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# STATISTICAL COMPENDIUM:
# MEDICAID PHARMACY BENEFIT USE AND REIMBURSEMENT IN 2005
# MASSACHUSETTS

**LIST OF TABLES**

TABLE 1
OVERVIEW OF BENEFICIARY SELECTION CRITERIA FOR STUDY POPULATION
MASSACHUSETTS, 2005

| Inclusion Criteria (2005) | Number of Dual and Non-dual Eligible Beneficiaries (Cell) | Number of Dual Eligible Beneficiaries (Cell)[g] | Number of Non-dual Eligible Beneficiaries (Cell) |
|---|---|---|---|
| 1. Beneficiaries who were eligible for Medicaid during at least one month[a] | 1221761 (A) | 235803 (E) | 985958 (I) |
| 2. Beneficiaries who had Medicaid pharmacy benefits during at least one month[b] | 1062101 (B) | 218954 (F) | 843147 (J) |
| 3. Beneficiaries who had fee-for-service pharmacy benefit coverage during at least one month[c, d, e] | 789180 (C) | 218317 (G) | 570863 (K) |
| 4. Beneficiaries who were all-year nursing facility residents[f] | 31692 (D) | 29169 (H) | 2523 (L) |

Source: Data for this table are from the MAX 2005 file for Massachusetts, released by CMS in 1/2009. This table was produced on 04/23/2009.

a. MAX data element "Eligible Months Count" was used to determine an individual's Medicaid eligibility. All individuals who had a value greater than zero were considered as beneficiaries and counted in Cell A.

b. Counts in Cell B were obtained by excluding from Cell A beneficiaries who never had pharmacy benefit coverage during their Medicaid enrollment in 2005 (based on MAX data element "Eligible Restricted Benefits Flag").

c. Cell C represents the study population for Tables 2 through 7. Cell C was obtained by excluding from Cell B beneficiaries who were in managed care (MC) plans that included prescription drugs in their capitated benefit package during all months of Medicaid eligibility in 2005, because the MAX files do not include separate prescription drug claims for those beneficiaries. MC plans include health maintenance organizations (HMOs), prepaid health plans (PHPs), or other MC organizations that provide health care benefits under capitation arrangements. Beneficiaries included in the study population are those who were in fee-for-service or primary care case management (PCCM) programs. In addition, beneficiaries in selected states in which prescription drug benefits were not covered in the capitated benefit package in MC or PHP plans are also included (see footnote e for a list of these states). In those states, if a beneficiary spent part of the year in fee-for-service, PCCM, or in a PHP or MC plan in which drugs were not included in the capitation, and spent part of the year in a PHP or MC plan in which drugs were capitated, only the months with fee-for-service pharmacy benefits are included in the tables. For example, if a beneficiary was in an MC plan that did not include prescription drugs in the capitation for 3 months of the year, and in a PHP with capitated drug coverage for the remaining 9 months, only the 3 months would be counted toward the number of benefit months associated with the beneficary. Therefore, benefit months included represent the benefit months with fee-for-service pharmacy benefits.

d. The total Medicaid pharmacy reimbursement for Massachusetts in 2005 was $1,054,271,915, of which $38,600,412 was excluded from our analysis because those claims were made for beneficiaries who were outside the study population or took place during months that were excluded from the analysis.

e. Enrollees in prepaid health plans (PHP) or managed care (MC) plans that did not provide a pharmacy benefit are treated as having fee-for-service pharmacy benefit coverage. There were 26 states in 2005 that had PHPs that did not include a pharmacy benefit: AL, AR, AZ, CA, CO, FL, GA, IA, KY, MA, MI, MS, NH, NV, NY, OH, OK, OR, PA, SC, SD, TN, TX, UT, WA, and WI. In addition, there were 8 states in which MC plans did not provide a pharmacy benefit (DE, IA, IL, NE, NY, TX, UT, and WV) and one state (NV) in which MC plans provided a pharmacy benefit for nonduals but not for duals. These lists were constructed from the CMS 2005 Medicaid Managed Care Enrollment Report http://www.cms.hhs.gov/MedicaidDataSourcesGenInfo/Downloads/mmcer05.pdf and by checking PHP and MC pharmacy coverage as necessary through state, PHP, and MC web sites. As a further check, we analyzed prescription drug claims for those reported as being in managed care all year in the MAX files (see Appendix Tables A.1 and A.3) to determine whether the annual number and cost of claims per person for those beneficiaries were comparable to those of beneficiaries reported as being in fee-for-service all year. If they were, that provided additional evidence that prescription drugs were not included in the managed care capitated benefit package.

f. Cell H represents the study population for Tables D.8 through D.10D. Cell L represents the study population for Tables ND.8 through ND.10D. All-year nursing facility residents are the beneficiaries who resided in nursing facilities throughout their enrollment in 2005. These beneficiaries were identified by comparing the number of months during which the MAX files contained at least one claim from nursing facilities to the number of Medicaid eligible months. If the former is greater than or equal to the latter, the beneficiary was considered an all-year resident. If the former is less than the latter but not equal to zero, the beneficiary was considered a part-year resident. Part-year residents are treated seperately because they are likely to be short-term residents and the level and pattern of their pharmacy benefit use may differ substantially from longer-term residents. The number of part-year residents and their benefit months are presented in footnotes to Tables D.8 through D.10D and N+B18D.8 through ND.10D. Residents of mental hospitals for the aged, inpatient psychiatric facilities for individuals under age 21, or intermediate care facilities for the mentally retarded are not counted as nursing facility residents in the nursing facility tables.

g. Pharmacy benefit use and reimbursement among full dual eligible beneficiaries are presented in Tables D.2 through D.7D, Tables D.11 through D.13, and Supplemental Tables 1 through 1E corresponding to the sample of beneficiaries in Cell G. To determine Medicaid-Medicare dual eligibility status, two MAX data elements ("Eligible Medicare Crossover Code -- Annual New Values" and "Eligible Restricted Benefits Flag") were used in combination. The dual eligible tables include all dual eligible benefit months in which the beneficiary had a fee-for-service pharmacy benefit.

Beneficiaries represented in Cell G, the dual study population, include all dual eligible beneficiaries who had a fee-for-service pharmacy benefit at least during one month in 2005. The dual eligible tables include all dual eligible benefit months in which the beneficiary had a fee-for-service pharmacy benefit.

Characteristics of non-dual eligible beneficiaries represented by Cell J are shown in Appendix Table A.1 and characteristics of non-dual eligible beneficiaries and their benefit months included in Cell J but excluded from Cell K are shown in Appendix Table A.2. Characteristics of dual eligible beneficiaries represented by Cell F are shown in Appendix Table A.3, and characteristics of dual eligible beneficiaries and their benefit months included in Cell F but excluded from Cell G are shown in Appendix Table A.4.

Bene(s) = beneficiary (or beneficiaries); CMS = Centers for Medicare & Medicaid Services; HMO = health maintenance organization; MAX = Medicaid Analytic Extract; MC = managed care; PCCM = primary care case management; PHP = prepaid health plan.

All Medicaid Beneficiaries

TABLE 2
CHARACTERISTICS OF MEDICAID STUDY POPULATION BENEFICIARIES, BY BASIS OF ELIGIBILITY[a, b]
MASSACHUSETTS, 2005

| Beneficiary Characteristics | Number of Beneficiaries | | | | | | Number of Benefit Months | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All | Aged | Disabled | Adults | Children | Other/ Unknown | All | Aged | Disabled | Adults | Children | Other/ Unknown |
| **All** | **789,180** | **126,522** | **219,524** | **155,682** | **287,452** | **0** | **6,910,199** | **1,331,100** | **2,385,156** | **1,102,289** | **2,091,654** | **0** |
| **Age** | | | | | | | | | | | | |
| 5 and younger | 102,740 | 2 | 3,523 | 0 | 99,215 | 0 | 649,994 | 24 | 33,657 | 0 | 616,313 | 0 |
| 6-14 | 135,258 | 2 | 11,497 | 0 | 123,759 | 0 | 1,102,911 | 17 | 125,880 | 0 | 977,014 | 0 |
| 15-20 | 86,757 | 1 | 10,879 | 11,425 | 64,452 | 0 | 693,772 | 12 | 116,002 | 79,536 | 498,222 | 0 |
| 21-44 | 197,321 | 6 | 78,383 | 118,911 | 21 | 0 | 1,679,250 | 61 | 852,079 | 827,016 | 94 | 0 |
| 45-64 | 140,579 | 6 | 115,242 | 25,326 | 5 | 0 | 1,453,239 | 56 | 1,257,538 | 195,634 | 11 | 0 |
| 65-74 | 49,833 | 49,813 | 0 | 20 | 0 | 0 | 546,515 | 546,412 | 0 | 103 | 0 | 0 |
| 75-84 | 42,055 | 42,055 | 0 | 0 | 0 | 0 | 449,228 | 449,228 | 0 | 0 | 0 | 0 |
| 85 and older | 34,635 | 34,635 | 0 | 0 | 0 | 0 | 335,285 | 335,285 | 0 | 0 | 0 | 0 |
| Unknown | 2 | 2 | 0 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 |
| **Gender** | | | | | | | | | | | | |
| Female | 458,312 | 90,175 | 110,972 | 115,229 | 141,936 | 0 | 4,022,555 | 952,888 | 1,215,289 | 823,480 | 1,030,898 | 0 |
| Male | 330,868 | 36,347 | 108,552 | 40,453 | 145,516 | 0 | 2,887,644 | 378,212 | 1,169,867 | 278,809 | 1,060,756 | 0 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Race** | | | | | | | | | | | | |
| White | 384,255 | 82,465 | 148,236 | 58,166 | 95,388 | 0 | 3,707,752 | 887,250 | 1,642,601 | 429,779 | 748,122 | 0 |
| African American | 67,739 | 6,494 | 16,795 | 14,649 | 29,801 | 0 | 556,812 | 71,680 | 183,000 | 97,119 | 205,013 | 0 |
| Other/unknown | 337,186 | 37,563 | 54,493 | 82,867 | 162,263 | 0 | 2,645,635 | 372,170 | 559,555 | 575,391 | 1,138,519 | 0 |
| **Use of Nursing Facilities[c]** | | | | | | | | | | | | |
| Entire year | 31,692 | 28,404 | 3,280 | 3 | 5 | 0 | 317,949 | 281,447 | 36,418 | 26 | 58 | 0 |
| Part year | 19,567 | 14,458 | 4,916 | 132 | 61 | 0 | 190,548 | 135,885 | 52,965 | 1,202 | 496 | 0 |
| None | 737,921 | 83,660 | 211,328 | 155,547 | 287,386 | 0 | 6,401,702 | 913,768 | 2,295,773 | 1,101,061 | 2,091,100 | 0 |
| **Maintenance Assistance Status** | | | | | | | | | | | | |
| Cash | 244,693 | 52,822 | 127,736 | 27,680 | 36,455 | 0 | 2,470,957 | 603,751 | 1,431,911 | 179,005 | 256,290 | 0 |
| Medically needy | 22,145 | 13,985 | 8,160 | 0 | 0 | 0 | 226,070 | 140,249 | 85,821 | 0 | 0 | 0 |
| Poverty-related | 328,585 | 34,465 | 64,200 | 0 | 229,920 | 0 | 2,682,878 | 350,923 | 669,183 | 0 | 1,662,772 | 0 |
| Other/unknown | 193,757 | 25,250 | 19,428 | 128,002 | 21,077 | 0 | 1,530,294 | 236,177 | 198,241 | 923,284 | 172,592 | 0 |
| **Dual Medicare Status[d]** | | | | | | | | | | | | |
| Full dual, all year | 216,214 | 111,154 | 103,527 | 1,529 | 4 | 0 | 2,344,153 | 1,172,085 | 1,158,402 | 13,634 | 32 | 0 |
| Full dual, part year | 2,103 | 2,037 | 66 | 0 | 0 | 0 | 23,326 | 22,580 | 746 | 0 | 0 | 0 |
| Non-dual, all year | 570,863 | 13,331 | 115,931 | 154,153 | 287,448 | 0 | 4,542,720 | 136,435 | 1,226,008 | 1,088,655 | 2,091,622 | 0 |
| **Managed Care (MC) Status** | | | | | | | | | | | | |
| Fee-for-service (FFS) all year | 611,176 | 126,179 | 207,973 | 96,705 | 180,319 | 0 | 6,192,839 | 1,329,069 | 2,319,011 | 873,782 | 1,670,977 | 0 |
| FFS part year, with Rx claims | 75,480 | 299 | 8,450 | 28,321 | 38,410 | 0 | 405,106 | 1,821 | 54,458 | 142,936 | 205,891 | 0 |
| FFS part year, no Rx claims | 102,524 | 44 | 3,101 | 30,656 | 68,723 | 0 | 312,254 | 210 | 11,687 | 85,571 | 214,786 | 0 |

Source: Data for this table are from the MAX 2005 file for Massachusetts, released by CMS in 1/2009. This table was produced on 04/23/2009.

a. Table 2 includes the beneficiaries represented by Cell C of Table 1. Benefit months are months during which beneficiaries had fee-for-service pharmacy benefits.

b. Medicaid basis of eligibility is classified as: aged, disabled, adults, and children. The disabled group includes beneficiaries of any age who were determined to be eligible because of disability or blindness. The children's group includes children receiving foster care and adoptive services. The total includes some beneficiaries with unknown basis of eligibility and some whose age categories are not consistent with basis of eligibility.

c. Please refer to footnote f of Table 1 for methodology used to determine nursing facility residence.

d. The "Full dual, all year" group includes beneficiaries who had Medicare coverage as well as Medicaid fee-for-service pharmacy benefits during all months of Medicaid enrollment in 2005. The "Full dual, part year" group includes beneficiaries who had such benefits for some, but not all, months of their enrollment. The "Non-dual, all year" group includes beneficiaries who were never dually eligible. Refer to footnote g of Table 1 for more information about how we determined dual eligibility status.

Bene(s) = beneficiary (or beneficiaries); Bene Mo(s) = benefit month(s); CMS = Centers for Medicare & Medicaid Services; FFS = fee-for-service pharmacy benefit; MAX = Medicaid Analytic Extract; MC = managed care; Rx = pharmacy benefit.

TABLE 3
ANNUAL MEDICAID PHARMACY BENEFIT USE AND REIMBURSEMENT PER BENEFICIARY, BY BENEFICIARY CHARACTERISTIC[a, b]
MASSACHUSETTS, 2005

| Beneficiary Characteristics | Percentage with at Least One Rx | Mean Number of Rx | Mean Rx $ | $ per Rx | Mean $, All Medicaid FFS $[c] | Rx $ as a Percentage of All Medicaid FFS $[d] | Number of Beneficiaries |
|---|---|---|---|---|---|---|---|
| **All** | **65.5** | **19.1** | **$1,287** | **$67** | **$8,626** | **14.9** | **789,180** |
| **Age** | | | | | | | |
| 5 and younger | 45.1 | 2.1 | 85 | 40 | 3,695 | 2.3 | 102,740 |
| 6-14 | 47.4 | 4.1 | 296 | 72 | 2,919 | 10.1 | 135,258 |
| 15-20 | 51.9 | 5.4 | 521 | 97 | 4,167 | 12.5 | 86,757 |
| 21-44 | 68.2 | 15.9 | 1,299 | 82 | 7,655 | 17.0 | 197,321 |
| 45-64 | 83.3 | 38.4 | 2,861 | 75 | 13,095 | 21.8 | 140,579 |
| 65-74 | 83.9 | 37.7 | 2,150 | 57 | 10,805 | 19.9 | 49,833 |
| 75-84 | 87.0 | 43.6 | 2,176 | 50 | 18,205 | 12.0 | 42,055 |
| 85 and older | 89.4 | 45.3 | 1,863 | 41 | 29,343 | 6.3 | 34,635 |
| Unknown | 100.0 | 17.0 | 616 | 36 | 9,328 | 6.6 | 2 |
| **Basis of Eligibility[e]** | | | | | | | |
| Aged | 86.4 | 41.8 | 2,080 | 50 | 18,340 | 11.3 | 126,522 |
| Disabled | 85.0 | 36.0 | 2,975 | 83 | 14,887 | 20.0 | 219,524 |
| Adults | 58.2 | 6.9 | 341 | 50 | 2,812 | 12.1 | 155,682 |
| Children | 45.2 | 2.8 | 161 | 57 | 2,718 | 5.9 | 287,452 |
| Unknown | 0.0 | 0.0 | 0 | 0 | 0 | 0.0 | 0 |
| **Gender** | | | | | | | |
| Female | 68.8 | 21.2 | 1,277 | 60 | 8,835 | 14.5 | 458,312 |
| Male | 60.8 | 16.2 | 1,301 | 80 | 8,338 | 15.6 | 330,868 |
| Unknown | 0.0 | 0.0 | 0 | 0 | 0 | 0.0 | 0 |
| **Race** | | | | | | | |
| White | 74.9 | 26.3 | 1,769 | 67 | 11,496 | 15.4 | 384,255 |
| African American | 55.9 | 12.4 | 886 | 71 | 6,483 | 13.7 | 67,739 |
| Other/unknown | 56.7 | 12.2 | 818 | 67 | 5,787 | 14.1 | 337,186 |
| **Use of Nursing Facilities[f]** | | | | | | | |
| Entire year | 94.1 | 64.3 | 3,058 | 48 | 50,918 | 6.0 | 31,692 |
| Part year | 94.9 | 53.9 | 2,900 | 54 | 33,195 | 8.7 | 19,567 |
| None | 63.4 | 16.2 | 1,168 | 72 | 6,158 | 19.0 | 737,921 |
| **Maintenance Assistance Status** | | | | | | | |
| Cash | 76.9 | 27.6 | 1,961 | 71 | 10,575 | 18.5 | 244,693 |
| Medically needy | 81.0 | 34.8 | 1,991 | 57 | 18,730 | 10.6 | 22,145 |
| Poverty related | 57.4 | 14.4 | 978 | 68 | 7,362 | 13.3 | 328,585 |
| Other/unknown | 62.9 | 14.4 | 880 | 61 | 7,155 | 12.3 | 193,757 |

Source: Data for this table are from the MAX 2005 file for Massachusetts, released by CMS in 1/2009. This table was produced on 04/23/2009.

a. Table 3 includes beneficiaries represented by Cell C of Table 1.

b. The Medicaid reimbursement amounts presented in this table do not reflect federally required rebates from drug manufacturers to the state.

c. In eight states (DE, IA, IL, NE, NY, TX, UT, and WV) the expenditures in this column include only Rx drug expenditures for those enrolled in capitated managed care plans, and not expenditures for other services covered by the plans or long-term-care services not covered by the plans. As a result, the amounts shown in this column for all Medicaid fee-for-service expenditures are lower than they would otherwise be.

d. In eight states (DE, IA, IL, NE, NY, TX, UT, and WV) the Rx share of expenditures for all Medicaid services shown in this column is higher than it would be if all expenditures for these other services, including services provided in capitated managed care plans and long-term-care services, were included.

e. Medicaid basis of eligibility is classified as: aged, disabled, adults, and children. The disabled group includes beneficiaries of any age who were determined to be eligible because of disability

or blindness. The children's group includes children receiving foster care and adoptive services.

f. Please refer to footnote f of Table 1 for methodology used to determine nursing facility residence.

Bene(s) = beneficiary (or beneficiaries); CMS = Centers for Medicare & Medicaid Services; FFS = fee-for-service; MAX = Medicaid Analytic Extract; OTC = over-the-counter; Rx = prescription(s) or pharmacy benefit; $ = Medicaid reimbursement.

TABLE 4

MEDICAID PHARMACY BENEFIT USE AND REIMBURSEMENT PER BENEFIT MONTH, BY BENEFICIARY CHARACTERISTIC[a, b]
MASSACHUSETTS, 2005

| Beneficiary Characteristics | Mean Number of Rx | Mean Rx $ | Rx $ as a Percentage of All Medicaid FFS $c | Number of Rx, Percentage with: None | More than 0, but 1 or Less | More than 1, but 2 or Less | More than 2, but 5 or Less | More than 5, but 10 or Less | More than 10 | Mean $, All Medicaid FFS $d | Number Beneficiaries | Benefit Months |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All | 2.2 | $147 | 14.9 | 34.5 | 32.0 | 8.6 | 14.4 | 8.5 | 2.0 | $985 | 789,180 | 6,910,199 |
| **Age** | | | | | | | | | | | | |
| 5 and younger | 0.3 | 14 | 2.3 | 54.9 | 41.0 | 2.7 | 1.3 | 0.1 | 0.0 | 584 | 102,740 | 649,994 |
| 6-14 | 0.5 | 36 | 10.1 | 52.6 | 38.8 | 4.5 | 3.5 | 0.5 | 0.0 | 358 | 135,258 | 1,102,911 |
| 15-20 | 0.7 | 65 | 12.5 | 48.1 | 40.0 | 6.0 | 4.7 | 1.0 | 0.1 | 521 | 86,757 | 693,772 |
| 21-44 | 1.9 | 153 | 17.0 | 31.8 | 36.4 | 10.7 | 14.2 | 5.8 | 1.1 | 900 | 197,321 | 1,679,250 |
| 45-64 | 3.7 | 277 | 21.8 | 16.7 | 20.9 | 12.2 | 27.5 | 18.2 | 4.5 | 1,267 | 140,579 | 1,453,239 |
| 65-74 | 3.4 | 196 | 19.9 | 16.1 | 21.7 | 13.2 | 26.9 | 17.7 | 4.4 | 985 | 49,833 | 546,515 |
| 75-84 | 4.1 | 204 | 12.0 | 13.0 | 16.3 | 11.9 | 29.5 | 23.1 | 6.2 | 1,704 | 42,055 | 449,228 |
| 85 and older | 4.7 | 192 | 6.3 | 10.6 | 11.8 | 10.7 | 31.2 | 29.1 | 6.7 | 3,031 | 34,635 | 335,285 |
| Unknown | 6.8 | 246 | 6.6 | 0.0 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 3,731 | 2 | 5 |
| **Basis of Eligibility[e]** | | | | | | | | | | | | |
| Aged | 4.0 | 198 | 11.3 | 13.6 | 17.2 | 12.1 | 28.9 | 22.6 | 5.6 | 1,743 | 126,522 | 1,331,100 |
| Disabled | 3.3 | 274 | 20.0 | 15.0 | 25.1 | 13.0 | 27.1 | 16.1 | 3.8 | 1,370 | 219,524 | 2,385,156 |
| Adults | 1.0 | 48 | 12.1 | 41.8 | 40.1 | 8.7 | 7.5 | 1.7 | 0.2 | 397 | 155,682 | 1,102,289 |
| Children | 0.4 | 22 | 5.9 | 54.8 | 39.4 | 3.5 | 2.1 | 0.3 | 0.0 | 374 | 287,452 | 2,091,654 |
| Unknown | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0 |
| **Gender** | | | | | | | | | | | | |
| Female | 2.4 | 146 | 14.5 | 31.2 | 32.0 | 9.0 | 15.6 | 9.8 | 2.4 | 1,007 | 458,312 | 4,022,555 |
| Male | 1.9 | 149 | 15.6 | 39.2 | 31.9 | 7.9 | 12.7 | 6.8 | 1.5 | 955 | 330,868 | 2,887,644 |
| Unknown | 0.0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0 | 0 |
| **Race** | | | | | | | | | | | | |
| White | 2.7 | 183 | 15.4 | 25.1 | 30.0 | 10.6 | 19.4 | 12.1 | 2.9 | 1,191 | 384,255 | 3,707,752 |
| African American | 1.5 | 108 | 13.7 | 44.1 | 33.3 | 6.9 | 10.1 | 4.7 | 0.9 | 789 | 67,739 | 556,812 |
| Other/unknown | 1.6 | 104 | 14.1 | 43.3 | 34.0 | 6.6 | 9.6 | 5.3 | 1.2 | 738 | 337,186 | 2,645,635 |
| **Use of Nursing Facilities[f]** | | | | | | | | | | | | |
| Entire year | 6.4 | 305 | 6.0 | 5.9 | 6.0 | 7.1 | 27.7 | 38.3 | 15.0 | 5,075 | 31,692 | 317,949 |
| Part year | 5.5 | 298 | 8.7 | 5.1 | 10.0 | 9.7 | 32.5 | 33.0 | 9.7 | 3,409 | 19,567 | 190,548 |
| None | 1.9 | 135 | 19.0 | 36.6 | 33.7 | 8.6 | 13.3 | 6.6 | 1.2 | 710 | 737,921 | 6,401,702 |
| **Maintenance Assistance Status** | | | | | | | | | | | | |
| Cash | 2.7 | 194 | 18.5 | 23.1 | 29.5 | 11.6 | 21.4 | 11.9 | 2.5 | 1,047 | 244,693 | 2,470,957 |
| Medically needy | 3.4 | 195 | 10.6 | 19.0 | 21.3 | 11.9 | 25.7 | 17.9 | 4.2 | 1,835 | 22,145 | 226,070 |
| Poverty related | 1.8 | 120 | 13.3 | 42.6 | 32.9 | 6.1 | 10.2 | 6.5 | 1.6 | 902 | 328,585 | 2,682,878 |
| Other/unknown | 1.8 | 111 | 12.3 | 37.1 | 34.7 | 8.5 | 11.3 | 6.6 | 1.7 | 906 | 193,757 | 1,530,294 |

Source: Data for this table are from the MAX 2005 file for Massachusetts, released by CMS in 1/2009. This table was produced on 04/23/2009.

a. Table 4 includes the beneficiaries represented by Cell C of Table 1. Benefit months are months during which beneficiaries had fee-for-service pharmacy benefits.

b. The Medicaid reimbursement amounts presented in this table do not reflect federally required rebates from drug manufacturers to the state.

c. In eight states (DE, IA, IL, NE, NY, TX, UT, and WV) the expenditures in this column include only Rx drug expenditures for those enrolled in capitated managed care plans, and not expenditures for other services covered by the plans or long-term-care services not covered by the plans. As a result, the amounts shown in this column for all Medicaid fee-for-service expenditures are lower than they would otherwise be.

d. In eight states (DE, IA, IL, NE, NY, TX, UT, and WV) the Rx share of expenditures for all Medicaid services shown in this column is higher than it would be if all expenditures for these other services, including services provided in capitated managed care plans and long-term-care services, were included.

e. Medicaid basis of eligibility is classified as: aged, disabled, adults, and children. The disabled group includes beneficiaries of any age who were determined to be eligible because of disability or blindness. The children's group includes children receiving foster care and adoptive services.

f. Please refer to footnote f of Table 1 for methodology used to determine nursing facility residence.

Bene(s) = beneficiary (or beneficiaries); Bene Mo(s) = benefit month(s); CMS = Centers for Medicare & Medicaid Services; FFS = fee-for-service; MAX = Medicaid Analytic Extract; Rx = prescription(s) or pharmacy benefit; $ = Medicaid reimbursement.

All Medicaid Beneficiaries

TABLE 5
AVERAGE MEDICAID PHARMACY BENEFIT USE AND REIMBURSEMENT PER BENEFIT MONTH, BY BRAND STATUS AND BENEFICIARY CHARACTERISTIC[a, b, c]
MASSACHUSETTS, 2005

| Beneficiary Characteristics | All Rx | | | Patented Brand-Name Drugs | | | Off-Patent Brand-Name Drugs | | | Generic Drugs | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of Rx | Rx $ | $ per Rx | Number of Rx | Rx $ | $ per Rx | Number of Rx | Rx $ | $ per Rx | Number of Rx | Rx $ | $ per Rx |
| **All** | **2.2** | **$147** | **$67** | **0.8** | **$113** | **$146** | **0.0** | **$4** | **$101** | **1.4** | **$30** | **$22** |
| **Age** | | | | | | | | | | | | |
| 5 and younger | 0.3 | 14 | 40 | 0.1 | 10 | 107 | 0.0 | 0 | 54 | 0.2 | 3 | 12 |
| 6-14 | 0.5 | 36 | 72 | 0.2 | 31 | 128 | 0.0 | 1 | 101 | 0.3 | 5 | 18 |
| 15-20 | 0.7 | 65 | 97 | 0.3 | 55 | 195 | 0.0 | 2 | 98 | 0.4 | 8 | 22 |
| 21-44 | 1.9 | 153 | 82 | 0.6 | 117 | 185 | 0.0 | 4 | 113 | 1.2 | 31 | 26 |
| 45-64 | 3.7 | 277 | 75 | 1.3 | 209 | 163 | 0.1 | 7 | 129 | 2.4 | 61 | 26 |
| 65-74 | 3.4 | 196 | 57 | 1.3 | 151 | 120 | 0.0 | 4 | 92 | 2.1 | 41 | 19 |
| 75-84 | 4.1 | 204 | 50 | 1.5 | 156 | 104 | 0.1 | 4 | 62 | 2.5 | 43 | 17 |
| 85 and older | 4.7 | 192 | 41 | 1.6 | 143 | 89 | 0.1 | 5 | 54 | 3.0 | 44 | 15 |
| Unknown | 6.8 | 246 | 36 | 3.4 | 220 | 65 | 0.2 | 5 | 25 | 3.2 | 21 | 7 |
| **Basis of Eligibility[d]** | | | | | | | | | | | | |
| Aged | 4.0 | 198 | 50 | 1.4 | 151 | 106 | 0.1 | 4 | 67 | 2.5 | 43 | 17 |
| Disabled | 3.3 | 274 | 83 | 1.2 | 212 | 179 | 0.1 | 7 | 129 | 2.1 | 55 | 27 |
| Adults | 1.0 | 48 | 50 | 0.3 | 33 | 119 | 0.0 | 2 | 83 | 0.7 | 13 | 20 |
| Children | 0.4 | 22 | 57 | 0.2 | 18 | 114 | 0.0 | 1 | 83 | 0.2 | 4 | 17 |
| Unknown | 0.0 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| **Gender** | | | | | | | | | | | | |
| Female | 2.4 | 146 | 60 | 0.8 | 110 | 131 | 0.0 | 4 | 92 | 1.5 | 32 | 21 |
| Male | 1.9 | 149 | 80 | 0.7 | 117 | 171 | 0.0 | 3 | 122 | 1.1 | 29 | 25 |
| Unknown | 0.0 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| **Race** | | | | | | | | | | | | |
| White | 2.7 | 183 | 67 | 1.0 | 140 | 144 | 0.0 | 5 | 102 | 1.7 | 39 | 23 |
| African American | 1.5 | 108 | 71 | 0.5 | 85 | 164 | 0.0 | 2 | 105 | 1.0 | 20 | 21 |
| Other/unknown | 1.6 | 104 | 67 | 0.6 | 81 | 145 | 0.0 | 3 | 98 | 1.0 | 21 | 21 |
| **Use of Nursing Facilities[e]** | | | | | | | | | | | | |
| Entire year | 6.4 | 305 | 48 | 2.2 | 230 | 102 | 0.1 | 8 | 55 | 4.0 | 67 | 17 |
| Part year | 5.5 | 298 | 54 | 1.9 | 225 | 117 | 0.1 | 7 | 74 | 3.5 | 65 | 19 |
| None | 1.9 | 135 | 72 | 0.7 | 104 | 155 | 0.0 | 3 | 115 | 1.2 | 28 | 24 |
| **Maintenance Assistance Status** | | | | | | | | | | | | |
| Cash | 2.7 | 194 | 71 | 1.0 | 150 | 155 | 0.0 | 5 | 113 | 1.7 | 40 | 23 |
| Medically needy | 3.4 | 195 | 57 | 1.3 | 149 | 118 | 0.1 | 5 | 86 | 2.1 | 41 | 20 |
| Poverty related | 1.8 | 120 | 68 | 0.6 | 92 | 145 | 0.0 | 3 | 102 | 1.1 | 25 | 23 |
| Other/unknown | 1.8 | 111 | 61 | 0.6 | 85 | 134 | 0.0 | 3 | 84 | 1.2 | 24 | 20 |

Source: Data for this table are from the MAX 2005 file for Massachusetts, released by CMS in 1/2009. This table was produced on 04/23/2009.

a. Table 5 includes the beneficiaries represented by Cell C of Table 1. Benefit months are months during which beneficiaries had fee-for-service pharmacy benefits.

b. The Medicaid reimbursement amounts presented in this table do not reflect federally required rebates from drug manufacturers to the state.

c. Brand-name drugs, sometimes called "innovator single-source drugs," are drugs whose patents have not yet expired. Off-patent brand-name drugs, sometimes called "innovator multiple-source drugs," are brand-name drugs whose patents have expired. Generic drugs, sometimes called "non-innovator multiple-source drugs," are off-patent drugs manufactured and sold by companies

other than the original patent holder. In Massachusetts, 0.3 percent of drug claims have missing values for brand status. Thus, the sum of the three groups in this table may be smaller than all prescriptions

combined. For information about this classification method, see Wolters Kluwer Health, http://www.medispan.com/marketing/ContentPage.aspx?contentId=09e0f1ed-80a9-4a87-8bc9-

d. Medicaid basis of eligibility is classified as: aged, disabled, adults, and children. The disabled group includes beneficiaries of any age who were determined to be eligible because of disability or blindness. The children's group includes children receiving foster care and adoptive services.

e. Please refer to footnote f of Table 1 for methodology used to determine nursing facility residence.

CMS = Centers for Medicare & Medicaid Services; MAX = Medicaid Analytic Extract; Rx = prescription(s) or pharmacy benefit; $ = Medicaid reimbursement.

All Medicaid Beneficiaries

TABLE 6

MEDICAID PHARMACY BENEFIT USE AND REIMBURSEMENT, BY BRAND STATUS AND THERAPEUTIC CATEGORY[a, b, c, d]
MASSACHUSETTS, 2005

| Therapeutic Category | Number of Rx per Benefit Month Among Users | | | | $ per Benefit Month Among Users | | | | $ per Rx | | | | Total Number of Rx | Total Rx $ | Users | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Patented Brand-Name | Off-Patent Brand-Name | Generic | Total | Patented Brand-Name | Off-Patent Brand-Name | Generic | Total | Patented Brand-Name | Off-Patent Brand-Name | Generic | | | Number of Users | As a Percentage of All Benes | Number of Benefit Months |
| Anti-infective Agents | 0.3 | 0.1 | 0.0 | 0.2 | $32 | $26 | $2 | $4 | $111 | $305 | $76 | $23 | 894,085 | $98,982,448 | 287,895 | 36.5 | 3,063,901 |
| Biologicals | 0.2 | 0.1 | 0.0 | 0.0 | 92 | 48 | 23 | 21 | 579 | 398 | 3,600 | 659 | 5,920 | 3,428,695 | 3,462 | 0.4 | 37,254 |
| Antineoplastic Agents | 0.5 | 0.2 | 0.0 | 0.4 | 133 | 108 | 1 | 24 | 260 | 681 | 616 | 68 | 49,531 | 12,886,348 | 9,141 | 1.2 | 97,056 |
| Endocrine/Metabolic Drugs | 0.7 | 0.3 | 0.0 | 0.5 | 35 | 25 | 2 | 8 | 48 | 101 | 73 | 17 | 1,428,870 | 68,524,550 | 180,986 | 22.9 | 1,932,240 |
| Cardiovascular Agents | 1.4 | 0.4 | 0.0 | 1.0 | 48 | 34 | 0 | 13 | 35 | 83 | 50 | 14 | 3,095,746 | 107,149,401 | 204,553 | 25.9 | 2,246,933 |
| Respiratory Agents | 0.5 | 0.3 | 0.0 | 0.2 | 35 | 33 | 0 | 2 | 66 | 99 | 55 | 10 | 873,669 | 57,513,049 | 151,524 | 19.2 | 1,629,023 |
| Gastrointestinal Agents | 0.6 | 0.4 | 0.0 | 0.2 | 50 | 46 | 0 | 4 | 83 | 126 | 46 | 17 | 1,016,060 | 84,153,635 | 152,305 | 19.3 | 1,670,201 |
| Genitourinary Agents | 0.4 | 0.2 | 0.0 | 0.1 | 24 | 20 | 1 | 3 | 65 | 89 | 55 | 26 | 191,182 | 12,504,956 | 47,963 | 6.1 | 522,178 |
| CNS Drugs | 1.2 | 0.4 | 0.0 | 0.8 | 109 | 86 | 0 | 23 | 87 | 193 | 78 | 29 | 3,121,961 | 273,087,676 | 230,839 | 29.3 | 2,511,479 |
| Stimulants/Anti-obesity/Anorexia | 0.6 | 0.5 | 0.0 | 0.2 | 55 | 48 | 0 | 8 | 86 | 104 | 102 | 41 | 193,183 | 16,558,415 | 28,386 | 3.6 | 299,157 |
| Miscellaneous Psychological/ Neurological Agents | 0.8 | 0.8 | 0.0 | 0.0 | 145 | 145 | 0 | 0 | 188 | 190 | 0 | 17 | 139,501 | 26,285,988 | 17,177 | 2.2 | 181,232 |
| Analgesics and Anesthetics | 0.6 | 0.1 | 0.0 | 0.5 | 30 | 11 | 3 | 16 | 50 | 156 | 238 | 31 | 1,441,692 | 72,629,410 | 225,272 | 28.5 | 2,426,104 |
| Neuromuscular Agents | 0.8 | 0.3 | 0.0 | 0.5 | 64 | 47 | 2 | 16 | 76 | 152 | 100 | 30 | 1,190,577 | 90,100,000 | 126,405 | 16.0 | 1,401,829 |
| Nutritional Products | 0.4 | 0.0 | 0.0 | 0.3 | 6 | 1 | 0 | 5 | 16 | 44 | 15 | 15 | 222,897 | 3,672,918 | 59,807 | 7.6 | 599,027 |
| Hematological Agents | 0.8 | 0.2 | 0.0 | 0.6 | 90 | 83 | 0 | 7 | 118 | 450 | 68 | 12 | 409,990 | 48,541,483 | 49,570 | 6.3 | 537,744 |
| Topical Products | 0.3 | 0.1 | 0.0 | 0.2 | 14 | 9 | 0 | 4 | 41 | 78 | 45 | 20 | 713,852 | 28,928,996 | 195,191 | 24.7 | 2,102,338 |
| Miscellaneous Products | 0.3 | 0.2 | 0.0 | 0.1 | 62 | 47 | 5 | 11 | 205 | 271 | 294 | 93 | 48,976 | 10,050,002 | 15,049 | 1.9 | 161,385 |
| Unknown Therapeutic Category | 0.3 | 0.0 | 0.0 | 0.0 | 7 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 27,155 | 673,533 | 8,505 | 1.1 | 94,928 |
| TOTAL NO. OF RX AND RX $ | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 15,064,847 | 1,015,671,503 | n.a. | n.a. | n.a. |

Source: Data for this table are from the MAX 2005 file for Massachusetts, released by CMS in 1/2009. This table was produced on 04/23/2009.

a. Table 6 includes the beneficiaries represented by Cell C of Table 1. A beneficiary who used drugs from two or more categories was counted as a user for each category. Therefore, the sum of users across categories may exceed the total number of individual users. Benefit months are months during which beneficiaries had fee-for-service pharmacy benefits.

b. Medicaid reimbursement amounts presented in this table do not reflect federally required rebates from drug manufacturers to the state.

c. For information about these therapeutic categories, see Wolters Kluwer Health, http://www.medispan.com/marketing/ContentPage.aspx?contentId=09e0f1ed-80a9-4a87-8bc9-ad778d7b6615 (October 26, 2007).

d. Brand-name drugs, sometimes called "innovator single-source drugs," are drugs whose patents have not yet expired. Off-patent brand-name drugs, sometimes called "innovator multiple-source drugs," are brand-name drugs whose patents have expired. Generic drugs, sometimes called "non-innovator multiple-source drugs," are off-patent drugs manufactured and sold by companies other than

the original patent holder. In Massachusetts, 0.3 percent of drug claims have missing values for brand status. Thus, the sum of the three groups in this table may be smaller than all prescriptions combined.

For information about this classification method, see Wolters Kluwer Health, http://www.medispan.com/marketing/ContentPage.aspx?contentId=09e0f1ed-80a9-4a87-8bc9-ad778d7b6615 (October 26, 2007).

e. A user is a beneficiary who had at least one prescription filled in a given therapeutic category during 2005.

Bene(s) = beneficiary (or beneficiaries); Bene Mo(s) = benefit month(s); CMS = Centers for Medicare & Medicaid Services; CNS = Central Nervous System; MAX = Medicaid Analytic Extract; n.a. = not applicable; Rx = prescription(s) or pharmacy benefit; $ = Medicaid reimbursement.

All Medicaid Beneficiaries

TABLE 7
MEDICAID PHARMACY BENEFIT USE AND REIMBURSEMENT, BY TOP 10 DRUG GROUP[a, b, c]
MASSACHUSETTS, 2005

| Top 10 Drug Groups | Total Medicaid Rx $ | Users | | | Among Users | | |
|---|---|---|---|---|---|---|---|
| | | Number | As a Percentage of All Beneficiaries | Number of Benefit Months | Number of Rx per Benefit Month | $ per Rx | Rx $ per Benefit Month |
| ANTIPSYCHOTICS | $193,111,942 | 131,634 | 16.7 | 1,476,988 | 0.7 | $190 | $131 |
| ANTICONVULSANT | 79,817,661 | 108,211 | 13.7 | 1,217,981 | 0.7 | 89 | 66 |
| ULCER DRUGS | 70,988,795 | 139,462 | 17.7 | 1,549,644 | 0.5 | 92 | 46 |
| ANTIVIRAL | 69,539,269 | 27,459 | 3.5 | 307,654 | 0.5 | 471 | 226 |
| ANTIDEPRESSANTS | 67,515,581 | 237,673 | 30.1 | 2,630,156 | 0.6 | 46 | 26 |
| ANTIHYPERLIPIDEMIC | 57,820,691 | 101,581 | 12.9 | 1,150,699 | 0.6 | 87 | 50 |
| ANTIASTHMATIC | 45,236,860 | 179,461 | 22.7 | 1,962,588 | 0.3 | 69 | 23 |
| ANALGESICS - Narcotic | 45,226,671 | 224,271 | 28.4 | 2,465,579 | 0.4 | 51 | 18 |
| ANTIDIABETIC | 39,719,306 | 98,527 | 12.5 | 1,100,693 | 0.6 | 57 | 36 |
| MISC. HEMATOLOGICAL | 29,325,959 | 14,260 | 1.8 | 156,709 | 0.6 | 324 | 187 |
| Total | 698,302,735 | 1,262,539 | | 14,018,691 | n.a. | n.a. | n.a. |

Source: Data for this table are from the MAX 2005 file for Massachusetts, released by CMS in 1/2009. This table was produced on 04/23/2009.

a. Table 7 includes the beneficiaries represented by Cell C of Table 1. A user is a beneficiary who had at least one prescription filled in a given drug group during 2005. A beneficiary who used drugs from two or more groups was counted as a user for each group. Therefore, the sum of users across drug groups may exceed the total number of individual users. Benefit months are months during which beneficiaries had fee-for-service pharmacy benefits.

b. Medicaid reimbursement amounts presented in this table do not reflect federally required rebates from drug manufacturers to the state.

c. The top 10 drug groups were determined based on total Medicaid reimbursement in the state for 2005. For information about these drug groups, see Wolters Kluwer Health, http://www.medispan. com/marketing/ContentPage.aspx?contentId=09e0f1ed-80a9-4a87-8bc9-ad778d7b6615 (October 26, 2007).

Bene(s) = beneficiary (or beneficiaries); Bene Mo(s) = benefit month(s); CMS = Centers for Medicare & Medicaid Services; MAX = Medicaid Analytic Extract; Rx = prescription(s) or pharmacy benefit; $ = Medicaid reimbursement.

All Medicaid Beneficiaries