# Supplement Content 2. National trend of population who underwent outpatient-based single-shot epidural injections in pain practice from 2006 to 2015 in South Korea

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| Year | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| All population | 1,027,675 | 1,038,266 | 1,041,764 | 1,045,198 | 1,049,470 | 1,053,266 | 1,057,687 | 1,060,994 | 1,064,537 | 1,068,306 |
| Population with single-shot epidural injection in pain practice  | 13,395 (1.3) | 14,589 (1.4) | 15,647 (1.5) | 17,166 (1.6) | 19,118 (1.8) | 22,257 (2.1) | 25,797 (2.4) | 27,479 (2.6) | 28,414 (2.7) | 29,812 (2.8) |
| Population with outpatient-based single-shot epidural injection in pain practice | 13,064 (97.5) | 14,255 (97.7) | 15,250 (97.5) | 16,702 (97.3) | 18,573 (97.1) | 21,670 (97.4) | 25,063 (97.2) | 26,613 (96.8) | 27,491 (96.8) | 28,760 (96.5) |
|  Sex |  |  |  |  |  |  |  |  |  |  |
|  Male | 4,793 (36.7) | 5,263 (36.9) | 5,579 (36.6) | 6,208 (37.2) | 7,006 (37.7) | 8,334 (38.5) | 9,609 (38.3) | 10,469 (39.3) | 10799 (39.3) | 11,641 (40.5) |
|  Female | 8,271 (63.3) | 8,992 (63.1) | 9,668 (63.4() | 10,493 (62.8) | 11,567 (62.3) | 13,335 (61.5) | 15,454(61.7) | 16,143 (60.7) | 16691 (60.7) | 17,119 (59.5) |
|  Age |  |  |  |  |  |  |  |  |  |  |
| < 55 | 4,936 (37.8) | 5,050 (35.4) | 5,367 (35.2) | 5,731 (34.3) | 6,444 (34.7) | 7,496 (34.6) | 8,417 (33.6) | 8,853 (33.3) | 8,981 (32.7) | 9,097 (31.6) |
| 55–64 | 3,117 (23.9) | 3,337 (23.4) | 3,410 (22.4) | 3,806 (22.8) | 4,291 (23.1) | 5,126 (23.7) | 6,000 (23.9) | 6,321 (23.8) | 6,604 (24.0) | 7,154 (24.9) |
| 65–74 | 3,612 (27.6) | 4,169 (29.2) | 4,510 (29.6) | 4,841 (29.0) | 5,148 (27.7) | 5,735 (26.5) | 6,629 (26.4) | 6,978 (26.20 | 7,096 (25.8) | 7,360 (25.6) |
| ≥ 75 | 1,399 (10.7) | 1,699 (11.9) | 1,960 (12.9) | 2,323 (13.9) | 2,690 (14.5) | 3,312 (15.3) | 4,017 (16.0) | 4,460 (16.8) | 4,809 (17.5) | 5,149 (17.9) |
|  Insurance type |  |  |  |  |  |  |  |  |  |  |
|  National health insurance | 11,971 (91.6) | 13,033 (91.4) | 13,955 (91.5) | 15,379 (92.1) | 17,260 (92.9) | 20,162 (93.0) | 23,401 (93.4) | 24,942 (93.7) | 25,833 (94.0) | 27,083 (94.2) |
|  Medical aid | 1,093 (8.4) | 1,222 (8.6) | 1,295 (8.5) | 1,323 (7.9) | 1,313 (7.1) | 1,508 (7.0) | 1,662 (6.6) | 1,671 (6.3) | 1,658 (6.0) | 1,677 (5.8) |
|  Residential area |  |  |  |  |  |  |  |  |  |  |
|  Large city | 6,822 (52.2) | 7,432 (52.1) | 8,054 (52.8) | 8,976 (53.7) | 9,957 (53.6) | 12,160 (56.1) | 14,115 (56.3) | 14,991 (56.3) | 15,797 (57.5) | 16,628 (57.8) |
|  Small city | 3,778 (28.9) | 4,391 (30.8) | 4,607 (30.2) | 4,940 (29.6) | 5,639 (30.4) | 6,136 (28.3) | 7,233 (28.9) | 7,781 (29.2) | 7,910 (28.8) | 8,263 (28.7) |
|  Rural area | 2,464 (18.9) | 2,432 (17.1) | 2,586 (17.0) | 2,785 (16.7) | 2,977 (16.0) | 3,373 (15.6) | 3,517 (14.8) | 3,840 (14.4) | 3,783 (13.8) | 3,869 (13.5) |
| Number of outpatient-based single-shot epidural injection in pain practice  | 40,796 | 44,855 | 47,751 | 51,033 | 56,666 | 65,977 | 76,498 | 79,830 | 80,192 | 84,362 |
|  Per 1,000 persons | 39.7 | 43.2 | 45.8 | 48.8 | 54.0 | 62.6 | 72.3 | 75.2 | 75.3 | 79.0 |
|  Per patient  | 1 [1, 2] | 2 [1, 3] | 2 [1, 3] | 2 [1, 3] | 2 [1, 3] | 2 [1, 3] | 2 [1, 3] | 2 [1, 3] | 2 [1, 3] | 2 [1, 3] |
|  Spinal pain disorder | 39,552 (97.0) | 43,653 (97.3) | 46,415 (97.2) | 49,680 (97.3) | 55,436 (97.8) | 64,846 (98.3) | 75188 (98.3) | 78647 (98.5) | 78940 (98.4) | 83222 (98.6) |
|  Institution |  |  |  |  |  |  |  |  |  |  |
|  Clinic | 34,145 (83.7) | 37,607 (83.8) | 39,443 (82.6) | 41,064 (80.5) | 44,550 (78.6) | 50,625 (76.7) | 57,503 (75.2) | 59,837 (75.0) | 60,366 (75.3) | 62,627 (74.2) |
|  Community hospital | 3,891 (9.5) | 4,432 (9.9) | 5,247 (11.0) | 6,416 (12.6) | 8,167 (14.4) | 10,746 (16.3) | 13,995 (18.3) | 14,643 (18.3) | 14,276 (17.8) | 15,997 (19.0) |
|  General hospital | 1,715 (4.2) | 1,635 (3.6) | 1,941 (4.1) |  2,116 (4.1) | 2,398 (4.2) | 3,093 (4.7) | 3,227 (4.2) | 3,398 (4.3) | 3,680 (4.6) | 3,852 (4.6) |
|  Tertiary hospital | 1,045 (2.6) | 1,181 (2.6) | 1,120 (2.3) | 1,437 (2.8) | 1,551 (2.7) | 1,513 (2.3) | 1,773 (2.3( | 1,952 (2.4) | 1,870 (2.3) | 1,886 (2.2) |
|  Department |  |  |  |  |  |  |  |  |  |  |
|  Anesthesiologya | 26,983 (66.1) | 29,126 (64.9) | 30,879 (64.7) | 31,812 (62.3) | 33,565 (59.2) | 37,696 (57.1) | 41,404 (54.1) | 41,963 (52.6) | 41,458 (51.7) | 42,167 (50.0) |
|  Spine surgeryb | 7,010 (17.2) | 8,131 (18.1) | 9,244 (19.4) | 11,067 (21.7) | 13,817 (24.4) | 17,779 (26.9) | 22,282 (29.1) | 24,190 (30.3) | 24,618 (30.7) | 27,973 (33.2) |
|  Othersc | 6,803 (16.7) | 7,598 (16.9) | 7,628 (16.0) | 8,154 (16.0) | 9,284 (16.4) | 10,502 (15.9) | 12,812 (16.7) | 13,677 (17.1) | 14,116 (17.6) | 14,222 (16.9) |
|  Type of epidural injection |  |  |  |  |  |  |  |  |  |  |
|  Epidural | 37,402 (91.7) | 40,643 (90.6) | 90 (0.2) | 12 (0.0) | 1 (0.0) | 1 (0.0) | 5 (0.0) | 5 (0.0) | 0 (0.0) | 0 (0.0) |
|  Lumbosacral | 0 (0.0) | 0 (0.0) | 41,145 (86.2) | 43,386 (85.0) | 47,307 (83.5) | 53,070 (80.4) | 59,270 (77.5) | 58,936 (73.8) | 57,019 (71.1) | 58,176 (69.0) |
|  Cervicothoracic | 0 (0.0) | 0 (0.0) | 3,284 (6.9) | 3,213 (6.3) | 3,782 (6.7) | 4,380 (6.6) | 5,612 (7.3) | 6,444 (8.1) | 7,094 (8.8) | 7,314 (8.7) |
| Spinal nerved | 2,704 (6.6) | 3,086 (6.9) | 12 0.0) | 2 (0.0) | 1 (0.0) | 1 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) |
| Selective nerve root | 0 (0.0) | 0 (0.0) | 1,080 (2.3) | 1,893 (3.7) | 2,368 (4.2) | 4,030 (6.1) | 6,475 (8.5) | 8,758 (11.0) | 10,452 (13.0) | 12,749 (15.1) |
| Dorsal root ganglion | 0 (0.0) | 0 (0.0) | 540 (1.1) | 545 (1.1) | 747 (1.3) | 1,237 (1.9) | 1,569 (2.1) | 1,980 (2.5) | 2,095 (2.6) | 2,543 (2.8) |
| Epidurography | 690 (1.7) | 1,126 (2.5) | 1,600 (3.4) | 1,982 (3.9) | 2,460 (4.3) | 3,258 (4.9) | 3,567 (4.7) | 3,707 (4.6) | 3,532 (4.4) | 3,779 (4.5) |
|  Injectable steroid |  |  |  |  |  |  |  |  |  |  |
| Claimed | 17,330 (42.5) | 19,290 (43.0) | 21,972 (46.0) | 25,519 (50.0) | 30,381 (53.6) | 36,791 (55.8) | 44,410 (58.1) | 37,943 (47.5) | 35,452 (44.2) | 38,285 (45.4) |
|  Triamcinolone | 16,745 (96.6) | 18,648 (96.7) | 21,150 (96.3) | 24,390 (95.6) | 29,101 (95.8) | 35,177 (95.6) | 42,405 (95.5) | 18,564 (48.9) | 6,812 (19.2) | 5,944 (15.5) |
|  Dexamethasone | 853 (4.9) | 857 (4.4) | 1,001 (4.6) | 1,377 (5.4) | 1,460 (4.8) | 1,840 (5.0) | 2,358 (5.3) | 16,525 (43.6) | 24,412 (68.9) | 28,562 (74.6) |
| Betamethasone | 87 (0.5) | 80 (0.4) | 72 (0.3) | 69 (0.3) | 89 (0.3) | 184 (0.5) | 208 (0.5) | 2,935 (7.7) | 4,006 (11.3) | 4,076 (10.6) |
|  Methyl prednisolone | 35 (0.2) | 58 (0.3) | 225 (1.0) | 127 (0.5) | 169 (0.6) | 171 (0.5) | 98 (0.2) | 857 (2.3) | 1,651 (4.7) | 1,402 (3.7) |
|  Hydrocortisone | 0 (0.0) | 5 (0.0) | 2 (0.0) | 1 (0.0) | 9 (0.0) | 4 (0.0) | 2 (0.0) | 6 (0.0) | 14 (0.0) | 12 (0.0) |

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| Values are expressed as number (%).aAnesthesiology and pain medicine.bOrthopedic surgery and neurosurgery.cOthers are departments such as internal medicine, rehabilitation medicine, general surgery, radiology, etc.dSpinal nerve plexus, root, or ganglion block |  |  |  |  |  |  |  |  |