**Supplemental Table 1**. Antibiotic Groupings for Analysisa

|  |  |
| --- | --- |
| **Antibiotic Group** | **Antibiotics Included** |
| Cephalosporins, 1st & 2nd Generation | Cefaclor, Cefadroxil, Cefprozil, Cefuromine, Cephalexin |
| Cephalosporins, 3rd Generationb | Cefdinir, Cefditoren, Cefixime, Cefpodoxime, Ceftibuten |
| Fluoroquinolonesb | Ciprofloxacin, Levofloxacin, Moxifloxacin, Ofloxacin, Gemifloxacin |
| Lincosamides | Clindamycin |
| Macrolides | Azithromycin, Clarithromycin, Erythromycin |
| Nitroimidazoles | Metronidazole |
| Penicillins, narrow-spectrum | Amoxicillin, ampicillin, dicloxacillin, penicillin G, penicillin V |
| Penicillins, extended-spectrumb | Amoxicillin-clavulanate |
| Other | Dapsone, Fidaxomicin, Linezolid, Neomycin, Rifaximin, Sulfadiazine, Sulfamethoxazole, Tedizolid, Telithromycin, Trimethoprim, Oral Vancomycin |
| Sulfamethoxazole-Trimethoprim | Sulfamethoxazole-Trimethoprim |
| Tetracyclines | Doxycycline, Minocycline, Tetracycline |
| Urinary Agents | Fosfomycin, Nitrofurantoin |

aSource: IQVIATM Xponent

bBroad-spectrum agents

**Supplemental Table 2**. Provider Specialty Groupsa

|  |  |
| --- | --- |
| **Specialty Grouping** | **Listed Specialties Included** |
| Dentist | Dentist, General Practitioner |
| Dermatology | Dermatology, Procedural Dermatology |
| Emergency Medicine | Emergency Medicine |
| Family Medicine | Family Medicine, General Practice |
| Internal Medicine | Internal Medicine, Internal Medicine/Pediatrics, Hospitalist, Internal Medicine/Family Practice |
| Medicine Specialty | Gastroenterology, Pulmonary Diseases, Infectious Diseases, Pulmonary Critical Care, Cardiovascular Diseases, Allergy & Immunology, Nephrology, Hematology/Oncology, Rheumatology, Geriatric Medicine, Oncology, Endocrinology & Metabolism, Cardiac Electrophysiology, Hematology, Interventional Cardiology, Allergy, Hepatology, Sleep Medicine, Advanced Heart Failure & Transplant, Blood Banking/Transfusion Medicine, Critical Care Medicine, Diabetes, Pathology, Hospice & Palliative Medicine, Medical Genetics, Musculoskeletal Oncology, Palliative Medicine |
| Nurse Practitioner | Nurse Practitioner |
| Obstetrics/Gynecology | Obstetrics/Gynecology, Gynecological Oncology, Maternal & Fetal Medicine, Female Pelvic Medicine/Reconstruction Obstetrics, Critical Care Obstetrics/Gynecology, Reproductive Endocrinology |
| Oral & Maxillofacial Surgery | Oral & Maxillofacial Surgery |
| Other | Unspecified, Podiatry, Veterinarian Medicine, Ophthalmology, Optometry, Anesthesiology, Anatomic/Clinical Pathology, Psychiatry, Physical Medicine & Rehabilitation, Neurology, Occupational Medicine, Diagnostic Radiology, Addiction Medicine, General Preventive Medicine, Nuclear Medicine, Orthopedic Sports Medicine, Sports Medicine, Dermatopathology, Pain Medicine, Radiation Oncology, Internal Medicine/Psychiatry, Otology/Neurotology, Radiology, Surgical Critical Care, Vascular & Interventional Radiology, Addiction Psychiatry, Adult Cardiothoracic Anesthesia, Aerospace Medicine, Anatomic Pathology, Clinical Molecular Genetics, Clinical Neurophysiology, Clinical Pathology, Clinical Pharmacology, Critical Care Anesthesiology, Cytopathology, Emergency Medical Service, Epidemiology, Epilepsy, Forensic Pathology, Forensic Psychiatry, Geriatric Psychiatry, Internal Medicine/Emergency Medicine, Legal Medicine, Medical Management, Medical Toxicology, Musculoskeletal Radiology, Neuromuscular Medicine, Neuroradiology, Nuclear Cardiology, Nuclear Radiology, Obstetric Anesthesia, Other, Pain Medicine, Public Health & General Preventative Medicine, Pharmaceutical Medicine, Pharmacist, Phlebology, Psychiatry/Neurology, Psychoanalysis, Psychology, Selective Pathology, Spinal Cord Injury, Undersea Medicine, Vascular Neurology |
| Otolaryngology | Otolaryngology |
| Pediatrics | Pediatrics, General |
| Pediatric Specialty | Pediatric Emergency Medicine, Neonatal-Perinatal Medicine, Pediatric Pulmonology, Pediatric Urology, Pediatric Hematology/Oncology, Pediatric Infectious Diseases, Pediatric Cardiology, Pediatric Dermatology, Pediatric Gastroenterology, Pediatric Otolaryngology, Adolescent Medicine Pediatrics, Pediatric Nephrology, Child & Adolescent Psychiatry, Pediatric Critical Care, Pediatric Surgery, Child Abuse Pediatrics, Child Neurology, Congenital Cardiac Surgery, Developmental-Behavioral Pediatrics, Neurodevelopmental Disability Pediatrics, Pathology Pediatric, Pediatric Psychiatry/Child Psychiatry, Pediatric Allergy, Pediatric Anesthesiology, Pediatric Endocrinology, Pediatric Ophthalmology, Pediatric Orthopedics, Pediatric Radiology, Pediatric Rehabilitation Medicine, Pediatric Rheumatology, Pediatric Sports Medicine  |
| Physician Assistant | Physician Assistant |
| Surgery, Not Otherwise Listed | General Surgery, Orthopedic Surgery, Plastic Surgery, Vascular Surgery, Colon & Rectal Surgery, Dermatologic Surgery, Facial Plastic Surgery, Neurological Surgery, Thoracic Surgery, Hand Surgery, Surgical Oncology, Female Pelvic Medicine/Reconstructive Surgery, Orthopedics, Orthopedic Spine Surgery, Cardiothoracic Surgery, Head & Neck Surgery, Orthopedic Trauma Surgery, Orthopedic Foot & Ankle Surgery, Transplant Surgery, Trauma Surgery, Transplant Hepatology |
| Trainee | Hospitals, Transitional Year |
| Urology | Urology |

aSource: IQVIATM Xponent