Summary:
Point of care (POC) viral testing can greatly improve patient care by shortening diagnostic times, decreasing unneeded tests and antibiotics and expediting delivery of antivirals when appropriate.

There is much data that demonstrates improved accuracy of a POC test with nasal wash specimens (NWA). Compared with obtaining a nasal swab (NS) specimen correctly (placing to nasopharynx, turning three times), the NWA is more preferred and can loosen/remove congestion at the same time, something a swab cannot do. Additionally, since the NS can be so uncomfortable, it is often not performed properly, further decreasing the accuracy of its specimen.

Often, NWA are not universally available because suction and the collection components are not readily available or too expensive. CleaRinse™ PRO eliminates this barrier by providing compact access to a nasal wash system that is easy to use, comfortable for the patient, and able to provide a specimen for POC viral testing.

References demonstrating greater accuracy of nasal wash specimens over nasal swab:

   Detection of 7 common respiratory viruses by immunoassay:
   nasopharyngeal aspirate, 93% vs. nasal swab, 81%

   Detection of Influenza by immunoassay:
   Nasopharyngeal aspirate, 100% vs. nasal swab, 91%

   Overall sensitivity for detection of 5 viruses by immunoassay:
   nasopharyngeal aspirate, 60% vs. nasal swab, 43%

   Overall sensitivity for detection of 9 viruses by PCR:
   nasopharyngeal aspirate, 92% vs. 67%

Product labeling from the largest viral test manufacturers reiterate greater accuracy with nasal wash systems than nasal swab

Excerpt from ‘QuickVue’ IFU - point of care viral diagnostics from Quidel

<table>
<thead>
<tr>
<th>Sensitivity</th>
<th>fluA</th>
<th>fluB</th>
<th>RSV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swab</td>
<td>83%</td>
<td>62%</td>
<td>92%</td>
</tr>
<tr>
<td>Aspirate</td>
<td>86%</td>
<td>95%</td>
<td>99%</td>
</tr>
</tbody>
</table>

Excerpt from ‘BinaxNow’ IFU - point of care viral diagnostics from Alere

<table>
<thead>
<tr>
<th>Sensitivity</th>
<th>fluA/B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swab</td>
<td>70%</td>
</tr>
<tr>
<td>Aspirate</td>
<td>89%</td>
</tr>
</tbody>
</table>