**Supplemental Table 1. Definitions of acute respiratory tract infections and gastroenteritis, with corresponding ICD-10 codes**

|  |  |
| --- | --- |
| Diagnosis | ICD-10 codes |
| **Acute respiratory tract infections** | |
| Acute nasopharyngitis [common cold] | J00 |
| Acute pharyngitis | J028, J029 |
| Streptococcal pharyngitis | J020 |
| Acute tonsillitis | J038, J039 |
| Streptococcal tonsillitis | J030 |
| Acute laryngitis and tracheitis | J04 |
| Acute bronchitis | J20 |
| Acute bronchiolitis | J21 |
| Unspecified bronchiolitis with COPD acute lower respiratory infection | J22 |
| Acute obstructive laryngitis [croup] | J050 |
| Acute upper respiratory infections of multiple and unspecified sites | J06 |
| Acute sinusitis | J01 |
| **Gastroenteritis** | |
| Noninfective gastroenteritis and colitis, unspecified | K529 |

COPD, chronic obstructive pulmonary disease; ICD-10 International Classification of Diseases, 10th revision.

**Supplemental Table 2. Definitions of antibiotics with corresponding WHO-ATC codes**

|  |  |
| --- | --- |
| Antibiotics | WHO-ATC codes |
| Penicillin | J01C |
| Amoxicillin | J01CA04 |
| Amoxicillin and beta-lactamase inhibitor | J01CR02 |
| First-generation cephalosporins | J01DB |
| Second-generation cephalosporins | J01DC |
| Sulfonamides and trimethoprim | J01E |
| **Broad-spectrum antibiotics** | |
| Third-generation cephalosporins | J01DD |
| Macrolides | J01FA |
| Quinolones | J01M |
| **Others** | |
| Faropenem | J01DI03 |
| Vancomycin | J01XA01 |
| Aminoglycoside | J01G |
| Tetracycline | J01A |
| Lincosamide | J01FF |
| Linezolid | J01XX08 |
| Tedizolid | J01XX11 |
| Amphenicol | J01B |

WHO-ATC, World Health Organization Anatomical Therapeutic Chemical.