Supplementary Table 1. Individuals who did review for antimicrobial stewardship program activities in each hospital

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Age, years | Sex | Position | The period of expertise in ID, years | The period of participation in ASP, years | Position in the ASP team |
| Measuring time spent on each ASP activity |  |  |  |  |  |  |
|  Hospital D | 49 | Male | Professor | 19 | 7 | Member |
|  Hospital E | 38 | Male | Assistant professor | 4 | 4 | Leader |
|  Hospital G | 37 | Male | Assistant professor | 4 | 4 | Leader |
|  Hospital H | 47 | Female | Assistant professor | 17 | 14 | Member |
| Measuring the number of each ASP activity for hospitalized patients per day  |  |  |  |  |  |  |
|  Hospital A | 36 | Female | Assistant professor | 7 | 7 | Leader |
|  Hospital B | 50 | Female | Professor | 21 | 12 | Leader |
|  Hospital C | 44 | Female | Associate professor | 15 | 12 | Leader |
|  Hospital D | 49 | Male | Professor | 19 | 7 | Member |
|  Hospital E | 38 | Male | Assistant professor | 4 | 4 | Leader |
|  Hospital F | 44 | Male | Physician | 12 | 12 | Leader |
|  Hospital G | 36 | Male | Assistant professor | 4 | 4 | Leader |
|  Hospital H | 47 | Female | Assistant professor | 17 | 14 | Member |

Abbreviations: ASP, antimicrobial stewardship program; ID, infectious diseases

Supplementary Table 2. Number of observed main antimicrobial stewardship activities for measuring time spent on patient review

|  |  |  |  |
| --- | --- | --- | --- |
|  | All patients(n=225) | Patients in general wards (n=183) | Patients in intensive care units (n=42) |
| Appropriate antibiotics recommendation for patients with suspected infections (%) |  |  |  |
|  without a proven site of infection or causative pathogens | 43 (19.1) | 36 (19.7) | 7 (17.1) |
| without a proven site of infection but with causative pathogens | 10 (4.4) | 6 (3.3) | 4 (9.8) |
| with a proven site of infection but without causative pathogens | 53 (23.6) | 42 (23.0) | 11 (26.8) |
| with a proven site of infection and causative pathogens | 65 (28.9) | 54 (29.5) | 11 (26.8) |
| Review and approval of designated antibiotics under restrictive measures (%) | 25 (11.1) | 18 (9.8) | 7 (17.1) |
| Avoidance of inappropriate combinations of antibiotic therapy (%) | 2 (0.9) | 2 (1.1) | 0 (0) |
| Parenteral to oral conversion (%) | 21 (9.3) | 20 (10.9) | 0 (0) |
| Review of therapy for appropriate duration, appropriate dosage, or drug-drug interaction (%) | 1 (0.4) | 0 (0) | 1 (2.4) |
| Review of surgical prophylactic antibiotics (%) | 3 (1.3) | 3 (1.6) | 0 (0) |
| Others (%) | 2 (0.9) | 2 (1.1) | 0 (0) |
| Total (%) | 225 (100) | 183 (100) | 41 (100) |