

Appendix 1.

Baseline characteristics of AMI patients, fiscal year 2008

| Characteristic | Improved Sites (n = 652) | Non-Improved Sites (n = 676) |
|---|-----------------------------|---------------------------------|
| Crowding (average ED LOS in hours), mean (SD) | 8.2 (3.2) | 7.1 (2.9) |
| ED LOS (hours), median (IQR) | 8.9 (4.4-17.3) | 8.3 (4.2-15.8) |
| Time to MD in hours, median (IQR) | 0.7 (0.3-1.6) | 0.8 (0.3-1.5) |
| Age, mean (SD) | 69.5 (14.3) | 69.7 (14.8) |
| Female, n (%) | 247 (37.9) | 261 (38.6) |
| Acuity (CTAS), n (%) | | |
| Resuscitation | 63 (9.7) | 43 (6.4) |
| Emergent | 429 (65.8) | 446 (66.0) |
| Urgent | 142 (21.8) | 171 (25.3) |
| Income quintile, n (%) | | |
| Income quintile 1 (lowest) | 163 (25.0) | 139 (20.6) |
| Income quintile 2 | 164 (25.2) | 142 (21.0) |
| Income quintile 3 | 121 (18.6) | 142 (21.0) |
| Income quintile 4 | 91 (14.0) | 128 (18.9) |
| Income quintile 5 (highest) | 110 (16.9) | 124 (18.3) |
| Missing | 3 (0.5) | 1 (0.1) |
| Rural residence, n (%) | 34 (5.2) | 41 (6.1) |
| Missing | 2 (0.3) | 1 (0.1) |
| Shift, n (%) | | |
| Night (00:00 to 07:59) | 142 (21.8) | 143 (21.2) |
| Day (08:00 to 15:59) | 292 (44.8) | 306 (45.3) |
| Evening (16:00 to 23:59) | 218 (33.4) | 227 (33.6) |
| Weekend/holiday, n (%) | 196 (30.1) | 222 (32.8) |
| STEMI, n (%) | 203 (31.1) | 204 (30.2) |
| Cardiac catheterization at ED site, n (%) | 305 (46.8) | 260 (38.5) |
| 12-lead in ambulance, n (%) | 180 (27.6) | 154 (22.8) |
| Chest pain, n (%) | 408 (62.6) | 395 (58.4) |
| Other symptoms, n (%) | 392 (60.1) | 483 (71.4) |
| Arrived by ambulance, n (%) | 352 (54.0) | 350 (51.8) |

Baseline characteristics of asthma patients, fiscal year 2008

| Characteristic | Improved Sites (n = 682) | Non-Improved Sites (n = 689) |
|--|-----------------------------|---------------------------------|
| Crowding (average ED LOS in hours), mean (SD) | 7.9 (3.2) | 6.5 (2.3) |
| ED LOS (hours), median (IQR) | 3.6 (2.3-5.3) | 3.0 (2.0-4.5) |
| Time to MD in hours, median (IQR) | 1.2 (0.5-2.5) | 1.0 (0.5-1.9) |
| Age, mean (SD) | 23.7 (16.5) | 23.7 (15.9) |
| Female, n (%) | 353 (51.8) | 371 (53.8) |
| Acuity (CTAS), n (%) | | |
| Resuscitation | 8 (1.2) | 13 (1.9) |
| Emergent | 224 (32.8) | 221 (32.1) |
| Urgent | 450 (66.0) | 455 (66.0) |
| Income quintile, n (%) | | |
| Income quintile 1 (lowest) | 217 (31.8) | 193 (28.0) |
| Income quintile 2 | 150 (22.0) | 130 (18.9) |
| Income quintile 3 | 135 (19.8) | 124 (18.0) |
| Income quintile 4 | 103 (15.1) | 117 (17.0) |
| Income quintile 5 (highest) | 75 (11.0) | 123 (17.9) |
| Missing | 2 (0.3) | 2 (0.3) |
| Rural residence, n (%) | 45 (6.6) | 33 (4.8) |
| Missing | 1 (0.1) | 0 (0.0) |
| Shift, n (%) | | |
| Night (00:00 to 07:59) | 168 (24.6) | 181 (26.3) |
| Day (08:00 to 15:59) | 223 (32.7) | 220 (31.9) |
| Evening (16:00 to 23:59) | 291 (42.7) | 288 (41.8) |
| Weekend/holiday, n (%) | 241 (35.3) | 254 (36.9) |
| Currently taking a beta agonist (oral or inhaled), n (%) | 453 (66.4) | 427 (62.0) |
| Currently taking a corticosteroid (oral or inhaled), n (%) | 310 (45.5) | 295 (42.8) |
| Beta agonist administered in ED, n (%) | | |
| None | 76 (11.1) | 82 (11.9) |
| 1 dose | 204 (29.9) | 226 (32.8) |
| 2 doses | 114 (16.7) | 163 (23.7) |
| 3 or more doses | 249 (36.5) | 165 (23.9) |

Baseline characteristics of adult fracture patients, fiscal year 2008

| Characteristic | Improved Sites (n = 504) | Non-Improved Sites (n = 507) |
|---|-----------------------------|---------------------------------|
| Crowding (average ED LOS in hours), mean (SD) | 6.4 (3.1) | 6.1 (5.2) |
| ED LOS (hours), median (IQR) | 3.7 (2.4-5.9) | 3.8 (2.5-5.7) |
| Time to MD in hours, median (IQR) | 1.3 (0.7-2.5) | 1.3 (0.7-2.3) |
| Age, mean (SD) | 60.3 (18.8) | 61.0 (20.3) |
| Female, n (%) | 347 (68.8) | 361 (71.2) |
| Acuity (CTAS), n (%) | | |
| Emergent | 57 (11.3) | 65 (12.8) |
| Urgent | 245 (48.6) | 276 (54.4) |
| Less Urgent | 192 (38.1) | 156 (30.8) |
| Income quintile, n (%) | | |
| Income quintile 1 (lowest) | 122 (24.2) | 109 (21.5) |
| Income quintile 2 | 107 (21.2) | 96 (18.9) |
| Income quintile 3 | 88 (17.5) | 101 (19.9) |
| Income quintile 4 | 99 (19.6) | 84 (16.6) |
| Income quintile 5 (highest) | 87 (17.3) | 115 (22.7) |
| Missing | 1 (0.2) | 2 (0.4) |
| Rural residence, n (%) | 43 (8.5) | 31 (6.1) |
| Missing | 1 (0.2) | 0 (0.0) |
| Shift, n (%) | | |
| Night (00:00 to 07:59) | 47 (9.3) | 60 (11.8) |
| Day (08:00 to 15:59) | 255 (50.6) | 265 (52.3) |
| Evening (16:00 to 23:59) | 202 (40.1) | 182 (35.9) |
| Weekend/holiday, n (%) | 160 (31.7) | 185 (36.5) |
| Reduction, n (%) | 107 (21.2) | 114 (22.5) |

Baseline characteristics of pediatric fracture patients, fiscal year 2008

| Characteristic | Improved Sites (n = 336) | Non-Improved Sites (n = 377) |
|---|-----------------------------|---------------------------------|
| Crowding (average ED LOS in hours), mean (SD) | 6.0 (3.0) | 5.1 (2.5) |
| ED LOS (hours), median (IQR) | 2.7 (1.7-4.0) | 2.6 (1.8-3.8) |
| Time to MD in hours, median (IQR) | 1.2 (0.6-2.2) | 1.1 (0.6-2.0) |
| Age, mean (SD) | 9.5 (4.2) | 9.0 (4.2) |
| Female, n (%) | 133 (39.6) | 151 (40.1) |
| Acuity (CTAS), n (%) | | |
| Emergent | 34 (10.1) | 53 (14.1) |
| Urgent | 149 (44.3) | 148 (39.3) |
| Less Urgent | 148 (44.0) | 166 (44.0) |
| Income quintile, n (%) | | |
| Income quintile 1 (lowest) | 87 (25.9) | 69 (18.3) |
| Income quintile 2 | 78 (23.2) | 59 (15.6) |
| Income quintile 3 | 47 (14.0) | 86 (22.8) |
| Income quintile 4 | 66 (19.6) | 86 (22.8) |
| Income quintile 5 (highest) | 56 (16.7) | 76 (20.2) |
| Missing | 2 (0.6) | 1 (0.3) |
| Rural residence, n (%) | 30 (8.9) | 22 (5.8) |
| Missing | 2 (0.6) | 0 (0.0) |
| Shift, n (%) | | |
| Night (00:00 to 07:59) | 12 (3.6) | 13 (3.4) |
| Day (08:00 to 15:59) | 138 (41.1) | 130 (34.5) |
| Evening (16:00 to 23:59) | 186 (55.4) | 234 (62.1) |
| Weekend/holiday, n (%) | 108 (32.1) | 125 (33.2) |
| Reduction, n (%) | 40 (11.9) | 48 (12.7) |