
### APPENDIX 1. Definitions of appropriateness of antimicrobial therapy in hospitals, developed by the National Antimicrobial Prescribing Survey (https://www.naps.org.au). Reproduced by permission.

<table>
<thead>
<tr>
<th>Appropriate</th>
<th>Inappropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 Optimal</strong></td>
<td><strong>3 Suboptimal</strong></td>
</tr>
<tr>
<td>Antimicrobial prescription follows endorsed local/ regional/ provincial guidelines optimally, including antimicrobial choice, dosage, route and duration.</td>
<td>Antimicrobial prescription (including antimicrobial choice, dosage, route and duration) is an unreasonable choice for the likely causative or cultured pathogens.</td>
</tr>
<tr>
<td><strong>2 Adequate</strong></td>
<td><strong>4 Inadequate</strong></td>
</tr>
<tr>
<td>Antimicrobial prescription does not optimally follow the endorsed local/ regional/ provincial guidelines (including antimicrobial choice, dosage, route or duration) however, is a reasonable alternative choice for the likely causative or cultured pathogens.</td>
<td>Antimicrobial prescription (including antimicrobial choice, dosage, route and duration) is unlikely to treat the likely causative or cultured pathogens.</td>
</tr>
<tr>
<td><strong>5 Not assessable</strong></td>
<td></td>
</tr>
<tr>
<td>The indication is not documented and unable to be determined from the notes.</td>
<td></td>
</tr>
<tr>
<td>The notes are not comprehensive enough to assess appropriateness.</td>
<td></td>
</tr>
<tr>
<td>The patient is too complex due to multiple co-morbidities, allergies or microbiology results, etc.</td>
<td></td>
</tr>
</tbody>
</table>

*Guideline* NAPS appropriate definitions

- If endorsed guidelines are present
- If endorsed guidelines are absent

- The antimicrobial prescription has been reviewed and endorsed by an infectious diseases specialist or a clinical microbiologist.
- The prescribed antimicrobial will cover the likely causative or cultured pathogens and there is not a narrower spectrum or more appropriate antimicrobial choice, dosage, route or duration available.

- Antimicrobial prescription (including antimicrobial choice, dosage, route and duration) is not the most optimal, however, is a reasonable alternative choice for the likely causative or cultured pathogens.
- For surgical prophylaxis, as above and duration is less than 24 hours.

- There may be a mild or non-life-threatening allergy mismatch.
- Antimicrobial prescription (including antimicrobial choice, dosage, route and duration) is an unreasonable choice for the likely causative or cultured pathogens, including:
  - Spectrum excessively broad, unnecessary overlap in spectrum of activity, dosage excessively high or duration excessively long
  - Failure to appropriately de-escalate with microbiological results.
- Antimicrobial prescription (including antimicrobial choice, dosage, route and duration) is unlikely to treat the likely causative or cultured pathogens.
- The documented or presumed indication does not require any antimicrobial treatment.
- There may be a severe or possibly life-threatening allergy mismatch, or the potential risk of toxicity due to drug interaction.
- For surgical prophylaxis, the duration is greater than 24 hours (except where local guidelines endorse this).