**Supplement**

Timeline of Resource Allocation Plan Revision



**RAP outline change of AMPDS Determinant pre/post**

\*percentages are column percentage

|  |  |  |  |
| --- | --- | --- | --- |
|  Overall |   | Final AMPDS Determinant |   |
| Initial AMPDS Determinant |   | A | B | C | D | E | O | Total |
| A | 181470 | 1470 | 4371.0 | 2451 | 36 | 321.0 | 190119 |
| 97.31 | 1.23 | 2.8 | 1.66 | 0.51 | 2.5 |   |
| B | 2034 | 115431 | 1352.0 | 3094 | 84 | 141.0 | 122136 |
| 1.09 | 96.42 | 0.9 | 2.1 | 1.2 | 1.1 |   |
| C | 962 | 202 | 145703.0 | 2539 | 77 | 63.0 | 149546 |
| 0.52 | 0.17 | 94.6 | 1.72 | 1.1 | 0.5 |   |
| D | 1180 | 1117 | 2171.0 | 138380 | 343 | 100.0 | 143291 |
| 0.63 | 0.93 | 1.4 | 93.94 | 4.9 | 0.8 |   |
| E | 35 | 1280 | 105.0 | 722 | 6464 | 113.0 | 8719 |
| 0.02 | 1.07 | 0.1 | 0.49 | 92.29 | 0.9 |   |
| O | 803 | 219 | 289.0 | 122 | 0 | 12048.0 | 13481 |
| 0.43 | 0.18 | 0.2 | 0.08 | 0 | 94.2 |   |
| Total | 186484 | 119719 | 153991.0 | 147308 | 7004 | 12786.0 | 627292 |

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|  Pre-RAP |   | Final AMPDS Determinant |   |
| Initial AMPDS Determinant |   | A | B | C | D | E | O | Total |
| A | 93169 | 825 | 2466.0 | 1293 | 19 | 226.0 | 97998 |
| 97.16 | 1.27 | 3.2 | 1.72 | 0.57 | 3.2 |   |
| B | 1181 | 62904 | 692.0 | 1434 | 42 | 96.0 | 66349 |
| 1.23 | 96.48 | 0.9 | 1.9 | 1.27 | 1.3 |   |
| C | 475 | 102 | 72865.0 | 979 | 28 | 37.0 | 74486 |
| 0.5 | 0.16 | 94.3 | 1.3 | 0.85 | 0.5 |   |
| D | 624 | 581 | 1014.0 | 71287 | 137 | 55.0 | 73698 |
| 0.65 | 0.89 | 1.3 | 94.56 | 4.14 | 0.8 |   |
| E | 17 | 662 | 39.0 | 324 | 3083 | 56.0 | 4181 |
| 0.02 | 1.02 | 0.1 | 0.43 | 93.17 | 0.8 |   |
| O | 427 | 127 | 183.0 | 70 | 0 | 6704.0 | 7511 |
| 0.45 | 0.19 | 0.2 | 0.09 | 0 | 93.5 |   |
| Total | 95893 | 65201 | 77259.0 | 75387 | 3309 | 7174.0 | 324223 |

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|  Post-RAP |   | Final AMPDS Determinant |   |
| Initial AMPDS Determinant |   | A | B | C | D | E | O | Total |
| A | 88301 | 645 | 1905.0 | 1158 | 17 | 95.0 | 92121 |
| 97.47 | 1.18 | 2.5 | 1.61 | 0.46 | 1.7 |   |
| B | 853 | 52527 | 660.0 | 1660 | 42 | 45.0 | 55787 |
| 0.94 | 96.35 | 0.9 | 2.31 | 1.14 | 0.8 |   |
| C | 487 | 100 | 72838.0 | 1560 | 49 | 26.0 | 75060 |
| 0.54 | 0.18 | 94.9 | 2.17 | 1.33 | 0.5 |   |
| D | 556 | 536 | 1157.0 | 67093 | 206 | 45.0 | 69593 |
| 0.61 | 0.98 | 1.5 | 93.29 | 5.58 | 0.8 |   |
| E | 18 | 618 | 66.0 | 398 | 3381 | 57.0 | 4538 |
| 0.02 | 1.13 | 0.1 | 0.55 | 91.5 | 1.0 |   |
| O | 376 | 92 | 106.0 | 52 | 0 | 5344.0 | 5970 |
| 0.42 | 0.17 | 0.1 | 0.07 | 0 | 95.2 |   |
| Total | 90591 | 54518 | 76732.0 | 71921 | 3695 | 5612.0 | 303069 |

Number of MPDS® Codes with Resource Allocation Plan Revision

|  |  |  |  |
| --- | --- | --- | --- |
|  RAP Revision | Number of MPDS® Codes with Change in Level of Resource only | Number of MPDS® Codes with Change in Speed of Response only | Number of MPDS® Codes with Change in Both Level of Resource and Speed of Response |
| Number of MPDS® Codes Upgraded | 6 | 3 | 9 |
| Number of MPDS Codes Downgraded | 68 | 74 | 1 |

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| Characteristic of patients deceased within 24 hours after EMS phone call  |
|   | Pre-RAP-Revision |   | Post-RAP-Revision |
|  | Deceased |  | Deceased |
|   | N | n | % |   | N | n | % |
| Total | 292094 | 3790 | 1.30 |  | 270452 | 3742 | 1.38 |
| Age  |  |  |  |  |  |  |  |
| 18 - 54  | 128514 | 811 | 0.63 |  | 114368 | 764 | 0.67 |
| 55 - 64  | 40190 | 610 | 1.52 |  | 37554 | 606 | 1.61 |
| 65 - 74  | 36585 | 725 | 1.98 |  | 35871 | 749 | 2.09 |
| 75+  | 86805 | 1644 | 1.89 |  | 82659 | 1623 | 1.96 |
| Gender  |  |  |  |  |  |  |  |
| Male | 147501 | 2394 | 1.62 |  | 135860 | 2405 | 1.77 |
| Female | 144503 | 1395 | 0.97 |  | 134510 | 1335 | 0.99 |
| Unknown | 90 | 1 | 1.11 |  | 82 | 2 | 2.44 |
| Urban/Metropolitan | 271507 | 3296 | 1.21 |  | 251851 | 3226 | 1.28 |
| Immediately life-threatening | 3265 | 1752 | 53.66 |  | 3644 | 1858 | 50.99 |
| Overdose (naloxone administered) | 1706 | 101 | 5.92 |  | 1622 | 115 | 7.09 |
| Season |  |  |  |  |  |  |  |
| Spring (Mar-May) | 75517 | 1021 | 1.35 |  | 63184 | 896 | 1.42 |
| Summer (Jun-Aug) | 94252 | 1145 | 1.21 |  | 48618 | 580 | 1.19 |
| Autumn (Sep-Nov) | 75898 | 957 | 1.26 |  | 62712 | 898 | 1.43 |
| Winter (Dec-Feb) | 46427 | 667 | 1.44 |  | 95938 | 1368 | 1.43 |
| Day of week |  |  |  |  |  |  |  |
| Sun | 42484 | 539 | 1.27 |  | 39195 | 556 | 1.42 |
| Mon | 40798 | 548 | 1.34 |  | 38222 | 540 | 1.41 |
| Tue | 39926 | 537 | 1.34 |  | 37875 | 528 | 1.39 |
| Wed | 40864 | 516 | 1.26 |  | 37806 | 543 | 1.44 |
| Thu | 42007 | 562 | 1.34 |  | 37481 | 505 | 1.35 |
| Fri | 42498 | 530 | 1.25 |  | 39232 | 497 | 1.27 |
| Sat | 43517 | 558 | 1.28 |  | 40641 | 573 | 1.41 |
| Hour of day |  |  |  |  |  |  |  |
| 0-6 | 46653 | 515 | 1.10 |  | 43379 | 463 | 1.07 |
| 6-12 | 74801 | 1294 | 1.73 |  | 70663 | 1321 | 1.87 |
| 12-18 | 89969 | 1110 | 1.23 |  | 82383 | 1124 | 1.36 |
| 18-24 | 80671 | 871 | 1.08 |  | 74027 | 834 | 1.13 |
| MPDS® determinant |  |  |  |  |  |  |  |
| A | 84222 | 115 | 0.14 |  | 78097 | 114 | 0.15 |
| B | 63134 | 153 | 0.24 |  | 52590 | 119 | 0.23 |
| C | 66151 | 252 | 0.38 |  | 64402 | 233 | 0.36 |
| D | 75278 | 1498 | 1.99 |  | 71668 | 1396 | 1.95 |
| E | 3309 | 1772 | 53.55 |  | 3695 | 1880 | 50.88 |

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| Univariate, RAP change-adjusted, and RAP change interaction logistic regression analysis showing associations between the different factors and 24 hours mortality  |
|
|   | Univariate model |   | RAP Revision adjusted |   | Interaction with RAP revision |
|  |   |   |  |   |   |  | Pre-RAP-Revision |   | Post-RAP-Revision |
|   | OR | 95% CI |  | OR | 95% CI |  | OR | 95% CI |  | OR | 95% CI |
| Post-Rap-Revision | 1.067 | (1.020-1.117) |  | - | - |  | - | - |  | - | - |
| Age  |  |  |  |  |  |  |  |  |  |  |  |
| 18 - 54  | 1 |  |  | 1 |  |  | 1 |  |  | 1 |  |
| 55 - 64  | 2.434 | (2.258-2.624) |  | 2.433 | (2.256-2.623) |  | 2.426 | (2.183-2.697) |  | 2.439 | (2.191-2.715) |
| 65 - 74  | 3.181 | (2.962-3.417) |  | 3.177 | (2.958-3.413) |  | 3.183 | (2.877-3.521) |  | 3.171 | (2.865-3.509) |
| > 75  | 3.011 | (2.835-3.199) |  | 3.009 | (2.832-3.196) |  | 3.039 | (2.793-3.307) |  | 2.978 | (2.731-3.247) |
| Gender  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 1.743 | (1.663-1.828) |  | 1.744 | (1.663-1.828) |  | 1.692 | (1.584-1.809) |  | 1.798 | (1.681-1.923) |
| Urban/Metropolitan | 0.477 | (0.446-0.510) |  | 0.477 | (0.446-0.510) |  | 0.500 | (0.454-0.550) |  | 0.455 | (0.414-0.500) |
| Immediately life-threatening | 154.012 | (145.521-162.998) |  | 154.268 | (145.753-163.282) |  | 163.052 | (150.300-176.886) |  | 146.365 | (135.220-158.429) |
| Overdose (naloxone administered) | 5.236 | (4.553-6.022) |  | 5.234 | (4.551-6.020) |  | 4.891 | (3.989-5.995) |  | 5.580 | (4.603-6.764) |
| Season |  |  |  |  |  |  |  |  |  |  |  |
| Spring (Mar-May) | 1.147 | (1.074-1.224) |  | 1.141 | (1.069-1.219) |  | 1.114 | (1.024-1.213) |  | 1.191 | (1.073-1.324) |
| Summer (Jun-Aug) | 1 |  |  | 1 |  |  | 1 |  |  | 1 |  |
| Autumn (Sep-Nov) | 1.110 | (1.039-1.266) |  | 1.105 | (1.034-1.180) |  | 1.038 | (0.952-1.132) |  | 1.203 | (1.083-1.337) |
| Winter (Dec-Feb) | 1.187 | (1.112-1.266) |  | 1.171 | (1.095-1.251) |  | 1.185 | (1.077-1.305) |  | 1.198 | (1.087-1.321) |
| Day of week |  |  |  |  |  |  |  |  |  |  |  |
| Sun | 1.068 | (0.980-1.163) |  | 1.068 | (0.980-1.163) |  | 1.018 | (0.902-1.148) |  | 1.121 | (0.993-1.267) |
| Mon | 1.097 | (1.007-1.195) |  | 1.097 | (1.007-1.195) |  | 1.078 | (0.956-1.216) |  | 1.117 | (0.988-1.263) |
| Tue | 1.091 | (1.001-1.189) |  | 1.090 | (1.000-1.188) |  | 1.080 | (0.957-1.218) |  | 1.102 | (0.974-1.247) |
| Wed | 1.072 | (0.984-1.169) |  | 1.072 | (0.983-1.169) |  | 1.013 | (0.896-1.144) |  | 1.136 | (1.005-1.284) |
| Thu | 1.069 | (0.981-1.166) |  | 1.070 | (0.981-1.166) |  | 1.074 | (0.953-1.210) |  | 1.064 | (0.940-1.206) |
| Fri | 1 |  |  | 1 |  |  | 1 |  |  | 1 |  |
| Sat | 1.070 | (0.983-1.165) |  | 1.070 | (0.983-1.165) |  | 1.029 | (0.913-1.159) |  | 1.115 | (0.988-1.258) |
| Hour of day |  |  |  |  |  |  |  |  |  |  |  |
| 0-6 | 1 |  |  | 1 |  |  | 1 |  |  | 1 |  |
| 6-12 | 1.667 | (1.548-1.795) |  | 1.667 | (1.548-1.794) |  | 1.577 | (1.423-1.748) |  | 1.766 | (1.587-1.964) |
| 12-18 | 1.196 | (1.109-1.290) |  | 1.196 | (1.109-1.290) |  | 1.119 | (1.007-1.243) |  | 1.282 | (1.150-1.430) |
| 18-24 | 1.015 | (0.938-1.098) |  | 1.015 | (0.938-1.098) |  | 0.978 | (0.876-1.091) |  | 1.056 | (0.942-1.184) |
| MPDS® determinant |  |  |  |  |  |  |  |  |  |  |  |
| A | 0.379 | (0.324-0.443) |  | 0.379 | (0.324-0.443) |  | 0.358 | (0.287-0.446) |  | 0.403 | (0.322-0.504) |
| B | 0.632 | (0.545-0.733) |  | 0.631 | (0.543-0.732) |  | 0.635 | (0.519-0.777) |  | 0.625 | (0.501-0.779) |
| C | 1 |  |  | 1 |  |  | 1 |  |  | 1 |  |
| D | 5.388 | (4.892-5.933) |  | 5.386 | (4.891-5.932) |  | 5.309 | (4.644-6.070) |  | 5.471 | (4.761-6.288) |
| E | 292.353 | (264.336-323.340) |  | 292.946 | (264.864-324.006) |  | 301.673 | (261.916-347.464) |  | 285.423 | (247.169-329.599) |

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| Characteristics of Immediately-life-threatening patients  |  |  |  |
|   |   | Total (N=6909) |   | Pre-RAP-Revision (N=3265) |   | Post-RAP-Revision (N=3644) |
|   |   | n | %  |   | n | %  |   | n | %  |
| Age mean, median, (SD) |  | 64.0, 66.1, (19.6) |  | 63.6, 65.7, (19.6) |  | 64.4, 66.5, (19.6) |
| Age  |  |  |  |  |  |  |  |  |  |
| 18 - 54  |  | 2129 | 30.81 |  | 1021 | 31.27 |  | 1108 | 30.41 |
| 55 - 64  |  | 1178 | 17.05 |  | 572 | 17.52 |  | 606 | 16.63 |
| 65 - 74  |  | 1234 | 17.86 |  | 562 | 17.21 |  | 672 | 18.44 |
| > 75  |  | 2368 | 34.27 |  | 1110 | 34.00 |  | 1258 | 34.52 |
| Gender  |  |  |  |  |  |  |  |  |  |
| Male |  | 4349 | 62.95 |  | 2070 | 63.40 |  | 2279 | 62.54 |
| Female |  | 2558 | 37.02 |  | 1194 | 36.57 |  | 1364 | 37.43 |
| Unknown |  | 2 | 0.03 |  | 1 | 0.03 |  | 1 | 0.03 |
| Urban/metropolitan |  | 6121 | 88.59 |  | 2892 | 88.58 |  | 3229 | 88.61 |
| Season |  |  |  |  |  |  |  |  |  |
| Spring (Mar-May) |  | 1787 | 25.86 |  | 926 | 28.36 |  | 861 | 23.63 |
| Summer (Jun-Aug) |  | 1587 | 22.97 |  | 986 | 30.20 |  | 601 | 16.49 |
| Autumn (Sep-Nov) |  | 1613 | 23.35 |  | 799 | 24.47 |  | 814 | 22.34 |
| Winter (Dec-Feb) |  | 1922 | 27.82 |  | 554 | 16.97 |  | 1368 | 37.54 |
| Day of week |  |  |  |  |  |  |  |  |  |
| Sun |  | 1031 | 14.92 |  | 470 | 14.40 |  | 561 | 15.40 |
| Mon |  | 961 | 13.91 |  | 434 | 13.29 |  | 527 | 14.46 |
| Tue |  | 960 | 13.89 |  | 460 | 14.09 |  | 500 | 13.72 |
| Wed |  | 976 | 14.13 |  | 466 | 14.27 |  | 510 | 14.00 |
| Thu |  | 1003 | 14.52 |  | 503 | 15.41 |  | 500 | 13.72 |
| Fri |  | 971 | 14.05 |  | 475 | 14.55 |  | 496 | 13.61 |
| Sat |  | 1007 | 14.58 |  | 457 | 14.00 |  | 550 | 15.09 |
| Hour of day |  |  |  |  |  |  |  |  |  |
| 0-6 |  | 972 | 14.07 |  | 463 | 14.18 |  | 509 | 13.97 |
| 6-12 |  | 2288 | 33.12 |  | 1095 | 33.54 |  | 1193 | 32.74 |
| 12-18 |  | 2041 | 29.54 |  | 947 | 29.00 |  | 1094 | 30.02 |
| 18-24 |  | 1608 | 23.27 |  | 760 | 23.28 |  | 848 | 23.27 |
| MPDS® code |  |  |  |  |  |  |  |  |  |
| 02E01 |  | 16 | 0.23 |  | 7 | 0.21 |  | 9 | 0.25 |
| 06E01 |  | 995 | 14.40 |  | 325 | 9.95 |  | 670 | 18.39 |
| 07E01 |  | 4 | 0.06 |  | 0 | 0.00 |  | 4 | 0.11 |
| 09E01 |  | 4334 | 62.73 |  | 2189 | 67.04 |  | 2145 | 58.86 |
| 09E02 |  | 916 | 13.26 |  | 448 | 13.72 |  | 468 | 12.84 |
| 09E03 |  | 231 | 3.34 |  | 106 | 3.25 |  | 125 | 3.43 |
| 09E04 |  | 4 | 0.06 |  | 3 | 0.09 |  | 1 | 0.03 |
| 09E05 |  | 7 | 0.10 |  | 5 | 0.15 |  | 2 | 0.05 |
| 09E06 |  | 12 | 0.17 |  | 4 | 0.12 |  | 8 | 0.22 |
| 11E01 |  | 127 | 1.84 |  | 64 | 1.96 |  | 63 | 1.73 |
| 15E01 |  | 4 | 0.06 |  | 2 | 0.06 |  | 2 | 0.05 |
| 31E01 |   | 259 | 3.75 |   | 112 | 3.43 |   | 147 | 4.03 |

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| Characteristics of Immediately life-threatening patients deceased within 24 hours after EMS call (p<.001) |
|   | Pre-RAP-Revision |   | Post-RAP-Revision |
|  |  | Deceased |  |  | Deceased |
|   | N | n | % |   | N | n | % |
| Total | 3265 | 1752 | 53.66 |  | 3644 | 1858 | 50.99 |
| Age  |  |  |  |  |  |  |  |
| 18 - 54  | 1021 | 439 | 43.00 |  | 1108 | 429 | 38.72 |
| 55 - 64  | 572 | 300 | 52.45 |  | 606 | 313 | 51.65 |
| 65 - 74  | 562 | 332 | 59.07 |  | 672 | 382 | 56.85 |
| > 75  | 1110 | 681 | 61.35 |  | 1258 | 734 | 58.35 |
| Gender  |  |  |  |  |  |  |  |
| Male | 2070 | 1134 | 54.78 |  | 2279 | 1245 | 54.63 |
| Female | 1194 | 617 | 51.68 |  | 1364 | 612 | 44.87 |
| Unknown | 1 | 1 | 100.00 |  | 1 | 1 | 100.00 |
| Urban/metropolitan  | 2892 | 1510 | 52.21 |  | 3229 | 1581 | 48.96 |
| Season |  |  |  |  |  |  |  |
| Spring (Mar-May) | 926 | 505 | 54.54 |  | 861 | 440 | 51.10 |
| Summer (Jun-Aug) | 986 | 507 | 51.42 |  | 601 | 299 | 49.75 |
| Autumn (Sep-Nov) | 799 | 432 | 54.07 |  | 814 | 422 | 51.84 |
| Winter (Dec-Feb) | 554 | 308 | 55.60 |  | 1368 | 697 | 50.95 |
| Day of week |  |  |  |  |  |  |  |
| Sun | 470 | 243 | 51.70 |  | 561 | 291 | 51.87 |
| Mon | 434 | 228 | 52.53 |  | 527 | 271 | 51.42 |
| Tue | 460 | 248 | 53.91 |  | 500 | 267 | 53.40 |
| Wed | 466 | 254 | 54.51 |  | 510 | 277 | 54.31 |
| Thu | 503 | 273 | 54.27 |  | 500 | 243 | 48.60 |
| Fri | 475 | 253 | 53.26 |  | 496 | 235 | 47.38 |
| Sat | 457 | 253 | 55.36 |  | 550 | 274 | 49.82 |
| Hour of day |  |  |  |  |  |  |  |
| 0-6 | 463 | 225 | 48.60 |  | 509 | 233 | 45.78 |
| 6-12 | 1095 | 646 | 59.00 |  | 1193 | 693 | 58.09 |
| 12-18 | 947 | 508 | 53.64 |  | 1094 | 567 | 51.83 |
| 18-24 | 760 | 373 | 49.08 |  | 848 | 365 | 43.04 |
| MPDS code |  |  |  |  |  |  |  |
| 02E01 | 7 | 0 | 0.00 |  | 9 | 0 | 0.00 |
| 06E01 | 325 | 19 | 5.85 |  | 670 | 34 | 5.07 |
| 07E01 | 0 | 0 | - |  | 4 | 1 | 25.00 |
| 09E01 | 2189 | 1410 | 64.41 |  | 2145 | 1420 | 66.20 |
| 09E02 | 448 | 221 | 49.33 |  | 468 | 255 | 54.49 |
| 09E03 | 106 | 61 | 57.55 |  | 125 | 88 | 70.40 |
| 09E04 | 3 | 1 | 33.33 |  | 1 | 1 | 100.00 |
| 09E05 | 5 | 5 | 100.00 |  | 2 | 2 | 100.00 |
| 09E06 | 4 | 1 | 25.00 |  | 8 | 4 | 50.00 |
| 11E01 | 64 | 10 | 15.63 |  | 63 | 10 | 15.87 |
| 15E01 | 2 | 1 | 50.00 |  | 2 | 1 | 50.00 |
| 31E01 | 112 | 23 | 20.54 |   | 147 | 42 | 28.57 |

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| Univariate, RAP change-adjusted, and RAP change interaction logistic regression analysis showing associations between the different factors and 24 hours mortality of Immediately life-threatening subgroup |
|
|   |   | Univariate model |   | RAP change adjusted |   | Interaction with RAP revision |
|  |  |   |   |  |   |   |  | Pre-RAP-Revision |   | Post-RAP-Revision |
|   |   | OR | 95% CI |   | OR | 95% CI |   | OR | 95% CI |   | OR | 95% CI |
| Post-RAP-Revision |  | 0.898 | (0.817-0.987) |  | - | - |  | - | - |  | - | - |
| Age  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 - 54  |  | 1 |  |  | 1 |  |  | 1 |  |  | 1 |  |
| 55 - 64  |  | 1.576 | (1.366-1.819) |  | 1.576 | (1.365-1.819) |  | 1.462 | (1.190-1.796) |  | 1.691 | (1.384-2.065) |
| 65 - 74  |  | 1.995 | (1.730-2.300) |  | 2.002 | (1.736-2.308) |  | 1.914 | (1.553-2.358) |  | 2.085 | (1.716-2.533) |
| > 75  |  | 2.162 | (1.919-2.435) |  | 2.166 | (1.922-2.440) |  | 2.109 | (1.774-2.508) |  | 2.221 | (1.884-2.619) |
| Gender  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male |  | 1.307 | (1.185-1.442) |  | 1.306 | (1.184-1.441) |  | 1.134 | (0.983-1.308) |  | 1.481 | (1.294-1.695) |
| Urban/Metropolitan  |  | 0.529 | (0.453-0.618) |  | 0.529 | (0.453-0.618) |  | 0.592 | (0.473-0.741) |  | 0.478 | (0.386-0.593) |
| Season |  |  |  |  |  |  |  |  |  |  |  |  |
| Spring (Mar-May) |  | 1.087 | (0.950-1.245) |  | 1.101 | (0.961-1.261) |  | 1.131 | (0.945-1.354) |  | 1.058 | (0.859-1.303) |
| Summer (Jun-Aug) |  | 1 |  |  | 1 |  |  | 1 |  |  | 1 |  |
| Autumn (Sep-Nov) |  | 1.089 | (0.948-1.251) |  | 1.106 | (0.962-1.271) |  | 1.110 | (0.920-1.338) |  | 1.087 | (0.881-1.343) |
| Winter (Dec-Feb) |  | 1.061 | (0.929-1.212) |  | 1.104 | (0.963-1.266) |  | 1.180 | (0.958-1.455) |  | 1.049 | (0.866-1.271) |
| Day of week |  |  |  |  |  |  |  |  |  |  |  |  |
| Sun |  | 1.064 | (0.892-1.267) |  | 1.067 | (0.896-1.272) |  | 0.939 | (0.728-1.213) |  | 1.197 | (0.940-1.525) |
| Mon |  | 1.069 | (0.894-1.278) |  | 1.073 | (0.898-1.283) |  | 0.971 | (0.748-1.260) |  | 1.176 | (0.920-1.503) |
| Tue |  | 1.145 | (0.958-1.370) |  | 1.147 | (0.959-1.371) |  | 1.026 | (0.794-1.327) |  | 1.273 | (0.992-1.632) |
| Wed |  | 1.184 | (0.990-1.414) |  | 1.185 | (0.992-1.417) |  | 1.056 | (0.817-1.365) |  | 1.320 | (1.031-1.692) |
| Thu |  | 1.051 | (0.881-1.254) |  | 1.049 | (0.880-1.252) |  | 1.042 | (0.810-1.339) |  | 1.054 | (0.822-1.352) |
| Fri |  | 1 |  |  | 1 |  |  | 1 |  |  | 1 |  |
| Sat |  | 1.087 | (0.911-1.296) |  | 1.091 | (0.914-1.301) |  | 1.088 | (0.841-1.408) |  | 1.103 | (0.865-1.406) |
| Hour of day |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-6 |  | 1 |  |  | 1 |  |  | 1 |  |  | 1 |  |
| 6-12 |  | 1.582 | (1.360-1.840) |  | 1.582 | (1.360-1.840) |  | 1.525 | (1.226-1.898) |  | 1.636 | (1.327-2.016) |
| 12-18 |  | 1.246 | (1.070-1.453) |  | 1.248 | (1.071-1.455) |  | 1.224 | (0.980-1.529) |  | 1.270 | (1.028-1.568) |
| 18-24 |   | 0.950 | (0.810-1.115) |   | 0.951 | (0.810-1.115) |   | 1.020 | (0.809-1.285) |   | 0.892 | (0.715-1.113) |

ILT Model1 + one more interaction term 

Time series analysis on overall cohort

