

# Comparing Apples With Oranges: Administrative Expenses and Finances in Medicare Systems

Dalit Baranoff, PhD; Etti G. Baranoff, PhD; Thomas W. Sager, PhD; and Bo Shi, PhD

## 1. Introduction

In this paper, we interrogate the assumption underlying recent debates on US health care reform: that government-run health insurance (Medicare parts A, B, and D) has lower administrative expenses than those of the private health insurers (Medicare Part C) and therefore is presumed more efficient. This argument is based on the assumption that the public Medicare's lower reported administrative expenses are comparable with those measures reported for Medicare Part C by the insurance industry.<sup>1</sup> Proponents of a single-payer system and opponents of a "public option" both present "administrative expenses" as a valid measurement of efficiency and/or waste in the health insurance system. We contend that the comparison based on administrative expenses is flawed because (1) expenses in the 2 systems are calculated under different criteria that are not reconcilable between them and (2) the focus on comparing administrative expenses ignores the larger context of income, benefits, gains and losses, and loss ratios of the programs. The public discussion would benefit both from recognition of the noncomparability of systems and from expansion of the focus to the larger context, especially during the coronavirus disease 2019 (COVID-19) period, which has a greater toll on the Medicare elderly population.

After a literature review in section 2, we begin the analysis in section 3 by examining the empirical basis for the claim that the governmental Medicare parts A, B, and D ("ABD") administrative expenses are lower than administrative expenses of private insurance for Medicare Part C. We compare costs for the public Medicare parts (comprehensive coverage comprising hospital, medical, and drugs, respectively) with the private Medicare Part C. Private insurers provide Medicare Part C (also called Medicare Advantage or Medicare managed care). Our source for Medicare ABD data is the government annual Medicare Boards of Trustees (MBT) reports produced by CMS. CMS also produces a second Medicare data source, the National Health Expenditure Accounts (NHEA). The MBT provides administrative expenses for Medicare ABD, whereas the NHEA reports those for both the public and private parts of Medicare.<sup>2,3</sup> Our source for private insurer data is

## ABSTRACT

**OBJECTIVES:** Proponents of a single-payer or public option health care system often cite the lower administrative expenses in public Medicare compared with those in private Medicare, claiming that this difference represents efficiency. We check the validity of this comparison in terms of accuracy and definitions and suggest expanding its scope to include expanded financial data of the 2 Medicare systems.

**STUDY DESIGN:** Using annual Medicare Boards of Trustees and National Health Expenditure Accounts data from CMS and health insurers' financial statement data, we compare the level and percentage of the administrative expenses of the Medicare systems and show incompatible and not reconcilable definitions of administrative expenses. We expand our analysis to income, benefits, gains and losses, and loss ratios of the programs.

**METHODS:** Our methodology is a careful comparison of categories of expenses between public and private insurers using official data sources. The comparison is both qualitative and quantitative.

**RESULTS:** We validate the low administrative expenses of Medicare parts A, B, and D (1.35% of benefits in 2018) compared with Medicare Part C (10.86% of benefits without loss adjustment expenses [LAE] and 14.84% with LAE for 2018). Expanding the focus, the income and benefits per beneficiary grew faster and larger in Medicare parts A, B, and D than in Medicare Part C—a reversal of earlier trends. The public Medicare program suffered losses in 11 years during 2002-2018, whereas private insurers' Medicare remained solvent with about an 85% loss ratio.

**CONCLUSIONS:** Comparisons of the systems in the United States would benefit from expanding the focus beyond incomparable administrative expenses. For the current period of coronavirus disease 2019, if the trends continue, public Medicare may suffer greater deficits relative to the private Medicare Part C.

*Am J Manag Care.* 2021;27(4):e123-e129. doi:10.37765/ajmc.2021.88621

## TAKEAWAY POINTS

- ▶ Comparing data for the public Medicare with private Medicare, we show that the administrative expenses percentage of benefits for the public system is much lower.
- ▶ The definitions are incompatible and not reconcilable between the systems.
- ▶ We expand the focus to more financial data. Per-member income and benefits are larger for the public Medicare and grew faster than Medicare Part C, reversing earlier trends. The public Medicare is not solvent in many years, whereas the insurers' Medicare has an 85% loss ratio. If trends continue, we can learn about the effects of coronavirus disease 2019 on the 2 Medicare systems.

the annual statements of health insurers filed with the National Association of Insurance Commissioners (NAIC).

In section 3, we show low administrative expenses of Medicare ABD (1.35% of benefits in 2018) compared with Medicare C (10.86% of benefits without loss adjustment expenses [LAE] and 14.84% with LAE for 2018). We expand the comparison to include income, medical costs, and medical loss ratios. In this larger context, we find that Medicare ABD has collected more in income (taxes) per beneficiary than Medicare Part C since 2014 and has also paid more in benefits per beneficiary than Medicare Part C throughout 2002-2018. Medicare ABD income and care service expenses both grew by about 86% to 89% over this period, whereas Medicare Part C premiums and care services expenses grew by about 59%. The balance of income vs expenses has resulted in 11 years of losses for the governmental Medicare ABD and no loss (with a loss ratio of about 85%) for Medicare Part C.

In section 4, we turn our attention to a second major government source of data on Medicare: the NHEA. The NHEA data show that Medicare administrative expenses are a bit over 6% of total health care benefit expenses and that the figure is about 12% for private insurance. The Medicare and Medicaid data include both the governmental and private insurers' data. The insurance data are for the rest of the private health insurance programs for employers, individuals, and federal employees. NHEA also includes self-insurance data, not just data from fully insured plans, which are the focus of our data from the insurers' financial statements.

In section 4, we also show the insurers' data for each of the main markets of health care in the United States: employers; individual insureds; and Medicare Part C, Medicaid, and federal government insureds.

The analysis is in the [eAppendix](#) (available at [ajmc.com](#)) discussed in section 4, which provides a broad and comprehensive picture of the health insurance income, benefits, administrative expenses, gains/losses, loss ratios, and extent of the reinsurance.

In section 5, we thoroughly unpack the definitions of administrative costs under the public Medicare ABD system and under private Medicare Part C of health insurance. We find that the definitions are incompatible. The reported categories create reporting inconsistencies and the categories do not correspond. We do not attempt to reconcile incompatible public and private data and/or definitions.

The paper concludes with a summary and an application to the COVID-19 pandemic and its potential financial impact if the trends that we identified continue.

## 2. Literature Review

The scant academic literature on administrative expenses for health care coverage reinforces our main argument that the data sources are incompatible. In addition, there is no recent comparison of broad income and benefits trends

between the governmental Medicare ABD and private insurance (Medicare Part C). The literature usually makes such comparisons for specific medical conditions, rather than for comprehensive coverage, and is not cited here. The most applicable research for comprehensive coverage is the comparison of Boccuti and Moon, who found for the period 1970-2000 that "Medicare can be counted on to control per enrollee spending growth over time, more than private insurers can" and that the benefits growth of the Medicare Part C of private insurance was higher than that of governmental Medicare.<sup>4</sup> They used governmental resources, not health insurers' data directly. Our current recent data, from private insurers, show the reverse of Boccuti and Moon: Benefits growth of Medicare ABD exceeds that of private Medicare Part C.

Returning to the administrative expenses literature, the scholarship deals primarily with the subject of administrative expenses writ large—focusing on the administrative costs to health care providers or comparing administrative expenses in the United States with those in other countries.<sup>5-9</sup>

In his academic paper on the subject, Kip Sullivan reviewed the debate over administrative costs, which began in 2006 with a series of papers that opposed expansion of government health insurance and that promoted privatization of Medicare. These papers claimed that the low administrative expenses that the government reported for Medicare were inaccurate.<sup>10</sup>

The most influential of these papers, produced by Milliman Inc, the Coalition for Affordable Health Insurance, and the Manhattan Institute, all argued that Medicare failed to report all of its true expenditures and that its actual administrative expenses were much higher.<sup>11-13</sup> Sullivan disputed these claims, noting that none of the papers cited the MBT reports—long accepted as the official source of Medicare administrative expense data—which do, in fact, report all the administrative expenses that the critics claimed were left out. Sullivan further noted that these and similar studies all cite each other rather than original government sources.

Sullivan's primary intent, however, was to present the government data sources and explain what they measure and how. Sullivan described the 2 sources, the MBT reports and the NHEA from the CMS, that we discussed earlier and will return to in sections 3 and 4.<sup>2,3</sup> The MBT and NHEA administrative expense measures, however, are generally accepted as accurate. Neither of the sources uses the health insurers' financial data directly, nor does any of the

**TABLE 1.** Annual Comparison of Public Medicare Parts A, B, and D Data (source: MBT reports) With Private Medicare Part C Data (source: health insurers' annual reports), 2002-2018<sup>16</sup>

A. Medicare A, B, and D <sup>16</sup>								
Calendar year	Total members in Medicare A, B, and D (in millions)	Medicare A, B, and D: per-member income	Benefit payments: per member	AdmExp (expenditures): per member	AdmExp as % of income per member	AdmExp as % of benefits per member	Income vs benefits per member	Benefits to income ratio per member
2002	40.508	\$6589.34	\$6441.02	\$117.95	0.0179	0.0183	\$148.32	0.9775
2003	41.188	\$6647.25	\$6698.77	\$117.78	0.0177	0.0176	-\$51.52	1.0078
2004	41.902	\$7164.96	\$7230.49	\$141.43	0.0197	0.0196	-\$65.53	1.0091
2005	42.606	\$7980.57	\$7753.34	\$143.29	0.0180	0.0185	\$227.22	0.9715
2006	43.436	\$9642.65	\$9255.78	\$145.34	0.0151	0.0157	\$386.87	0.9599
2007	44.368	\$9971.04	\$9588.31	\$142.17	0.0143	0.0148	\$382.73	0.9616
2008	45.500	\$10,127.87	\$10,145.63	\$143.43	0.0142	0.0141	-\$17.76	1.0018
2009	46.604	\$10,472.04	\$10,778.99	\$143.29	0.0137	0.0133	-\$306.95	1.0293
2010	47.720	\$9779.46	\$10,810.81	\$146.17	0.0149	0.0135	-\$1031.35	1.1055
2011	48.896	\$10,428.17	\$11,072.68	\$157.93	0.0151	0.0143	-\$644.51	1.0618
2012	50.874	\$10,168.91	\$11,123.97	\$163.17	0.0160	0.0147	-\$955.07	1.0939
2013	52.504	\$10,626.01	\$10,951.47	\$150.92	0.0142	0.0138	-\$325.46	1.0306
2014	54.115	\$10,752.60	\$11,170.38	\$163.10	0.0152	0.0146	-\$417.78	1.0389
2015	55.589	\$11,308.37	\$11,489.47	\$160.91	0.0142	0.0140	-\$181.10	1.0160
2016	57.073	\$12,168.82	\$11,729.87	\$162.06	0.0133	0.0138	\$438.95	0.9639
2017	58.683	\$11,738.46	\$11,964.28	\$137.83	0.0117	0.0115	-\$225.82	1.0192
2018	60.147	\$12,282.04	\$12,149.53	\$164.48	0.0134	0.0135	\$132.51	0.9892
Growth, 2002 to 2018	1.4848	\$1.86	\$1.89	\$1.39	0.7481	0.7393	\$ 0.89	1.01199
Mean	48.9243	\$9873.44	\$10,020.87	\$147.13	0.0152	0.0150	-\$147.43	1.0140
SD	6.4465	\$1784.46	\$1881.86	\$14.28	0.0021	0.0022	\$437.86	0.0435

(continued)

relevant literature. Recent estimates of the cost of a single-payer proposal by the Mercatus Center and the Urban Institute cite the higher administrative expenses of NHEA, rather than the lower MBT figures, citing Sullivan.<sup>14,15</sup>

### 3. Computation and Analysis of Income, Benefits, Reinsurance, and Administrative Expenses: Government Data vs Health Insurers' Data for Medicare Only

In this section, we compare the public Medicare ABD with the private Medicare Part C data without delving into the differences in coverages. For public Medicare, the annual MBT reports produced by CMS are compared with the health insurers' fully insured data.<sup>2,3</sup>

Table 1<sup>16</sup> shows a set of comparisons for each year 2002-2018, not only for reported administrative expenses, but also for the larger context of relative financial performance of the 2 systems.

The main highlights of Table 1 are:

1. Administrative expenses per member: For every year, as a percentage of reported benefits per beneficiary, reported administrative expenses of Medicare ABD (mean [SD], \$147.13 [\$14.28] per member, with mean [SD], 1.50% [0.22%] of percentage per member) are substantially lower than reported administrative

expenses of Medicare Part C (mean [SD], \$812.39 [\$159.49] per member, with mean [SD], 9.41% [0.86%]), even after exclusion of LAE from the latter. Both figures are stable over time. There remains the issue of definitional mismatch (see Table 2).

- Income per beneficiary member: The government collection of taxes for Medicare ABD per beneficiary was lower than the written premiums for Medicare Part C per beneficiary from 2002 until 2014. From 2014 to 2018, the tax collections per beneficiary exceeded the written premiums per beneficiary of the insurers. Medicare tax collection per beneficiary grew by 86% over 2002-2018 vs insurer premium growth of 59%. The more rapid growth of government collections is a reversal of the trend reported by Boccuti and Moon for 1970 to 2000.<sup>4</sup>
- Benefits per beneficiary member: For every year, the dollar amount of benefits per beneficiary of Medicare ABD exceed reported benefits per beneficiary of Medicare Part C. The higher expenses of government benefits are also a reversal of Boccuti and Moon.<sup>4</sup> Moreover, Medicare ABD benefits grew more rapidly (89%) over 2002-2018 than Medicare Part C (59%). Both figures are growing over time. The benefits per beneficiary were lower for Medicare Part C throughout the period 2002-2018, which is opposite of the results of the 2003 research by Boccuti and Moon.<sup>4</sup>

**TABLE 1.** (Continued) Annual Comparison of Public Medicare Parts A, B, and D Data (source: MBT reports) With Private Medicare Part C Data (source: health insurers' annual reports), 2002-2018<sup>16</sup>

B. Medicare C from health insurers											
Year	Member-years	Medicare C premium written per member	Benefits per member	Medicare C AdmExp sum per member	Medicare C LAE per member	Medicare C AdmExp sum + Medicare C LAE	AdmExp (no LAE) as % of income per member	AdmExp (no LAE) as % of benefits per member	Income vs benefits per member	Benefits to income ratio per member	Medicare C AdmExp sum + Medicare C LAE sum
2002	3,536,546	\$7127.11	\$6105.76	\$551.04	\$129.82	\$680.86	0.0773	0.0902	\$1021.35	0.8567	0.1115
2003	3,469,200	\$7295.84	\$6504.09	\$549.87	\$157.63	\$707.50	0.0754	0.0845	\$791.75	0.8915	0.1088
2004	3,644,188	\$7835.51	\$6968.75	\$539.69	\$187.20	\$726.89	0.0689	0.0774	\$866.76	0.8894	0.1043
2005	4,089,752	\$8218.20	\$7202.95	\$660.53	\$196.83	\$857.36	0.0804	0.0917	\$1015.25	0.8765	0.1190
2006	4,856,240	\$9410.51	\$8106.56	\$714.46	\$209.30	\$923.76	0.0759	0.0881	\$1303.95	0.8614	0.1140
2007	5,411,927	\$10,011.54	\$8522.63	\$767.15	\$233.67	\$1000.82	0.0766	0.0900	\$1488.91	0.8513	0.1174
2008	6,221,819	\$10,597.57	\$9063.52	\$858.49	\$225.98	\$1084.48	0.0810	0.0947	\$1534.06	0.8552	0.1197
2009	7,160,309	\$10,862.24	\$9219.74	\$860.01	\$234.40	\$1094.41	0.0792	0.0933	\$1642.50	0.8488	0.1187
2010	7,439,632	\$10,885.92	\$9395.27	\$881.76	\$263.00	\$1144.76	0.0810	0.0939	\$1490.65	0.8631	0.1218
2011	8,148,545	\$11,083.66	\$9461.57	\$861.78	\$273.90	\$1135.68	0.0778	0.0911	\$1622.08	0.8537	0.1200
2012	9,022,630	\$11,031.47	\$9362.65	\$849.77	\$297.89	\$1147.66	0.0770	0.0908	\$1668.82	0.8487	0.1226
2013	9,810,191	\$10,700.98	\$9291.12	\$848.13	\$322.08	\$1170.21	0.0793	0.0913	\$1409.85	0.8683	0.1259
2014	10,748,840	\$10,492.99	\$9145.05	\$959.84	\$318.26	\$1278.10	0.0915	0.1050	\$1347.94	0.8715	0.1398
2015	13,553,081	\$10,557.71	\$9119.85	\$965.77	\$351.04	\$1316.82	0.0915	0.1059	\$1437.86	0.8638	0.1444
2016	14,199,114	\$10,890.09	\$9222.98	\$1008.73	\$356.82	\$1365.55	0.0926	0.1094	\$1667.11	0.8469	0.1481
2017	15,282,124	\$11,014.40	\$9451.18	\$880.51	\$380.92	\$1261.43	0.0799	0.0932	\$1563.22	0.8581	0.1335
2018	16,648,410	\$11,325.48	\$9693.92	\$1053.09	\$385.36	\$1438.45	0.0930	0.1086	\$1631.56	0.8559	0.1484
Growth from 2002 to 2018	4.7075	\$1.59	\$1.59	\$1.91	\$2.97	\$2.11	1.2026	1.2037	\$1.60	0.9991	1.3307
Mean	8,426,032.24	\$9961.25	\$8578.68	\$812.39	\$266.12	\$1078.51	0.0811	0.0941	\$1382.57	0.8624	0.1246
SD	4,340,084.37	\$1425.11	\$1155.91	\$159.49	\$78.28	\$232.04	0.0069	0.0086	\$287.24	0.0133	0.0136

AdmExp, administrative expenses; LAE, loss adjustment expenses; MBT, Medicare Boards of Trustees.

Source: Medicare C data from the financial statements of the US health insurers (submitted to the National Association of Insurance Commissioners) servicing this population—full insurance (authors' computations).

- Loss ratio per beneficiary member: The solvency measure is the income minus benefits or the loss ratio. Table 1 shows that there were 11 years in 2002-2018 in which Medicare ABD benefits paid exceeded income, whereas Medicare Part C income at least covered benefits for every year. In insurance, it is common to use loss ratio, defined as benefits paid divided by the premium income. For Medicare ABD, the loss ratio exceeded 100% for 11 years (mean [SD], 101.4% [4.4%]). For the health insurers, the loss ratio remained around 85% (mean [SD], 86.2% [1.3%]) even before the Affordable Care Act of 2010, which limits the loss ratio to no less than 85%.
- Reinsurance per beneficiary member (see applicable tables in the eAppendix): The low level of reinsurance per beneficiary (on the order of 1% of premiums) shows that the health insurance industry is carrying the health risk of Medicare Part C with minimal safety net from reinsurance.

If the trends that we show in Table 1 continue, the impact of COVID-19 on the financial position of Medicare ABD may be more

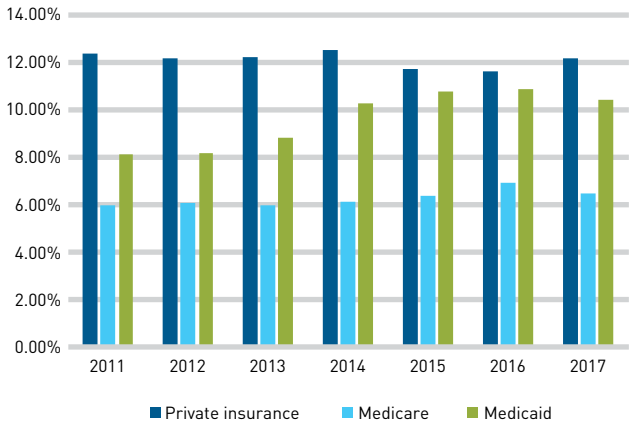
devastating than to the private Medicare Part C. It is possible that the administrative expenses will change because the government is in charge of curtailing the spread of the virus.

#### 4. Computation and Analysis of Income, Benefits, Reinsurance, and Administrative Expenses: Government Data vs All Health Insurers' Data

Using the data in the NHEA, we extracted the administrative costs percentages shown in Figure 1.<sup>3</sup>

Unlike the MBT reports, the NHEA tables include administrative expenses for both public and private insurance.<sup>17</sup> In the NHEA data, administrative expenses appear under 2 categories: "government administration" (public) and "net cost of health insurance" (private). In 2018, the NHEA reported health consumption expenditures by Medicare of \$750 billion. Of this, \$12 billion was designated "government administration" and \$41.1 billion was listed as "net cost of health insurance." The latter figure represents the administrative costs, per NHEA, of private insurers covering Medicare Part C and

**FIGURE 1. Administrative Expenses Ratio to Health Care Expenses by Type of Insurance, 2011-2018<sup>3</sup>**



Source: National Health Expenditure Accounts, Table 4.<sup>3</sup>

other private health insurance plans as well. In 2018, the ratio of administrative expenses to total expenditures in public and private insurance combined was 7.08%.

The NHEA also provide data on administrative expenses for private health insurance (defined as “traditional managed care, self-insured health plans, and indemnity plans”). In 2018, health care expenses paid by private insurers (excluding private Medicare and Medicaid plans) were \$1.24 trillion, \$164.3 billion (13.22%) of which went to administrative expenses, per NHEA.

Figure 2 and Figure 3 were created based on the private insurers’ data (from the annual statements filed with the NAIC). We show the results of the median and weighted averages of some of the segments of the private insurers in Figures 2 and 3 for immediate transparency of the industry’s administrative expenses (in Figure 2) plus the LAE (in Figure 3).

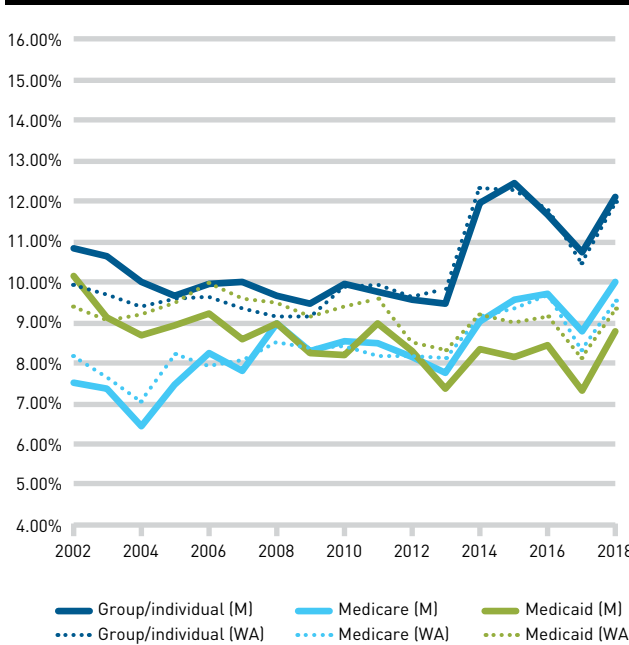
We also show all the separate segments of the private health insurance markets in the eAppendix without an attempt to create reconciliations with the governmental data.

Our tables in the eAppendix show the calculation of administrative expenses per private insurer data for all market segments serviced by private health insurers including the insurers’ Medicare C and Medicaid segments. For 2002-2018 for group and individual insurance, administrative expenses, per insurers’ data and excluding LAE, have averaged 4.0% of benefits (SD, 0.14%); for federal employees, 2.5% (0.13%); and for all segments combined (including private Medicare and Medicaid), 5.0% (0.43%). Adding the LAE is reflected in the eAppendix tables and Figure 3.

**5. Analysis: The Definition of the Components of Administrative Expenses**

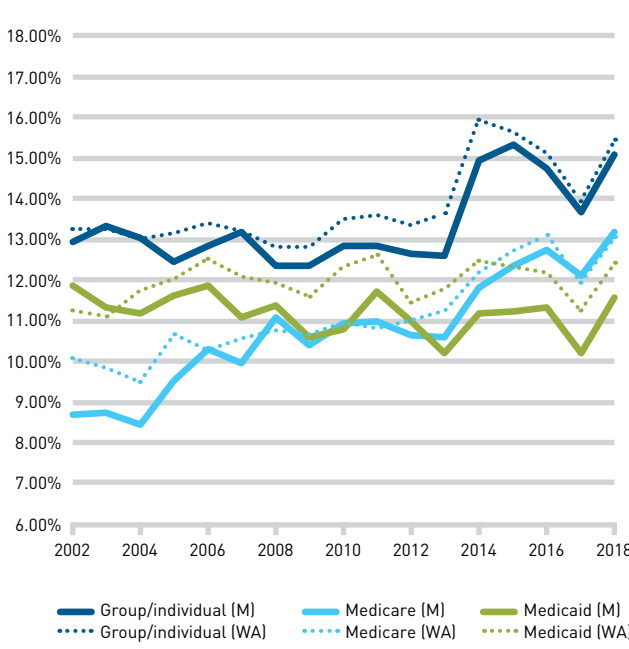
Administrative expenses are all the expenses incurred in providing a service, excluding the cost of the service itself. In health insurance, administrative expenses are all the expenses not spent directly on

**FIGURE 2. Private Insurers’ Administrative Expense Ratios to Health Care Expenses [median [M] and weighted average [WA]] by Sector, 2002-2018**



Source: Annual statements of health insurers in the United States as submitted to the National Association of Insurance Commissioners. Authors’ computations.

**FIGURE 3. Private Insurers’ Administrative Expense + Claims Adjustment Expense Ratios to Health Care Expenses [median [M] and weighted average [WA]] by Sector, 2002-2018**



Source: Annual statements of health insurers in the United States as submitted to the National Association of Insurance Commissioners. Authors’ computations.

**TABLE 2.** Comparison of Definitions

Defining “administrative expenses” in Medicare and the insurance industry		
Medicare trustees report		NAIC annual report
Medicare Part A	Medicare Part B	Health insurance companies’ filings
<ul style="list-style-type: none"> <li>• Treasury administrative expenses</li> <li>• Salaries and expenses, SSA</li> <li>• Salaries and expenses, CMS</li> <li>• Salaries and expenses, Office of the Secretary, HHS</li> <li>• Medicare Payment Advisory Commission</li> <li>• Administration on Aging funding</li> <li>• CMS program management: Affordable Care Act</li> <li>• Transfer to Patient-Centered Outcomes Research Trust Fund</li> <li>• ACL State Health Insurance Assistance Program</li> <li>• MACRA</li> <li>• Medicare Access Children’s Health Insurance Program</li> <li>• Fraud and abuse control expenses:                             <ul style="list-style-type: none"> <li>› HHS Medicare integrity program</li> <li>› HHS OIG</li> <li>› Department of Justice</li> <li>› FBI</li> <li>› HCFAC Department of Justice Discretionary, CMS</li> <li>› HCFAC OIG Discretionary, CMS</li> <li>› HCFAC Other HHS Discretionary, CMS</li> <li>› HCFAC Discretionary, CMS</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Transfer to Medicaid</li> <li>• Treasury administrative expenses</li> <li>• Salaries and expenses, CMS</li> <li>• Salaries and expenses, Office of the Secretary, HHS</li> <li>• Salaries and expenses, SSA</li> <li>• Medicare Payment Advisory Commission</li> <li>• Administration on Aging funding</li> <li>• Railroad Retirement administrative expenses, OIG</li> <li>• CMS program management: Affordable Care Act</li> <li>• Transfer to Patient-Centered Outcomes Research Trust Fund</li> <li>• ACL State Health Insurance Assistance Programs</li> <li>• MACRA</li> </ul>	<p><b>Claims adjustment expenses:</b> All expenses incurred in connection with the recording, adjustment, and settlement of claims</p> <p><b>General administrative expenses:</b></p> <ul style="list-style-type: none"> <li>• Rent and utilities</li> <li>• Salaries, wages, and other benefits</li> <li>• Commissions</li> <li>• Legal fees and expenses</li> <li>• Certification and accreditation fees</li> <li>• Auditing, actuarial, and other consulting services</li> <li>• Traveling expenses</li> <li>• Marketing and advertising</li> <li>• Postage, express, and telephone</li> <li>• Printing and office supplies</li> <li>• Occupancy, depreciation, and amortization</li> <li>• Equipment</li> <li>• Cost or depreciation of EDP equipment and software</li> <li>• Outsourced services including EDP, claims, and other services</li> <li>• Board, bureau, and association fees</li> <li>• Insurance, except on real estate</li> <li>• Collection and bank service charges</li> <li>• Group service and administration fees</li> <li>• Real estate expenses</li> <li>• Real estate taxes</li> <li>• State and local insurance taxes</li> <li>• State premium taxes</li> <li>• Payroll taxes</li> </ul>

ACL, Administration for Community Living; EDP, electronic data processing; FBI, Federal Bureau of Investigation; HCFAC, Health Care Fraud and Abuse Control; MACRA, Medicare Access and CHIP Reauthorization Act; NAIC, National Association of Insurance Commissioners; OIG, Office of Inspector General; SSA, Social Security Administration.

health care. Often referred to as “overhead” or “bureaucracy,” they include all the costs of administering an insurance plan or program, including marketing, collecting premiums, billing, and actuarial consulting, as well as salaries, rent, taxes, fees, and other expenses. But how the government measures administrative expenses for the Medicare program differs significantly from the insurance industry definition.

Table 2 compares the administrative expenses categories that appear in the annual MBT reports with those in the health insurers’ annual reports, illustrating the problem with comparing Medicare’s administrative expenses with those of private insurers. The 2 sources present their data in very different ways, with the government source listing expenses for various agencies and programs, whereas the industry includes specific expense categories. These differences render the sources incompatible and are apples to oranges comparisons.

As Table 2 shows, administrative expenses for Medicare parts A (hospital) and B (medical) contain different, overlapping categories. Both parts A and B, however, primarily itemize administrative expenses by the government agencies or programs involved in administering the Medicare program. In some cases, these expenses are identified as “salaries and expenses.” “Fraud and abuse control expenses” are listed as well. But for the most part, the specific expenses included in administrative expenses are not evident.<sup>2</sup>

The insurance industry, by contrast, defines administrative expenses in greater detail. The annual statements that health insurers file with the NAIC include data on administrative expenses as part of underwriting expenses. The instructions for this section list 2 categories: “general administrative expenses” and “claims adjustment expenses” containing expenses generally considered specific to insurance claims adjusting. Insurers regard the LAE as

part of the combined ratio ((losses + LAE) divided by premiums)—the combined ratio being a criterion for underwriting success. Table 2 shows the expense categories included in administrative expenses.<sup>18</sup>

Table 2 also provides 1 explanation for why private insurers' administrative expenses are so much higher than those published by the federal government for Medicare. As previous work has noted, insurers' administrative costs include many expenses not found in the Medicare program, such as taxes, fees, and commissions. Private administrative costs are especially high when the LAE are included, as shown in the eAppendix tables and Table 1.

## 6. Conclusions

In this paper, we show that the focus on comparing administrative expenses for public Medicare ABD and Medicare Part C of private health insurance is misguided for 2 reasons. First, administrative expenses are defined and calculated differently under the public Medicare and private insurance systems. These differences are not reconcilable. Second, administrative expenses are a flawed, narrow measure and are only a part of the larger context of income, benefits, losses/gains, and loss ratios.

We identified and focused on 3 systems to calculate administrative expenses: 2 government systems (MBT and NHEA) and 1 private health insurer's data. They all disagree.

We compare administrative expenses and the broader data of income, benefits, losses/gains, and loss ratios using Medicare ABD data including administrative expenses, as reported by MBT, vs Medicare C data as reported by insurers. We found that administrative expenses are substantially higher for Medicare C, even after subtracting LAE. We expanded our comparison and show that from 2015 to 2018, Medicare ABD has collected more in taxes per member than Medicare C has collected in premiums, and Medicare ABD costs of providing health care service per member have exceeded the costs for Medicare C. Moreover, Medicare C has consistently shown gains, whereas Medicare ABD has run deficits for 11 of the past 17 years.

We also examined the second government data source, NHEA, because it also purports to calculate the Medicare and Medicaid private insurer administrative expenses. The NHEA data include self-insured programs. For our comparison of NHEA administrative expenses, Medicare ABD with Medicare C came in higher than the MBT administrative expenses for Medicare ABD (as would be expected) but not as high as Medicare C. For the NHEA calculation of the private insurers (excluding Medicare and Medicaid by private insurer) for the administrative expenses, we also found differences from the private insurers' own figures (see Figures 2 and 3 and the tables in the eAppendix).

In the policy debate, the use of administrative expenses comparison is flawed and is not a broad enough yardstick for "efficiency" measures. The expanded analyses of the income, benefits, and solvency provided in this paper could not only enrich the public policy debate but also give direction to the discussion of the financial impact of COVID-19 on the 2 Medicare systems. ■

**Author Affiliations:** Institute for Applied Economics, Global Health and the Study of Business Enterprise, The Johns Hopkins University (DB), Baltimore, MD; Department of Finance, Insurance and Real Estate, Virginia Commonwealth University (EGB), Richmond, VA; Department of Information, Risk, and Operations Management, The University of Texas at Austin (TWS), Austin, TX; Department of Accounting, Economics and Finance, Morehead State University (BS), Morehead, KY.

**Source of Funding:** None.

**Author Disclosures:** Dr Dalit Baranoff with Dr Etti G. Baranoff gave an academic presentation of an early version of this paper at the American Risk and Insurance Association meeting in 2019. The remaining authors report no relationship or financial interest with any entity that would pose a conflict of interest with the subject matter of this article.

**Authorship Information:** Concept and design (DB, EGB); acquisition of data (DB, EGB, BS); analysis and interpretation of data (DB, EGB, TWS, BS); drafting of the manuscript (DB, EGB, TWS); critical revision of the manuscript for important intellectual content (EGB, TWS); and statistical analysis (EGB, BS).

**Address Correspondence to:** Etti G. Baranoff, PhD, Department of Finance, Insurance and Real Estate, Virginia Commonwealth University, Snead Hall, 301 W Main St, Ste B4167, Richmond, VA 23284-4000. Email: ebaranof@vcu.edu.

## REFERENCES

1. Full Sanders: single-payer "not going to happen tomorrow." NBC News. September 17, 2017. Accessed July 30, 2019. <https://www.nbcnews.com/meet-the-press/video/full-sanders-single-payer-not-going-to-happen-tomorrow-1048427587675>
2. Medicare Boards of Trustees. 2020 annual report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds. CMS. 2020. Accessed March 11, 2021. <https://www.cms.gov/files/document/2020-medicare-trustees-report.pdf>
3. National Health Expenditure Data: historical. CMS. December 11, 2018. Accessed September 4, 2019. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html>
4. Boccuti C, Moon M. Comparing Medicare and private insurers: growth rates in spending over three decades. *Health Aff (Millwood)*. 2003;22(2):230-237. doi:10.1377/hlthaff.22.2.230
5. Woolhandler S, Campbell T, Himmelstein DU. Costs of health care administration in the United States and Canada. *N Engl J Med*. 2003;349(8):768-775. doi:10.1056/NEJMs022033
6. Woolhandler S, Campbell T, Himmelstein DU. Health care administration in the United States and Canada: micromanagement, macro costs. *Int J Health Serv*. 2004;34(1):65-78. doi:10.2190/MJHW-GADV-78KT-9RGX
7. Woolhandler S, Himmelstein DU. Single-payer reform—"Medicare for all." *JAMA*. 2019;321(24):2399-2400. doi:10.1001/jama.2019.7031
8. Himmelstein DU, Jun M, Busse R, et al. A comparison of hospital administrative costs in eight nations: US costs exceed all others by far. *Health Aff (Millwood)*. 2014;33(9):1586-1594. doi:10.1377/hlthaff.2013.1327
9. Jiwani A, Himmelstein D, Woolhandler S, Kahn JG. Billing and insurance-related administrative costs in United States' health care: synthesis of micro-costing evidence. *BMC Health Serv Res*. 2014;14:556. doi:10.1186/s12913-014-0556-7
10. Sullivan K. How to think clearly about Medicare administrative costs: data sources and measurement. *J Health Polit Policy Law*. 2013;38(3):479-504. doi:10.1215/03616878-2079523
11. Litow ME. Medicare versus private health insurance: the cost of administration. Wendell Murray Associates Inc. January 6, 2006. Accessed September 4, 2019. [http://www.wpmassociates.com/healthcare/costs/administrative\\_costs\\_insurance.pdf](http://www.wpmassociates.com/healthcare/costs/administrative_costs_insurance.pdf)
12. Matthews M. Medicare's hidden administrative costs: a comparison of Medicare and the private sector. Council for Affordable Health Insurance. January 10, 2006. Accessed July 28, 2019. [https://healthcarereform.procon.org/wp-content/uploads/sites/49/m\\_matthews\\_medicares\\_hidden\\_administrative\\_costs.pdf](https://healthcarereform.procon.org/wp-content/uploads/sites/49/m_matthews_medicares_hidden_administrative_costs.pdf)
13. Zycher B. Comparing public and private health insurance: would a single-payer system save enough to cover the uninsured? Manhattan Institute. October 1, 2007. Accessed July 28, 2019. <https://www.manhattan-institute.org/html/comparing-public-and-private-health-insurance-would-single-payer-system-save-enough-cover>
14. Holahan J, Clemans-Cope L, Buettgens M, Favreault M, Blumberg LJ, Ndwandwe S. The Sanders single-payer health care plan: the effect on national health expenditures and federal and private spending. Urban Institute. May 2016. Accessed July 21, 2017. <https://www.urban.org/sites/default/files/publication/80486/200785-The-Sanders-Single-Payer-Health-Care-Plan.pdf>
15. Blumberg LJ, Holahan J. The pros and cons of single-payer health plans. Urban Institute. March 12, 2019. Accessed July 8, 2019. <https://www.urban.org/research/publication/pros-and-cons-single-payer-health-plans>
16. The 2020 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds: 2020 expanded and supplementary tables and figures—tables: Medicare enrollment by part and in total (in millions) - (actual data through 2018); historical operations of the hospital insurance (HI) trust fund for calendar years (in millions, and on a cash basis); historical operations of the Part B account of the supplementary medical insurance (SMI) trust fund for calendar years (in millions, and on a cash basis); historical operations of the Part D account of the supplementary medical insurance (SMI) trust fund for calendar years (in millions, and on a cash basis). CMS. 2020. Accessed July 30, 2020. <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Trustees-Reports-Items/2016-2019>
17. Quick definitions for National Health Expenditure Accounts (NHEA) categories. CMS. Accessed February 10, 2020. <https://www.cms.gov/files/document/quick-definitions-national-health-expenditures-accounts-nhea-categories.pdf>
18. Official NAIC annual statement instructions: health for the 2016 reporting year. National Association of Insurance Commissioners. 2016. Accessed July 24, 2019. [https://www.naic.org/prod\\_serv\\_publications.htm](https://www.naic.org/prod_serv_publications.htm)

Visit [ajmc.com/link/88621](https://ajmc.com/link/88621) to download PDF and eAppendix

**eAppendix.** Supplemental Tables of all markets of fully insured health insurers data (Source: annual statements of the health insurers filed with the NAIC – computation by the authors)

Medicare C- per member															
Year	Members years	Medicare C Premium Written per member	Medicare C Net Premium per member	Medicare C Reinsurance Ceded per member	Benefits per member	Medicare C Reinsure Recovery per member	Medicare C AdmExp_sum per member	Medicare C LAE_sum per member	Medicare C AdmExp_sum + Medicare C LAE-sum	Adm exp (no LAE) as % of income per member	Adm exp(No LAE) as % of benefits per member	income vs. benefits per member	Benefits to income ratio per member	% of reinsurance from written premium per member	Medicare C AdmExp_sum + Medicare C LAE-sum
2002	3,536,546	\$7,127.11	\$6,941.40	\$323.23	\$6,105.76	\$11.69	\$551.04	\$129.82	\$680.86	0.0773	0.0902	\$1,021.35	0.8567	0.0454	0.1115
2003	3,469,200	\$7,295.84	\$7,462.56	\$84.82	\$6,504.09	\$7.03	\$549.87	\$157.63	\$707.50	0.0754	0.0845	\$791.75	0.8915	0.0116	0.1088
2004	3,644,188	\$7,835.51	\$7,952.68	\$26.80	\$6,968.75	\$6.04	\$539.69	\$187.20	\$726.89	0.0689	0.0774	\$866.76	0.8894	0.0034	0.1043
2005	4,089,752	\$8,218.20	\$8,341.35	\$96.76	\$7,202.95	\$5.57	\$660.53	\$196.83	\$857.36	0.0804	0.0917	\$1,015.25	0.8765	0.0118	0.1190
2006	4,856,240	\$9,410.51	\$9,546.29	\$49.71	\$8,106.56	\$17.27	\$714.46	\$209.30	\$923.76	0.0759	0.0881	\$1,303.95	0.8614	0.0053	0.1140
2007	5,411,927	\$10,011.54	\$10,022.29	\$143.97	\$8,522.63	\$32.44	\$767.15	\$233.67	\$1,000.82	0.0766	0.0900	\$1,488.91	0.8513	0.0144	0.1174
2008	6,221,819	\$10,597.57	\$10,529.49	\$127.36	\$9,063.52	\$69.70	\$858.49	\$225.98	\$1,084.48	0.0810	0.0947	\$1,534.06	0.8552	0.0120	0.1197
2009	7,160,309	\$10,862.24	\$10,780.30	\$108.00	\$9,219.74	\$35.37	\$860.01	\$234.40	\$1,094.41	0.0792	0.0933	\$1,642.50	0.8488	0.0099	0.1187
2010	7,439,632	\$10,885.92	\$10,976.06	\$101.88	\$9,395.27	\$73.26	\$881.76	\$263.00	\$1,144.76	0.0810	0.0939	\$1,490.65	0.8631	0.0094	0.1218
2011	8,148,545	\$11,083.66	\$10,998.05	\$152.98	\$9,461.57	\$115.28	\$861.78	\$273.90	\$1,135.68	0.0778	0.0911	\$1,622.08	0.8537	0.0138	0.1200
2012	9,022,630	\$11,031.47	\$10,913.46	\$154.28	\$9,362.65	\$123.28	\$849.77	\$297.89	\$1,147.66	0.0770	0.0908	\$1,668.82	0.8487	0.0140	0.1226
2013	9,810,191	\$10,700.98	\$10,644.13	\$76.69	\$9,291.12	\$52.15	\$848.13	\$322.08	\$1,170.21	0.0793	0.0913	\$1,409.85	0.8683	0.0072	0.1259
2014	10,748,840	\$10,492.99	\$10,581.73	\$121.21	\$9,145.05	\$67.07	\$959.84	\$318.26	\$1,278.10	0.0915	0.1050	\$1,347.94	0.8715	0.0116	0.1398
2015	13,553,081	\$10,557.71	\$10,464.29	\$139.35	\$9,119.85	\$63.57	\$965.77	\$351.04	\$1,316.82	0.0915	0.1059	\$1,437.86	0.8638	0.0132	0.1444
2016	14,199,114	\$10,890.09	\$10,774.26	\$134.43	\$9,222.98	\$97.16	\$1,008.73	\$356.82	\$1,365.55	0.0926	0.1094	\$1,667.11	0.8469	0.0123	0.1481
2017	15,282,124	\$11,014.40	\$10,909.98	\$126.65	\$9,451.18	\$111.46	\$880.51	\$380.92	\$1,261.43	0.0799	0.0932	\$1,563.22	0.8581	0.0115	0.1335



2018	16,648,410	\$11,325.48	\$11,274.59	\$90.18	\$9,693.92	\$78.26	\$1,053.09	\$385.36	\$1,438.45	0.0930	0.1086	\$1,631.56	0.8559	0.0080	0.1484
Growth from 2002 to 2018	4.708	\$1.59	\$1.62	\$0.28	\$1.59	\$6.69	\$1.91	\$2.97	\$2.11	1.2026	1.2037	\$1.60	0.99911793	0.1756	1.33068651
Average	8,426,032	\$9,961.25	\$9,947.82	\$121.08	\$8,578.68	\$56.86	\$812.39	\$266.12	\$1,078.51	0.0811	0.0941	\$1,382.57	0.8624	0.0126	0.1246
Standard Deviations	4,340,084	\$1,425.11	\$1,382.70	\$62.97	\$1,155.91	\$40.20	\$159.49	\$78.28	\$232.04	0.0069	0.0086	\$287.24	0.0133	0.0090	0.0136

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Medicaid market per member**

Year	Members	Medicaid Premium Written	Medicaid Net Premium	Medicaid Reinsurance Ceded	Benefits per member	Medicaid ReinsurRecovery	Medicaid AdmExp_sum	Medicaid LAE sum	Medicaid AdmExp_sum + Medicaid LAE-sum	Adm exp as % of income per member	Adm exp as % of benefits per member	income vs. benefits per member	Benefits to income ratio per member	% of reinsurance from written premiums per member	Medicaid AdmExp_sum + Medicaid LAE-sum
2002	11,063,994	\$1,738.49	\$1,738.32	\$46.92	\$1,536.33	\$6.30	\$32.45	\$161.21	\$193.66	0.0187	0.0211	\$202.16	0.88372	0.0270	0.1261
2003	11,620,478	\$1,819.45	\$1,808.44	\$37.51	\$1,594.32	\$6.94	\$37.15	\$160.88	\$198.02	0.0204	0.0233	\$225.13	0.87627	0.0206	0.1242
2004	12,065,785	\$1,998.87	\$1,880.86	\$133.51	\$1,657.81	\$28.73	\$46.84	\$169.70	\$216.54	0.0234	0.0283	\$341.05	0.82938	0.0668	0.1306
2005	12,777,047	\$2,071.13	\$2,068.72	\$59.75	\$1,812.90	\$24.02	\$52.00	\$193.29	\$245.29	0.0251	0.0287	\$258.24	0.87532	0.0289	0.1353
2006	14,600,991	\$2,040.91	\$2,032.62	\$46.26	\$1,790.45	\$24.56	\$51.48	\$200.90	\$252.38	0.0252	0.0288	\$250.46	0.87728	0.0227	0.1410
2007	15,157,451	\$2,465.39	\$2,411.85	\$61.93	\$2,129.03	\$26.17	\$59.42	\$229.66	\$289.08	0.0241	0.0279	\$336.36	0.86357	0.0251	0.1358
2008	16,562,014	\$2,521.75	\$2,478.05	\$47.63	\$2,185.87	\$23.49	\$60.52	\$233.08	\$293.60	0.0240	0.0277	\$335.88	0.86681	0.0189	0.1343
2009	18,832,335	\$2,712.16	\$2,681.26	\$31.69	\$2,389.69	\$20.07	\$66.35	\$244.86	\$311.21	0.0245	0.0278	\$322.47	0.88110	0.0117	0.1302
2010	20,088,748	\$2,769.61	\$2,712.94	\$57.63	\$2,350.88	\$20.14	\$77.13	\$249.12	\$326.25	0.0278	0.0328	\$418.73	0.84881	0.0208	0.1388
2011	22,320,713	\$2,915.00	\$2,858.06	\$59.84	\$2,458.00	\$14.84	\$83.94	\$267.89	\$351.83	0.0288	0.0342	\$457.00	0.84323	0.0205	0.1431
2012	24,833,996	\$3,136.73	\$3,109.10	\$31.09	\$2,754.00	\$17.10	\$91.08	\$263.60	\$354.68	0.0290	0.0331	\$382.73	0.87798	0.0099	0.1288

2013	24,599,459	\$3,607.85	\$3,499.79	\$117.25	\$3,098.32	\$44.68	\$119.22	\$287.84	\$407.06	0.0330	0.0385	\$509.52	0.85877	0.0325	0.1314
2014	32,540,669	\$3,555.65	\$3,491.80	\$88.39	\$3,035.02	\$54.09	\$111.40	\$312.81	\$424.21	0.0313	0.0367	\$520.63	0.85358	0.0249	0.1398
2015	38,162,596	\$3,908.36	\$3,880.58	\$65.16	\$3,384.11	\$44.39	\$127.66	\$341.71	\$469.37	0.0327	0.0377	\$524.25	0.86586	0.0167	0.1387
2016	39,808,149	\$4,276.60	\$4,257.52	\$60.05	\$3,763.13	\$51.68	\$128.60	\$387.11	\$515.71	0.0301	0.0342	\$513.47	0.87994	0.0140	0.1370
2017	42,672,629	\$4,264.67	\$4,080.01	\$225.71	\$3,775.31	\$154.07	\$126.25	\$330.80	\$457.05	0.0296	0.0334	\$489.36	0.88525	0.0529	0.1211
2018	43,367,492	\$4,464.10	\$4,301.49	\$191.60	\$3,932.39	\$151.26	\$133.25	\$400.46	\$533.71	0.0298	0.0339	\$531.71	0.88089	0.0429	0.1357
Growth from 2002 to 2018	3.920	\$2.57	\$2.47	\$4.08	\$2.56	\$23.99	\$4.11	\$2.48	\$2.76	1.5992	1.6043	\$2.63	0.99680566	1.5902	1.0767125
Average	23,592,620	\$2,956.87	\$2,899.49	\$80.11	\$2,567.50	\$41.91	\$82.63	\$260.88	\$343.51	0.0269	0.0311	\$389.36	0.8675	0.0269	0.1336
Standard Deviations	11,459,362	\$911.41	\$881.71	\$55.95	\$805.95	\$43.99	\$35.31	\$74.53	\$108.91	0.0042	0.0049	\$115.11	0.0160	0.0149	0.0062

**Group and Individual Markets per member**

year	Group Ind	GroupIndPremiumWritten	GroupIndNetPremium	GroupIndReinsuranceCeded	Benefits per member	GroupIndReinsurRecovery	GroupIndAdmExp_sum	GroupIndLAE sum	GroupIndAdmExp_sum + GroupIndLAE-sum	Adm exp as % of income per member	Adm exp as % of benefits per member	income vs. benefits per member	Benefits to income ratio per member	% of reinsurance from written premiums per member	Group Ind AdmExp_sum + groupIndLAE-sum
2002	58,049,786	\$2,188.95	\$2,128.41	\$90.14	\$1,853.15	\$37.21	\$69.78	\$208.42	\$278.20	0.0319	0.0377	\$335.80	0.84659	0.0412	0.1501
2003	57,092,378	\$2,435.76	\$2,395.08	\$72.18	\$2,047.96	\$43.34	\$82.66	\$224.91	\$307.57	0.0339	0.0404	\$387.80	0.84079	0.0296	0.1502
2004	56,150,259	\$2,623.39	\$2,580.98	\$69.70	\$2,204.66	\$53.34	\$89.66	\$234.26	\$323.92	0.0342	0.0407	\$418.73	0.84039	0.0266	0.1469
2005	53,397,788	\$2,820.06	\$2,784.60	\$62.26	\$2,363.10	\$48.58	\$95.39	\$256.25	\$351.65	0.0338	0.0404	\$456.96	0.83796	0.0221	0.1488
2006	59,356,566	\$2,963.66	\$2,910.79	\$84.99	\$2,497.65	\$69.31	\$105.35	\$271.51	\$376.86	0.0355	0.0422	\$466.01	0.84276	0.0287	0.1509
2007	59,365,346	\$3,108.83	\$3,040.34	\$96.71	\$2,654.51	\$81.05	\$113.86	\$278.71	\$392.58	0.0366	0.0429	\$454.31	0.85386	0.0311	0.1479

2008	57,726,203	\$3,317.96	\$3,221.72	\$137.43	\$2,852.94	\$116.19	\$115.55	\$289.39	\$404.94	0.0348	0.0405	\$465.03	0.85985	0.0414	0.1419
2009	54,752,310	\$3,493.06	\$3,367.72	\$154.14	\$3,039.92	\$133.74	\$122.53	\$307.08	\$429.60	0.0351	0.0403	\$453.13	0.87028	0.0441	0.1413
2010	52,598,215	\$3,672.23	\$3,548.31	\$156.84	\$3,094.26	\$135.49	\$124.81	\$339.71	\$464.52	0.0340	0.0403	\$577.97	0.84261	0.0427	0.1501
2011	52,157,047	\$3,773.33	\$3,650.08	\$207.62	\$3,150.58	\$177.38	\$129.06	\$348.71	\$477.77	0.0342	0.0410	\$622.75	0.83496	0.0550	0.1516
2012	51,607,141	\$3,841.70	\$3,709.33	\$211.16	\$3,272.42	\$185.00	\$135.42	\$350.19	\$485.61	0.0353	0.0414	\$569.28	0.85182	0.0550	0.1484
2013	50,064,757	\$3,925.79	\$3,836.58	\$119.54	\$3,334.00	\$103.83	\$142.88	\$370.82	\$513.69	0.0364	0.0429	\$591.79	0.84926	0.0304	0.1541
2014	47,538,843	\$4,326.04	\$4,304.04	\$71.67	\$3,739.35	\$151.32	\$154.94	\$532.54	\$687.48	0.0358	0.0414	\$586.69	0.86438	0.0166	0.1839
2015	48,387,910	\$4,466.92	\$4,450.35	\$60.90	\$3,944.34	\$168.93	\$153.07	\$553.00	\$706.07	0.0343	0.0388	\$522.58	0.88301	0.0136	0.1790
2016	46,215,172	\$4,813.05	\$4,804.15	\$56.87	\$4,183.00	\$96.79	\$159.26	\$567.64	\$726.90	0.0331	0.0381	\$630.04	0.86910	0.0118	0.1738
2017	44,316,070	\$5,200.44	\$5,200.29	\$49.59	\$4,329.49	\$55.35	\$173.12	\$522.56	\$695.68	0.0333	0.0400	\$870.95	0.83252	0.0095	0.1607
2018	42,410,081	\$5,662.26	\$5,665.36	\$51.75	\$4,528.09	\$45.71	\$183.60	\$640.53	\$824.13	0.0324	0.0405	\$1,134.16	0.79970	0.0091	0.1820
Growth from 2002 to 2018	0.731	\$2.59	\$2.66	\$0.57	\$2.44	\$1.23	\$2.63	\$3.07	\$2.96	1.0171	1.0767	\$3.38	0.94460579	0.2219	1.21236042
Average	52,422,698	\$3,684.32	\$3,623.42	\$103.15	\$3,122.91	\$100.15	\$126.53	\$370.37	\$496.89	0.0344	0.0405	\$561.41	0.8482	0.0299	0.1566
Standard Deviations	5,298,053	\$977.53	\$995.78	\$52.58	\$812.24	\$50.93	\$32.20	\$137.89	\$168.52	0.0013	0.0014	\$191.97	0.0188	0.0150	0.0140

**Federal employee Market – per member**

year	Fed members	FedPremiumWritten	FedNetPremium	FedReinsuranceCeded	Benefits per member	FedReinsurRecovery	FedAdmExp sum	Fed LAE sum	FedAdmExp sum + FedLAE-sum	Adm exp as % of income per member	Adm exp as % of benefits per member	income vs. benefits per member	Benefits to income ratio per member	% of reinsurance from written premiums per member	Fed AdmExp_sum + Fed LAE-sum
2002	3,901,422	\$2,632.45	\$2,449.40	\$229.03	\$2,245.05	\$0.75	\$62.30	\$146.69	\$208.98	0.0237	0.0277	\$387.40	0.85284	0.0870	0.0931
2003	4,190,334	\$2,782.51	\$2,771.86	\$113.95	\$2,542.93	\$0.75	\$67.97	\$148.16	\$216.14	0.0244	0.0267	\$239.58	0.91390	0.0410	0.0850

2004	4,520,613	\$3,058.32	\$3,035.24	\$52.52	\$2,779.57	\$0.74	\$75.71	\$142.89	\$218.60	0.0248	0.0272	\$278.75	0.90885	0.0172	0.0786
2005	4,482,275	\$3,315.00	\$3,314.99	\$22.23	\$3,049.58	\$1.15	\$80.45	\$151.33	\$231.78	0.0243	0.0264	\$265.42	0.91993	0.0067	0.0760
2006	5,818,645	\$3,712.70	\$3,704.57	\$21.22	\$3,430.60	\$3.10	\$85.15	\$140.85	\$226.00	0.0229	0.0248	\$282.10	0.92402	0.0057	0.0659
2007	6,324,481	\$3,848.76	\$3,844.86	\$25.54	\$3,631.06	\$6.45	\$90.59	\$143.06	\$233.65	0.0235	0.0249	\$217.70	0.94344	0.0066	0.0643
2008	6,269,410	\$4,251.53	\$4,236.60	\$29.88	\$3,912.92	\$5.81	\$89.76	\$160.04	\$249.79	0.0211	0.0229	\$338.61	0.92036	0.0070	0.0638
2009	6,241,044	\$4,450.43	\$4,434.20	\$31.41	\$4,078.46	\$8.89	\$97.86	\$165.79	\$263.65	0.0220	0.0240	\$371.97	0.91642	0.0071	0.0646
2010	6,169,575	\$4,684.52	\$4,659.23	\$41.21	\$4,246.82	\$7.25	\$103.51	\$159.52	\$263.03	0.0221	0.0244	\$437.70	0.90656	0.0088	0.0619
2011	7,143,815	\$4,360.61	\$4,238.34	\$136.12	\$3,938.56	\$96.56	\$97.03	\$145.03	\$242.06	0.0223	0.0246	\$422.05	0.90321	0.0312	0.0615
2012	7,413,978	\$4,265.06	\$4,127.58	\$137.49	\$4,001.64	\$94.13	\$94.77	\$145.01	\$239.79	0.0222	0.0237	\$263.43	0.93824	0.0322	0.0599
2013	7,272,919	\$4,402.14	\$4,401.44	\$6.15	\$4,157.10	\$5.80	\$107.42	\$152.59	\$260.00	0.0244	0.0258	\$245.04	0.94434	0.0014	0.0625
2014	7,117,893	\$4,790.87	\$4,782.74	\$8.62	\$4,433.68	\$3.64	\$109.67	\$257.25	\$366.92	0.0229	0.0247	\$357.19	0.92544	0.0018	0.0828
2015	7,293,836	\$4,967.29	\$4,965.87	\$1.80	\$4,518.85	\$0.97	\$110.83	\$276.90	\$387.73	0.0223	0.0245	\$448.44	0.90972	0.0004	0.0858
2016	7,514,323	\$5,036.05	\$5,025.23	\$10.82	\$4,520.24	\$7.45	\$113.46	\$270.36	\$383.82	0.0225	0.0251	\$515.81	0.89758	0.0021	0.0849
2017	7,587,464	\$4,975.86	\$4,966.60	\$10.91	\$4,560.44	\$9.46	\$114.50	\$178.75	\$293.25	0.0230	0.0251	\$415.42	0.91651	0.0022	0.0643
2018	7,611,028	\$5,105.27	\$4,918.67	\$189.08	\$4,779.57	\$161.52	\$127.71	\$256.44	\$384.15	0.0250	0.0267	\$325.70	0.93620	0.0370	0.0804
Growth from 2002 to 2018	1.951	\$1.94	\$2.01	\$0.83	\$2.13	\$215.40	\$2.05	\$1.75	\$1.84	1.0570	0.9629	\$0.84	1.09775284	0.4257	0.86342642
Average	6,286,650	\$4,155.26	\$4,110.44	\$62.82	\$3,813.36	\$24.38	\$95.81	\$178.86	\$274.67	0.0231	0.0253	\$341.90	0.9163	0.0174	0.0727
Standard Deviations	1,282,869	\$802.70	\$810.29	\$70.63	\$758.97	\$46.49	\$17.70	\$50.49	\$64.07	0.0011	0.0013	\$86.94	0.0214	0.0225	0.0110

**Health insurance industry (Fully Insured) – per member**

year	Industry - members	Industry Premium Written	Industry Net Premium	Industry Reinsurance Ceded per member	Benefits per member	Industry Reinsurance Recovery	Industry Adm Exp_sum	Industry LAE sum	Industry Adm Exp_sum + Industry LAE-sum	Adm exp as % of income per member	Adm exp (no LAE) as % of benefits per member	income vs. benefits per member	Benefits to income ratio per member	% of reinsurance from written premiums per member	Industry Adm Exp_sum + Industry LAE-sum
2002	76,551,748	\$2,374.58	\$2,310.74	\$101.74	\$2,023.80	\$29.71	\$86.24	\$194.82	\$281.06	0.0363	0.0426	\$350.78	0.85228	0.0428	0.1389
2003	76,372,390	\$2,581.78	\$2,556.68	\$69.77	\$2,208.51	\$33.81	\$96.15	\$207.90	\$304.05	0.0372	0.0435	\$373.27	0.85542	0.0270	0.1377
2004	76,380,845	\$2,799.15	\$2,753.56	\$76.72	\$2,379.60	\$44.08	\$103.54	\$216.41	\$319.95	0.0370	0.0435	\$419.55	0.85012	0.0274	0.1345
2005	74,746,862	\$3,017.08	\$2,998.07	\$61.32	\$2,575.03	\$39.18	\$118.00	\$235.95	\$353.95	0.0391	0.0458	\$442.05	0.85348	0.0203	0.1375
2006	84,632,442	\$3,225.88	\$3,194.60	\$71.90	\$2,761.62	\$54.05	\$129.62	\$246.78	\$376.40	0.0402	0.0469	\$464.26	0.85608	0.0223	0.1363
2007	86,259,205	\$3,483.09	\$3,426.94	\$88.34	\$3,001.94	\$62.89	\$143.58	\$257.32	\$400.90	0.0412	0.0478	\$481.15	0.86186	0.0254	0.1335
2008	86,779,446	\$3,755.38	\$3,677.05	\$111.80	\$3,247.48	\$87.19	\$156.45	\$264.75	\$421.20	0.0417	0.0482	\$507.89	0.86476	0.0298	0.1297
2009	86,985,998	\$3,999.28	\$3,905.79	\$115.03	\$3,482.36	\$92.07	\$169.30	\$277.49	\$446.79	0.0423	0.0486	\$516.93	0.87075	0.0288	0.1283
2010	86,296,170	\$4,156.38	\$4,073.62	\$120.74	\$3,546.83	\$94.11	\$177.44	\$299.13	\$476.57	0.0427	0.0500	\$609.55	0.85334	0.0290	0.1344
2011	89,770,120	\$4,270.21	\$4,166.95	\$160.23	\$3,613.94	\$124.90	\$181.80	\$305.62	\$487.42	0.0426	0.0503	\$656.28	0.84631	0.0375	0.1349
2012	92,877,745	\$4,385.45	\$4,282.07	\$151.61	\$3,783.65	\$126.86	\$189.72	\$305.58	\$495.30	0.0433	0.0501	\$601.80	0.86277	0.0346	0.1309
2013	91,747,326	\$4,602.75	\$4,518.96	\$105.36	\$3,973.03	\$74.68	\$209.13	\$326.06	\$535.19	0.0454	0.0526	\$629.72	0.86319	0.0229	0.1347
2014	97,946,245	\$4,780.65	\$4,757.90	\$78.08	\$4,149.04	\$99.04	\$225.52	\$416.02	\$641.54	0.0472	0.0544	\$631.61	0.86788	0.0163	0.1546
2015	107,397,423	\$5,071.06	\$5,041.83	\$68.30	\$4,437.41	\$99.97	\$243.73	\$433.68	\$677.41	0.0481	0.0549	\$633.64	0.87505	0.0135	0.1527
2016	107,736,758	\$5,431.31	\$5,404.42	\$65.06	\$4,715.63	\$73.94	\$256.69	\$452.41	\$709.11	0.0473	0.0544	\$715.68	0.86823	0.0120	0.1504
2017	109,858,287	\$5,630.21	\$5,543.26	\$126.05	\$4,842.64	\$98.33	\$249.27	\$404.63	\$653.89	0.0443	0.0515	\$787.57	0.86012	0.0224	0.1350
2018	110,037,011	\$6,008.35	\$5,924.86	\$122.18	\$5,092.29	\$100.24	\$291.44	\$480.74	\$772.18	0.0485	0.0572	\$916.06	0.84754	0.0203	0.1516
Growth from 2002 to 2018	1.437	\$2.53	\$2.56	\$1.20	\$2.52	\$3.37	\$3.38	\$2.47	\$2.75	1.3356	1.3431	\$2.61	0.99443888	0.4746	1.09189261
Average	90,728,001	\$4,092.50	\$4,031.61	\$99.66	\$3,519.69	\$78.53	\$178.10	\$313.25	\$491.35	0.0426	0.0496	\$572.81	0.8594	0.0254	0.1386

Standard Deviations	12,091,584	\$1,088.23	\$1,080.18	\$30.49	\$943.53	\$30.34	\$61.32	\$91.16	\$151.64	0.0039	0.0043	\$150.23	0.0084	0.0082	0.0084
---------------------	------------	------------	------------	---------	----------	---------	---------	---------	----------	--------	--------	----------	--------	--------	--------

Source: Annual statements of health insurers in the US as submitted to the NAIC. Authors' computations