Appendix 2: variables and proxies used for CPR validation

### All serious infections

<table>
<thead>
<tr>
<th>Variables used (original or proxy)</th>
<th>PREVALENCE</th>
<th>CHILDREN</th>
<th>N/N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yale Observation Scale (cutoff &gt; 10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van den Brul et al. (7)</td>
<td>No (no proxies or variables recorded)</td>
<td>Low</td>
<td>3981</td>
</tr>
<tr>
<td>Monteny et al. (23)</td>
<td>Yes</td>
<td>Low</td>
<td>506</td>
</tr>
<tr>
<td>Brent et al. (28)</td>
<td>Yes</td>
<td>Intermediate</td>
<td>2777</td>
</tr>
<tr>
<td>Roukema et al. (29)</td>
<td>No (no proxies or variables recorded)</td>
<td>Intermediate</td>
<td>1750</td>
</tr>
<tr>
<td>Bleeker et al. (26)</td>
<td>No (no proxies or variables recorded)</td>
<td>High</td>
<td>595</td>
</tr>
<tr>
<td>Thompson et al. (14)</td>
<td>Yes</td>
<td>High</td>
<td>700</td>
</tr>
<tr>
<td>Oostenbrink et al. (27)</td>
<td>No (no proxies or variables recorded)</td>
<td>High</td>
<td>593</td>
</tr>
</tbody>
</table>

### S-stage Decision Tree

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Childen</th>
<th>N/N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van den Brul et al. (7)</td>
<td>No (derivation dataset)</td>
<td>Low</td>
</tr>
<tr>
<td>Monteny et al. (23)</td>
<td>Yes</td>
<td>Low</td>
</tr>
<tr>
<td>Brent et al. (28)</td>
<td>Yes</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Roukema et al. (29)</td>
<td>Yes</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Bleeker et al. (26)</td>
<td>Yes</td>
<td>High</td>
</tr>
<tr>
<td>Thompson et al. (14)</td>
<td>Yes</td>
<td>High</td>
</tr>
<tr>
<td>Oostenbrink et al. (27)</td>
<td>No (2 variables not recorded)</td>
<td>High</td>
</tr>
</tbody>
</table>

### Clinical Diagnostic Model (Craig et al.)

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Childen</th>
<th>N/N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van den Brul et al. (7)</td>
<td>No (11 variables not recorded)</td>
<td>Low</td>
</tr>
<tr>
<td>Monteny et al. (23)</td>
<td>No (9 variables not recorded)</td>
<td>Low</td>
</tr>
<tr>
<td>Brent et al. (28)</td>
<td>No (1 variable not recorded)</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Roukema et al. (29)</td>
<td>No (1 variable not recorded)</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Bleeker et al. (26)</td>
<td>No (1 variable not recorded)</td>
<td>High</td>
</tr>
<tr>
<td>Thompson et al. (14)</td>
<td>No (1 variable not recorded)</td>
<td>High</td>
</tr>
<tr>
<td>Oostenbrink et al. (27)</td>
<td>No (2 variables not recorded)</td>
<td>High</td>
</tr>
</tbody>
</table>

### Pneumonia

#### Pneumonia Rule 1

<table>
<thead>
<tr>
<th>Variables used (original or proxy)</th>
<th>PREVALENCE</th>
<th>CHILDREN</th>
<th>N/N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van den Brul et al. (7)</td>
<td>No (derivation dataset)</td>
<td>Low</td>
<td>3981</td>
</tr>
<tr>
<td>Monteny et al. (23)</td>
<td>No (1 variable not recorded)</td>
<td>Low</td>
<td>506</td>
</tr>
<tr>
<td>Brent et al. (28)</td>
<td>No (1 variable not recorded)</td>
<td>Intermediate</td>
<td>2777</td>
</tr>
<tr>
<td>Roukema et al. (29)</td>
<td>No (1 variable not recorded)</td>
<td>Intermediate</td>
<td>1750</td>
</tr>
<tr>
<td>Bleeker et al. (26)</td>
<td>No (1 variable not recorded)</td>
<td>High</td>
<td>595</td>
</tr>
<tr>
<td>Thompson et al. (14)</td>
<td>No (1 variable not recorded)</td>
<td>High</td>
<td>700</td>
</tr>
<tr>
<td>Oostenbrink et al. (27)</td>
<td>No (2 variables not recorded)</td>
<td>High</td>
<td>593</td>
</tr>
</tbody>
</table>

#### Pneumonia Rule 2

<table>
<thead>
<tr>
<th>Variables used (original or proxy)</th>
<th>PREVALENCE</th>
<th>CHILDREN</th>
<th>N/N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van den Brul et al. (7)</td>
<td>No (derivation dataset)</td>
<td>Low</td>
<td>3981</td>
</tr>
<tr>
<td>Monteny et al. (23)</td>
<td>Yes</td>
<td>Low</td>
<td>506</td>
</tr>
<tr>
<td>Brent et al. (28)</td>
<td>Yes</td>
<td>Intermediate</td>
<td>2777</td>
</tr>
<tr>
<td>Roukema et al. (29)</td>
<td>Yes</td>
<td>Intermediate</td>
<td>1750</td>
</tr>
<tr>
<td>Bleeker et al. (26)</td>
<td>Yes</td>
<td>High</td>
<td>595</td>
</tr>
<tr>
<td>Thompson et al. (14)</td>
<td>Yes</td>
<td>High</td>
<td>700</td>
</tr>
<tr>
<td>Oostenbrink et al. (27)</td>
<td>No (1 variable not recorded)</td>
<td>High</td>
<td>593</td>
</tr>
</tbody>
</table>

### Meningitis

#### Meningitis Rule 1

<table>
<thead>
<tr>
<th>Variables used (original or proxy)</th>
<th>PREVALENCE</th>
<th>CHILDREN</th>
<th>N/N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van den Brul et al. (7)</td>
<td>Yes</td>
<td>Low</td>
<td>3981</td>
</tr>
<tr>
<td>Monteny et al. (23)</td>
<td>No (2 variables not recorded)</td>
<td>Low</td>
<td>506</td>
</tr>
<tr>
<td>Thompson et al. (14)</td>
<td>Yes</td>
<td>Low</td>
<td>700</td>
</tr>
<tr>
<td>Roukema et al. (29)</td>
<td>No (2 variables not recorded)</td>
<td>Low</td>
<td>1750</td>
</tr>
<tr>
<td>Bleeker et al. (26)</td>
<td>No (3 variables not recorded)</td>
<td>Low</td>
<td>595</td>
</tr>
<tr>
<td>Brent et al. (28)</td>
<td>Yes</td>
<td>Low</td>
<td>2777</td>
</tr>
<tr>
<td>Oostenbrink et al. (27)</td>
<td>Yes</td>
<td>High</td>
<td>593</td>
</tr>
</tbody>
</table>

#### Meningitis Rule 2

<table>
<thead>
<tr>
<th>Variables used (original or proxy)</th>
<th>PREVALENCE</th>
<th>CHILDREN</th>
<th>N/N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van den Brul et al. (7)</td>
<td>No (1 variable not recorded)</td>
<td>Low</td>
<td>3981</td>
</tr>
<tr>
<td>Monteny et al. (23)</td>
<td>No (1 variable not recorded)</td>
<td>Low</td>
<td>506</td>
</tr>
<tr>
<td>Thompson et al. (14)</td>
<td>No (1 variable not recorded)</td>
<td>Low</td>
<td>700</td>
</tr>
<tr>
<td>Roukema et al. (29)</td>
<td>No (1 variable not recorded)</td>
<td>Low</td>
<td>1750</td>
</tr>
<tr>
<td>Bleeker et al. (26)</td>
<td>No (2 variables not recorded)</td>
<td>Low</td>
<td>595</td>
</tr>
<tr>
<td>Brent et al. (28)</td>
<td>No (1 variable not recorded)</td>
<td>Low</td>
<td>2777</td>
</tr>
<tr>
<td>Oostenbrink et al. (27)</td>
<td>No (1 variable not recorded)</td>
<td>High</td>
<td>593</td>
</tr>
</tbody>
</table>

### Dehydration from gastroenteritis

<table>
<thead>
<tr>
<th>Variables used (original or proxy)</th>
<th>PREVALENCE</th>
<th>CHILDREN</th>
<th>N/N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van den Brul et al. (7)</td>
<td>No (2 variables not recorded)</td>
<td>Low</td>
<td>3981</td>
</tr>
<tr>
<td>Monteny et al. (23)</td>
<td>No (2 variables not recorded)</td>
<td>Low</td>
<td>506</td>
</tr>
<tr>
<td>Brent et al. (28)</td>
<td>No (2 variables not recorded)</td>
<td>Intermediate</td>
<td>2777</td>
</tr>
<tr>
<td>Roukema et al. (29)</td>
<td>No (2 variables not recorded)</td>
<td>Intermediate</td>
<td>1750</td>
</tr>
<tr>
<td>Bleeker et al. (26)</td>
<td>No (2 variables not recorded)</td>
<td>High</td>
<td>595</td>
</tr>
<tr>
<td>Thompson et al. (14)</td>
<td>No (2 variables not recorded)</td>
<td>High</td>
<td>700</td>
</tr>
<tr>
<td>Oostenbrink et al. (27)</td>
<td>No (2 variables not recorded)</td>
<td>High</td>
<td>593</td>
</tr>
</tbody>
</table>

### Gastroenteritis rule

<table>
<thead>
<tr>
<th>Variables used (original or proxy)</th>
<th>PREVALENCE</th>
<th>CHILDREN</th>
<th>N/N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Van den Brul et al. (7)</td>
<td>No (2 variables not recorded)</td>
<td>Low</td>
<td>3981</td>
</tr>
<tr>
<td>Monteny et al. (23)</td>
<td>No (2 variables not recorded)</td>
<td>Low</td>
<td>506</td>
</tr>
<tr>
<td>Brent et al. (28)</td>
<td>No (2 variables not recorded)</td>
<td>Intermediate</td>
<td>2777</td>
</tr>
<tr>
<td>Roukema et al. (29)</td>
<td>No (2 variables not recorded)</td>
<td>Intermediate</td>
<td>1750</td>
</tr>
<tr>
<td>Bleeker et al. (26)</td>
<td>No (2 variables not recorded)</td>
<td>High</td>
<td>595</td>
</tr>
<tr>
<td>Thompson et al. (14)</td>
<td>No (2 variables not recorded)</td>
<td>High</td>
<td>700</td>
</tr>
<tr>
<td>Oostenbrink et al. (27)</td>
<td>No (2 variables not recorded)</td>
<td>High</td>
<td>593</td>
</tr>
</tbody>
</table>