

Supplemental digital content. eTable 1. Characteristics of the ICU stay of 5,250 consecutively admitted patients.

| Variables | Pre-intervention period | Study period | | | | | | | | | | | P value |
|--|-------------------------|--------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------|
| | | Total | 1 st semester | 2 nd semester | 3 rd semester | 4 th semester | 5 th semester | 6 th semester | 7 th semester | 8 th semester | 9 th semester | 10 th semester | |
| | N=925 | N=5250 | N=527 | N=509 | N=480 | N=542 | N=537 | N=546 | N=597 | N=501 | N=508 | N=503 | |
| Age, yr | 56 (43-69) | 58 (46-69) | 56 (45-69) | 57 (43-68) | 59 (48-71) | 57 (45-69) | 60 (48-71) | 58 (45-69) | 59 (47-68) | 59 (47-68) | 59 (45-69) | 60 (45-69) | 0.0486 |
| Male, n (%) | 564 (61.0) | 3244 (61.8) | 299 (59.4) | 326 (61.9) | 302 (59.3) | 295 (61.5) | 345 (63.7) | 337 (62.8) | 334 (61.2) | 378 (63.3) | 321 (64.1) | 307 (60.4) | 0.7708 |
| Main diagnosis category at admission, n (%) | | | | | | | | | | | | | <0.0001 |
| Respiratory | 199 (21.5) | 1193 (22.7) | 132 (25.0) | 101 (19.8) | 123 (25.6) | 116 (21.4) | 116 (21.6) | 133 (24.4) | 122 (20.4) | 114 (22.8) | 132 (26.0) | 104 (20.7) | |
| Infection | 185 (20.0) | 907 (17.3) | 73 (13.9) | 82 (16.1) | 78 (16.3) | 98 (18.1) | 99 (18.4) | 84 (15.4) | 106 (17.8) | 90 (18.0) | 109 (21.5) | 88 (17.5) | |
| Cardiovascular | 66 (7.1) | 624 (11.9) | 63 (12.0) | 44 (8.6) | 46 (9.6) | 58 (10.7) | 83 (15.5) | 55 (10.1) | 74 (12.4) | 59 (11.8) | 69 (13.6) | 73 (14.5) | |
| Intoxication | 124 (13.4) | 598 (11.4) | 71 (13.5) | 76 (14.9) | 46 (9.6) | 60 (11.1) | 59 (11.0) | 65 (11.9) | 78 (13.1) | 41 (8.2) | 51 (10.0) | 51 (10.1) | |
| Neurology | 91 (9.8) | 596 (11.4) | 70 (13.3) | 81 (15.9) | 51 (9.6) | 72 (13.3) | 47 (8.8) | 65 (11.9) | 59 (9.9) | 61 (12.2) | 42 (8.3) | 48 (9.5) | |
| Liver transplantation | 117 (12.6) | 472 (9.0) | 46 (8.7) | 38 (7.1) | 41 (8.5) | 40 (7.4) | 43 (8.0) | 53 (9.7) | 54 (9.0) | 58 (11.6) | 52 (10.2) | 47 (9.3) | |
| Nephrology/metabolism | 81 (8.8) | 437 (8.3) | 36 (6.8) | 41 (8.1) | 42 (8.8) | 50 (9.2) | 51 (9.5) | 44 (8.1) | 55 (9.2) | 40 (8.0) | 26 (5.1) | 52 (10.3) | |
| Digestive | 39 (4.2) | 287 (5.5) | 25 (4.7) | 31 (6.1) | 41 (8.5) | 33 (6.1) | 23 (4.3) | 37 (6.8) | 25 (4.2) | 23 (4.6) | 19 (3.7) | 30 (6.0) | |
| Trauma/other | 23 (2.5) | 136 (2.6) | 11 (2.1) | 15 (2.9) | 12 (2.5) | 15 (2.8) | 16 (3.0) | 10 (1.8) | 24 (4.0) | 15 (3.0) | 8 (1.6) | 10 (2.0) | |
| Simplified Acute Physiology Score II | 38 (27-52) | 40 (28-54) | 39 (28-53) | 41 (27-55) | 41.5 (3056) | 42 (28-55) | 42 (30-56) | 41 (29-53) | 40 (28-53) | 38 (28-53) | 40.5 (27-54) | 40 (29-55) | 0.1040 |
| Glasgow coma score | 15 (8-15) | 15 (7-15) | 14 (6-15) | 14 (6-15) | 15 (7-15) | 14 (7-15) | 14 (6-15) | 15 (7-15) | 15 (7-15) | 15 (7-15) | 15 (7-15) | 15 (7-15) | 0.0135 |
| Infection at admission | | | | | | | | | | | | | |
| Community-acquired, n (%) | 248 (26.8) | 1442 (27.5) | 129 (24.5) | 94 (18.5) | 130 (27.1) | 169 (31.2) | 160 (29.8) | 146 (26.7) | 175 (29.3) | 137 (27.3) | 148 (29.1) | 155 (30.8) | <0.0001 |
| Healthcare-associated, n (%) | 127 (13.7) | 640 (12.2) | 45 (8.5) | 64 (12.6) | 63 (13.1) | 69 (12.7) | 63 (11.7) | 75 (13.7) | 77 (12.9) | 73 (14.6) | 60 (11.8) | 51 (10.1) | 0.1202 |
| Rectal colonization with ESBL-producing AGNB at admission, n (%) | Not assessed | 237 (4.5) | 18 (3.4) | 17 (3.3) | 16 (3.3) | 16 (3.0) | 27 (5.0) | 29 (5.3) | 38 (6.4) | 38 (7.6) | 23 (4.5) | 15 (3.0) | 0.0012 |
| Intubation duration, n (%) | | | | | | | | | | | | | 0.3086 |
| ≤3 calendar days | 669 (72.3) | 3769 (71.8) | 380 (72.1) | 372 (73.1) | 329 (68.5) | 376 (69.4) | 382 (71.1) | 403 (73.8) | 443 (74.2) | 371 (74.1) | 351 (69.1) | 362 (72.0) | |
| >3 calendar days, n (%) | 256 (27.7) | 1481 (28.2) | 147 (27.9) | 137 (26.9) | 151 (31.5) | 166 (30.6) | 155 (28.9) | 143 (26.2) | 154 (25.8) | 130 (25.9) | 157 (30.9) | 141 (28.0) | |
| Urinary catheter duration | | | | | | | | | | | | | 0.0121 |
| <3 calendar days, n (%) | 524 (56.6) | 2945 (56.1) | 219 (41.6) | 219 (43.0) | 209 (43.5) | 230 (42.4) | 228 (42.5) | 224 (41.0) | 242 (40.5) | 234 (46.7) | 251 (49.4) | 249 (49.5) | |
| >3 calendar days, n (%) | 401 (43.4) | 2305 (43.9) | 308 (58.4) | 290 (57.0) | 271 (56.5) | 312 (57.6) | 309 (57.5) | 322 (59.0) | 355 (59.5) | 267 (53.3) | 257 (50.6) | 254 (50.5) | |
| Central venous catheter, n (%) | | | | | | | | | | | | | 0.0040 |
| Yes | 480 (52) | 2774 (52.8) | 257 (48.8) | 239 (47.0) | 263 (54.8) | 273 (50.4) | 309 (57.5) | 282 (51.6) | 317 (53.1) | 263 (52.5) | 295 (58.1) | 276 (54.9) | |
| No | 445 (48) | 2476 (47.2) | 270 (51.2) | 270 (53.0) | 217 (45.2) | 269 (49.6) | 228 (42.5) | 264 (48.4) | 280 (46.9) | 238 (47.5) | 213 (41.9) | 227 (45.1) | |
| Acquisition of infection in ICU, n (%)* | 102 (11.0) | 235 (6.4) | 23 (6.4) | 22 (6.4) | 32 (9.3) | 33 (8.8) | 24 (6.6) | 22 (5.9) | 21 (5.4) | 18 (4.9) | 20 (5.3) | 20 (5.3) | 0.1906 |
| Length of stay in ICU, days | 4 (2-9) | 4 (2-8) | 4 (2-8) | 4 (2-8) | 4 (2-8) | 4 (2-7) | 4 (2-8) | 3 (2-7) | 3 (2-7) | 4 (2-7.25) | 4 (2.5-9) | 4 (2-8) | 0.0070 |
| Mortality in ICU, n (%) | 133 (14.4) | 789 (15.0) | 94 (17.8) | 81 (15.9) | 71 (14.8) | 96 (17.7) | 84 (15.6) | 68 (12.5) | 86 (14.4) | 56 (11.2) | 86 (16.9) | 67 (13.3) | 0.0327 |

Legend of eTable1. Variables are medians (25th percentile-75percentile) unless otherwise indicated. Differences in patients' characteristics across semesters were mostly age and the Glasgow coma score. However, there was no statistically significant difference on the severity score SAPS II, which includes both

variables. The proportion of patients with community-acquired infection gradually increased with time (OR=1.02 [95 percent confidence interval 1.04-1.06, p for trend < 0.001). Rectal colonization rate with ESBL-producing AGNB tended to increase each semester (OR=1.05 [1.01-1.10], $p = 0.03$) although a decline in the last two semesters was observed as compared to the rates of the 5th to 8th semesters. The proportion of patients who had a central venous catheter and who underwent urinary catheterization greater than 3 calendar days also increased with time (for each variable: OR=1.03 [1.01-1.05], $p = 0.002$). The proportion of patients with intubation duration greater than 3 calendar days did not significantly vary over time. * In patients with a length of stay in ICU equal or greater than 3 calendar days.