**Online Supplemental Table 1.** Sample quarterly surveillance data in days of therapy per 1000 patient-days, by antimicrobial agent and nursing unit.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Antimicrobial** | **3B** | **3PCU** | **4B** | **6A** | **7A** | **8A** | **L&D** | **M&B** | **MICU** | **NICU** | **PICU** | **SICU** | **Total** |
| AMIKACIN IV | 0.0 | 1.2 | 9.7 | 0.7 | 0.0 | 0.7 | 0.0 | 0.0 | 3.6 | 0.0 | 0.0 | 3.4 | **2.0** |
| AMPICILLIN IV | 1.5 | 0.0 | 2.6 | 0.0 | 2.8 | 3.2 | 14.9 | 43.6 | 9.7 | 168.6 | 0.0 | 2.5 | **14.5** |
| AMPICILLIN/SULBACTAM IV | 17.4 | 20.1 | 26.4 | 22.7 | 10.4 | 4.7 | 68.5 | 56.9 | 26.8 | 0.0 | 63.8 | 26.9 | **22.4** |
| AZITHROMYCIN IV | 0.0 | 0.0 | 0.4 | 6.9 | 6.6 | 7.5 | 3.0 | 0.3 | 75.4 | 0.0 | 0.0 | 2.5 | **10.9** |
| AZITHROMYCIN PO | 0.0 | 8.3 | 13.2 | 36.4 | 28.9 | 41.2 | 3.0 | 1.6 | 24.3 | 0.0 | 28.4 | 0.8 | **22.4** |
| CASPOFUNGIN IV | 1.5 | 4.7 | 4.0 | 0.0 | 1.4 | 0.7 | 0.0 | 0.0 | 7.3 | 0.0 | 0.0 | 7.6 | **1.9** |
| CEFAZOLIN IV | 163.6 | 41.4 | 77.4 | 19.9 | 7.6 | 22.9 | 8.9 | 12.6 | 10.9 | 17.0 | 70.9 | 133.7 | **38.9** |
| CEFEPIME IV | 18.9 | 79.3 | 11.4 | 10.3 | 7.6 | 8.6 | 0.0 | 0.0 | 35.3 | 0.0 | 49.6 | 131.2 | **20.0** |
| CEFOTETAN IV | 7.6 | 0.0 | 11.0 | 1.4 | 0.5 | 0.4 | 83.3 | 30.7 | 0.6 | 0.0 | 0.0 | 7.6 | **8.1** |
| CEFTRIAXONE IV | 32.6 | 42.6 | 35.2 | 101.0 | 50.7 | 69.2 | 0.0 | 1.0 | 160.0 | 0.0 | 56.7 | 55.5 | **60.7** |
| CEFUROXIME IV | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.1 | 0.0 | **0.0** |
| CIPROFLOXACIN IV | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | **0.0** |
| CIPROFLOXACIN PO | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | **0.1** |
| CLARITHROMYCIN PO | 0.0 | 0.0 | 0.9 | 11.0 | 0.9 | 0.0 | 0.0 | 0.0 | 4.9 | 0.0 | 0.0 | 0.8 | **1.4** |
| CLINDAMYCIN IV | 35.6 | 14.2 | 22.4 | 8.9 | 2.4 | 5.4 | 8.9 | 9.4 | 15.2 | 0.0 | 0.0 | 21.0 | **11.9** |
| CLINDAMYCIN PO | 3.8 | 0.0 | 5.7 | 6.9 | 2.4 | 9.0 | 0.0 | 0.0 | 2.4 | 0.0 | 0.0 | 0.0 | **3.6** |
| DAPTOMYCIN IV | 0.0 | 2.4 | 4.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 2.4 | 0.0 | 0.0 | 0.8 | **0.8** |
| DOXYCYCLINE IV | 0.0 | 0.0 | 3.1 | 1.4 | 0.0 | 0.0 | 0.0 | 0.3 | 0.6 | 0.0 | 0.0 | 0.0 | **0.6** |
| DOXYCYCLINE PO | 2.3 | 0.0 | 4.0 | 4.1 | 5.7 | 6.8 | 0.0 | 0.0 | 4.9 | 0.0 | 0.0 | 0.0 | **3.9** |
| ERTAPENEM IV | 5.3 | 0.0 | 11.0 | 21.3 | 3.3 | 2.1 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 9.3 | **4.8** |
| FLUCONAZOLE IV | 5.3 | 15.4 | 2.6 | 6.2 | 0.0 | 1.4 | 0.0 | 0.0 | 3.6 | 0.0 | 0.0 | 36.2 | **4.1** |
| FLUCONAZOLE PO | 2.3 | 24.9 | 11.9 | 12.4 | 5.2 | 12.9 | 0.0 | 0.0 | 9.7 | 0.0 | 0.0 | 3.4 | **6.7** |
| GENTAMICIN IV | 3.8 | 0.0 | 4.0 | 0.0 | 0.0 | 0.0 | 11.9 | 40.7 | 0.0 | 153.0 | 0.0 | 0.8 | **12.0** |
| IMIPENEM/CILASTATIN IV | 0.8 | 10.7 | 0.4 | 1.4 | 0.5 | 2.5 | 0.0 | 0.0 | 24.9 | 0.0 | 0.0 | 8.4 | **3.2** |
| LEVOFLOXACIN IV | 22.0 | 85.2 | 21.1 | 25.4 | 16.6 | 11.8 | 0.0 | 0.0 | 90.6 | 0.0 | 0.0 | 29.4 | **23.6** |
| LEVOFLOXACIN PO | 28.8 | 5.9 | 21.6 | 52.2 | 36.9 | 35.5 | 0.0 | 0.0 | 19.5 | 0.0 | 0.0 | 1.7 | **24.3** |
| LINEZOLID IV | 0.8 | 8.3 | 2.2 | 0.7 | 0.0 | 0.4 | 0.0 | 0.0 | 6.1 | 0.0 | 0.0 | 5.0 | **1.5** |
| LINEZOLID PO | 3.0 | 0.0 | 8.8 | 2.1 | 0.0 | 1.8 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 0.0 | **1.5** |
| METRONIDAZOLE IV | 20.5 | 14.2 | 29.9 | 13.1 | 12.3 | 6.4 | 3.0 | 1.0 | 22.5 | 8.5 | 0.0 | 36.2 | **15.8** |
| METRONIDAZOLE PO | 18.2 | 15.4 | 11.0 | 39.2 | 8.0 | 7.9 | 3.0 | 1.9 | 2.4 | 0.0 | 0.0 | 4.2 | **9.0** |
| NAFCILLIN IV | 7.6 | 0.0 | 18.9 | 12.4 | 28.9 | 15.0 | 0.0 | 0.0 | 8.5 | 0.0 | 0.0 | 2.5 | **9.0** |
| PENICILLIN G IV | 3.8 | 0.0 | 0.9 | 0.0 | 15.2 | 3.6 | 178.6 | 33.3 | 1.2 | 0.0 | 0.0 | 0.0 | **9.4** |
| PIPERACILLIN/TAZO IV | 47.0 | 87.6 | 66.4 | 66.7 | 33.1 | 62.3 | 0.0 | 1.0 | 222.0 | 0.0 | 7.1 | 100.1 | **61.2** |
| RIFAMPIN PO | 3.0 | 0.0 | 9.7 | 10.3 | 1.4 | 26.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | **5.8** |
| TOBRAMYCIN IV | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | **0.0** |
| TRIMETHOP/SULFA IV | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 0.0 | 0.0 | 0.8 | **0.3** |
| TRIMETHOP/SULFA PO | 12.9 | 11.8 | 33.9 | 11.7 | 9.9 | 22.6 | 3.0 | 2.6 | 6.1 | 0.0 | 0.0 | 10.9 | **15.7** |
| VANCOMYCIN IV | 126.5 | 200.0 | 70.4 | 134.0 | 48.3 | 95.7 | 8.9 | 1.6 | 236.0 | 22.7 | 92.2 | 187.6 | **90.2** |
| VANCOMYCIN PO | 0.0 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | **0.2** |
| VORICONAZOLE IV | 0.0 | 0.0 | 0.4 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | **0.1** |
| VORICONAZOLE PO | 0.0 | 0.0 | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | **0.1** |
| **Total** | **605.3** | **703.0** | **559.2** | **651.5** | **352.7** | **492.7** | **401.8** | **241.4** | **1,065.1** | **375.4** | **375.9** | **833.5** | **527.7** |

**Online Supplemental Table 2.** Mean quarterly antimicrobial use before and after implementation of the stewardship program.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Preintervention period****(Days of Therapy per 1000 Patient-Days)** | **Stewardship period****(Days of Therapy per 1000 Patient-Days)** | **Percent change** | ***P*** |
| All antibacterials | 533.1 | 457.5 | -14.2 | <.001 |
|  Antipseudomonal agents | 203.9 | 142.8 | -30.0 | <.001 |
|  Imipenem-cilastatin | 24.4 | 4.3 | -82.4 | <.001 |
|  β-lactam/β-lactamase inhibitors | 63.8 | 53.4 | -16.3 | .03 |
|  Fluoroquinolones | 68.8 | 43.7 | -36.5 | <.001 |
|  Cefepime | 17.5 | 23.2 | 32.6 | .03 |
|  Aminoglycosides | 28.9 | 17.9 | -38.1 | <.001 |
|  Resistant gram-positive agents  | 102.9 | 95.4 | -7.3 | .10 |
|  Vancomycin | 96.7 | 90.7 | -6.2 | .21 |
|  Linezolid | 5.5 | 2.3 | -58.2 | .001 |
|  Daptomycin | 0.8 | 2.4 | 200.0 | .002 |
|  Other common antibacterials |  |  |  |  |
|  Ceftriaxone | 47.0 | 66.2 | 40.9 | <.001 |
|  Cefazolin | 60.7 | 43.3 | -28.7 | <.001 |
|  Nafcillin | 11.8 | 4.7 | -60.2 | .001 |
|  Ampicillin-sulbactam | 20.4 | 22.1 | 8.3 | .12 |
|  Azithromycin | 27.3 | 31.4 | 15.0 | .04 |
|  Clindamycin | 29.6 | 18.4 | -37.8 | <.001 |
|  Metronidazole | 29.4 | 30.9 | 5.1 | .47 |
|  Ceftriaxone plus metronidazole a  | 2.3 | 7.7 | 234.8 | <.001 |
| Antifungals | 22.0 | 17.1 | -22.3 | <.001 |
|  Fluconazole | 19.2 | 14.8 | -22.9 | <.001 |
|  Echinocandins | 2.8 | 2.4 | -14.3 | .38 |

a Preintervention period data only available dating back to 4th quarter of 2005

**Online Supplemental Table 3.** Mean quarterly antimicrobial expenditures before and after implementation of the stewardship program.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Preintervention period****$ per 1000 Patient-Days (standard deviation)** | **Stewardship period****$ per 1000 Patient-Days (standard deviation)**  | **Percent change** | ***P*** |
| Total antimicrobial expenditures | 10024 (917) | 7224 (2204) | -27.9 | <.001 |
|  Antibacterials | 9168 (689) | 6414 (1973) | -30.0 | <.001 |
|  Antipseudomonal agents | 4063 (590) | 2756 (1166) | -32.2 | .002 |
|  Resistant gram-positive agents  | 1898 (678) | 1769 (403) | -6.8 | .53 |
|  Cefazolin and ceftriaxone | 125 (21) | 158 (33) | 26.4 | .01 |
|  Nafcillin and penicillin G | 1777 (341) | 799 (408) | -55.0 | <.001 |
|  Antifungals | 856 (509) | 810 (571) | -5.4 | .60 |