**Appendix 1. ASP Prospective Audit-and-Feedback (PAF) Descriptions at Study Sites**

|  |  |  |  |
| --- | --- | --- | --- |
| **Hospital (in alphabetical order)** | **Sunnybrook Health Sciences Centre** | **Unity Health Toronto/St. Joseph’s Health Centre** | **Unity Health Toronto/St. Michael’s Hospital** |
| **ASP Staff** | 2.2-2.7 full-time equivalent (FTE) Pharmacists  0.4 FTE Physicians | 2.0 FTE Pharmacists  0.5 FTE Physician | 1.0 FTE Pharmacist  0.4 FTE Physician |
| **Baseline audit and feedback (PAF) service** | ICU, medical and surgical are reviewed on days 3, 7 and 14 of targeted antimicrobials\* by ASP pharmacists. Suggestions for antibiotic optimization are reviewed with the ID physician on-call for the ID consult service. Suggestions are documented in the electronic patient record and verbally discussed with prescribers. | For each GIM floor as well as the ICU, ASP rounds are held 2x/week; prospective audit-and-feedback is performed on all GIM/ICU patients receiving systemic antimicrobial therapy. Rounds are attended by the floor physician, floor pharmacist, ASP physician, ASP pharmacist (with the exception of ICU, where the ICU pharmacist provides ASP audit-and-feedback)  Non-GIM patients, non-ID on broad-spectrum antimicrobials^ are reviewed 2x/week. Formal rounds are not performed; individual prescribers are independently approached with suggestions | ICU ASP rounds are held 3x/week, and review all patients admitted to all ICUs (regardless of whether the patient is on current antimicrobial therapy).   * medical/surgical: 30 beds * trauma/neuro: 24 beds * cardiovascular: 18 beds   ASP PAF for GIM was piloted from 2016-2018; GIM PAF was suspended indefinitely in 2018 due to lack of dedicated human resources. However, GIM Wards continued to receive ASP-led didactic education sessions and other targeted interventions (i.e. IV to PO program). |
| **Pandemic- related changes in ASP services** | Wave 1: Patients with COVID-19 were excluded from the audit and feedback program and were assessed by the Infectious Diseases Staff Physician  Wave 2&3: All patients were included in the audit and feedback program and were no longer assessed by the Infectious Diseases Staff | All 3 waves: ASP physician redeployed to focus on Infection Prevention & Control duties  Wave 1: All ASP rounds converted to teleconference/virtual rounds with no interruption to usual PAF rounds schedule  Wave 2: In-person ASP rounds were performed with the exception of floor with an active COVID-19 outbreak  Wave 3: Similar to Wave 2; additionally, ASP pharmacists were asked to support pharmacy dispensary shifts as well as the COVID-ID service | Wave 1: ASP physician had significant infection prevention and control responsibilities  Wave 2&3: ASP physician on leave; other Infectious Diseases MDs focused on COVID-ID consultation service  Start of Wave 1 (continued to present)): ICU ASP rounds converted to teleconference (physically distanced) rounds with no interruption to the usual PAF rounds schedule. ICU ASP PAF included patients with COVID-19. GIM Wards no longer received intermittent education sessions due to limited resources and suspension of non-essential in-person teaching activities. |
| **Role of COVID-ID consult team** | Reviewed every COVID-19 patient in wave 1. In subsequent waves they were consulted for approval of novel therapeutic agents for COVID-19  Reviewed appropriateness of antibiotics: Wave 1 only (in subsequent waves antibiotics were reviewed by ASP) | Did not review all COVID-19 cases in all waves (usually consulted for approval of novel therapeutic agents for COVID-19).  Did not consistently review appropriateness of antibiotics | Did not review all COVID-19 cases in all waves (usually consulted for approval of novel therapeutic agents for COVID-19).  Only reviewed appropriateness of antibiotics when requested by ASP |

**\*** targeted antimicrobials = 3rd generation cephalosporins (IV), fluoroquinolones, piperacillin-tazobactam, carbapenems, aminoglycosides and vancomycin (IV)

^ broad-spectrum antimicrobials = 3rd generation cephalosporins (IV), fluoroquinolones, piperacillin-tazobactam, carbapenems, aminoglycosides, clindamycin, vancomycin (PO + IV), daptomycin, linezolid, fluconazole, echinocandins, fosfomycin