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The Distribution of Public Spending for Health Care in the United States on the Eve of Health Reform

Didem Bernard, Thomas Selden, and Yuriy Pylypchuk

14.1 Introduction

US health care spending in 2012 was \$2.8 trillion or 17.2 percent of US gross domestic product (GDP) (Martin et al. 2014). Spending of this magnitude can place significant pressures on families striving to afford premiums and out-of-pocket payments for care, on employers providing insurance to current and retired employees, and on governments concerned with the fiscal implications of public spending on health care. Despite the recent slowdown in health care expenditure growth, these pressures are likely to increase, with growth in health care spending predicted to outpace growth in GDP over the next decade (Cuckler et al. 2013). As a result, the role of government in the financing of health care is likely to remain at the forefront of public policy debate for the foreseeable future.

In this chapter we examine several basic questions: What is the overall percentage of health care paid for by the public sector? How has the public share changed over time? And what is the incidence of public spending across key subgroups of the population? These questions may be basic, but the complexity of health care finance in the United States makes it difficult to provide answers

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with commonly available statistics. Measuring public spending entails tracking not only outlays from public insurance coverage (such as Medicaid and Medicare), but also implicit tax subsidies (such as those for employer-sponsored insurance), public grants to providers (such as Medicaid Disproportionate Share payments), and private premium payments for public coverage (such as Part B Medicare premiums). Because no single data source provides all of this information, in this chapter we combine aggregate measures from the National Health Expenditure Accounts (NHEA) with microdata from the Medical Expenditure Panel Survey (MEPS). The second section of the chapter adjusts NHEA estimates to provide a historical look at the public-private spending mix since 1960. The third section presents a “benefit incidence analysis” of public spending in 2010 by age, poverty level, insurance coverage, and health status, and across ACA-relevant subgroups on the eve of reform.

14.2 Aggregate Public Spending on Health Care

The NHEA, produced by the Centers for Medicare and Medicaid Services (CMS), combine data on provider revenues and administrative claims to produce aggregate estimates of US health spending by service type and payment source (CMS 2014a). We modify the NHEA estimates in two ways. First, we reclassify as private the portion of Medicare paid for by private premiums (these payments are voluntary, and thus more akin to a “user fee” than to a tax).¹ Second, we shift to public spending the portion of private spending that is defrayed by tax expenditures.

Unfortunately, we are aware of no consistent and comprehensive time series for tax expenditures, and published tax expenditure estimates can be only imperfectly reconciled. For 1987, 1996, 2002, 2007, and 2010 the tax subsidy estimates are from calculations performed by one or more of this chapter’s authors, providing a reasonably consistent and comprehensive set of adjustments.² We describe the 2010 estimates in greater detail below, but our basic objective is to include: (a) federal income, state income, and payroll tax expenditures for employer-sponsored insurance ([ESI]; subsidies for employer contributions and for tax-exempt employee contributions);

1. Medicare premiums paid by households for 1987 to 2010 are from NHEA “sponsor” estimates (CMS 2014b), supplemented with pre-1987 data on Medicare financing from Trustee Reports. Although we use NHEA sponsor estimates for Medicare premiums, note that our public/private estimates differ from NHEA sponsor estimates in several key respects. First, we exclude nonpatient revenue. Second, we count Medicare as public, whether it is funded by payroll taxes or general revenues (excluding only the portion paid by premiums). Third, we treat all employer-sponsored insurance as private, including that for government employees. Lastly, we account for tax expenditures. As a result, our estimates of the public share are substantially larger than those in the NHEA sponsor estimates.

2. Estimates for 1996 are from Selden and Moeller (2000), which is also our source for unpublished 1987 estimates. For 2002, estimates are from Selden and Sing (2008) (see also Sheils and Haught 2004). Note that tax expenditures that reduce health care spending (such as property tax exemptions or exemptions from ad valorem sales taxes) effectively increase the total amount of health care spending by a small percentage.

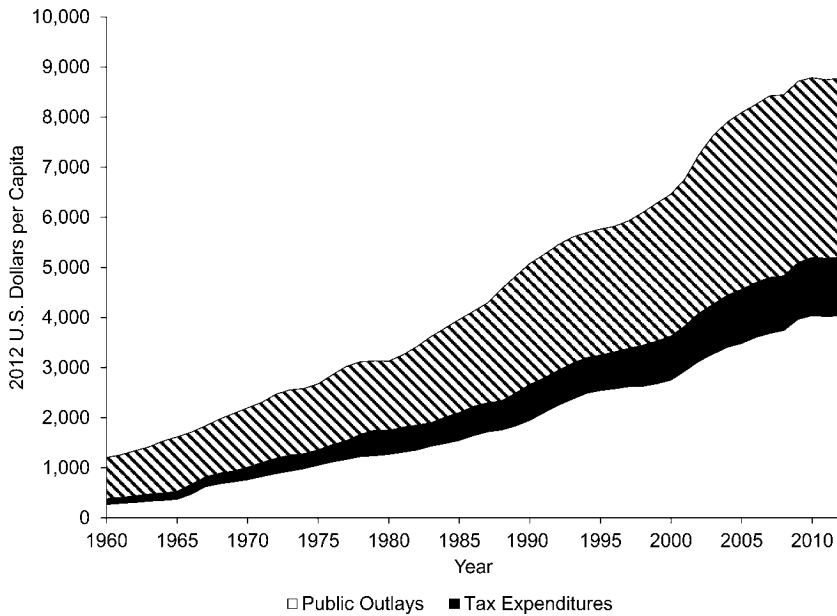


Fig. 14.1 Per capita public and private spending on health care, 1960–2012

(b) the excess medical care itemized deduction; (c) the tax preference for self-employment health insurance; (d) tax preferences for (health care) flexible spending accounts and health savings accounts; (e) the exemption of medical care from sales taxation; and (f) a range of smaller tax expenditures, such as those available to nonprofit providers. Tax expenditure estimates were constructed assuming that all preferences were removed simultaneously (rather than, say, allowing the excess medical care deduction to grow in response to removal of the ESI and self-employment preferences).

We fill gaps between 1987 and 2012 by interpolation and extrapolation, building on estimates of the ESI subsidy for current workers from Miller and Selden (2013), Selden and Gray (2006), and the Joint Committee on Taxation (JCT, various years, available for 1967–present, but only covering the federal income tax portion of the ESI subsidy), as well as estimates in Sheils and Hogan (1999) and Sheils and Hought (2004). For earlier years, we construct estimates that are as consistent as possible from Feldstein and Allison (1970) and Helms (2008), filling any remaining gaps back to 1960 using Barro and Redlick’s historical average tax rates (National Bureau of Economic Research 2012) and NHEA estimates of private insurance premiums. Due to the variety of data sources used to construct our time series for tax expenditures, our results should be viewed as an approximation of how public spending has evolved over time.

Figure 14.1 clearly shows both the remarkable rise in real per capita spending and the rising public share. Combining public outlays with implicit public

spending through tax expenditures, the public share of total health spending increased from 31.2 percent in 1960 to 46.8 percent in 1970 (following the implementation of Medicare and Medicaid). Subsequent changes were more gradual, but tended to increase the public share, which reached 53.6 percent in 1990, 57.2 percent in 2000, 58.7 percent in 2007, and 59.2 percent in 2012. Tax expenditures as a percentage of health care spending peaked in the 1979–1981 period at an average of 15.5 percent of total health care spending, declining thereafter to approximately 13 percent at present. This decline is due primarily to lower marginal tax rates. Together with the fact that private spending itself is a declining share of total spending, declines in marginal rates more than offset the shift toward the use of Section 125 plans to exempt employee premium contributions from taxation. In contrast, public outlays have quite steadily increased as a share of US health care spending, even after the initial introduction of Medicare and Medicaid.

14.3 Benefit Incidence of Public Spending on Health Care

Given that the public sector accounts for well over half of all US spending on health care, a natural next question concerns the incidence of benefits from this spending across key socioeconomic groups. To answer this, we move beyond aggregate NHEA estimates, updating and extending the “benefit incidence analysis” for 2002 in Selden and Sing (2008). Benefit incidence analysis is a “statutory” method of accounting in a simplified manner for the distribution of benefits from public spending (Selden and Wasylenko 1992). Public programs are assumed to confer benefits in proportion to services or payments received. We do not attempt to measure the risk-reducing benefits associated with public insurance or the cash-equivalent valuation by recipients for benefits received, and we ignore shifting across generations and throughout the economy—our rationale being that we seek to provide a complete overview of a very complex sector.³

Our starting point is the MEPS household survey sponsored by the Agency for Healthcare Research and Quality (AHRQ) and the National Center for Health Statistics (NCHS). The MEPS contains individual and household-level data on health expenditures and use, health insurance coverage, health status, and a wide range of demographic and socioeconomic characteristics for a nationally representative sample of households in the civilian, noninstitutionalized population (Cohen 1997).

Although MEPS is an ideal starting point for analyzing the distribution of public spending, no household survey, by itself, can support a complete

3. For an analysis of how alternative assumptions regarding wage formation might affect the tax subsidy incidence, see Selden and Bernard (2004). For incidence analyses of Medicare’s benefits net of payments, see McClellan and Skinner (2006) and Bhattacharya and Lakdawalla (2006). With respect to valuing in-kind benefits, see Wolfe and Moffitt (1991).

distributional analysis. First, household data suffer from underreporting, and high-cost cases may be underrepresented. Second, household respondents cannot be expected to report certain types of spending, such as administrative costs or some hospital payments not tied to patient events. Third, although MEPS provides much of the data to compute tax expenditures, such subsidies are implicit by nature and thus not readily reportable by household respondents.

To remedy the first gap, we begin with 2007 NHEA benchmarks that have been aligned with the type of service and source of payment definitions in MEPS and adjusted to exclude spending for the institutionalized, active-duty military and foreigners visiting the United States—groups not included in MEPS (Bernard et al. 2012). We age these benchmarks forward to our analysis year, 2010, and then align MEPS by type of service and source of payment. Gaps are closed in part by upweighting high-cost cases and, in part, by scaling reported amounts (Bernard, Selden, and Pylypchuk 2014).

Next we allocate amounts in NHEA that were outside the scope of MEPS. Personal care services are allocated in proportion to home health care spending. Administrative costs are allocated in proportion to benefits received, with any premiums paid by households for public coverage netted out of public benefits received. Medicaid and Medicare Disproportionate Share payments and state and local funding for public hospitals are allocated using MEPS data on uncompensated care.⁴ For completeness, we also allocate: research spending in proportion to prescription drug spending, investment in structures and equipment in proportion to hospital use, and public health spending evenly across the population. Throughout the analysis, health insurance provided by public employers to their employees is considered private spending (a noncash form of compensation in lieu of higher cash wages), rather than public insurance.

Finally, we estimate a comprehensive array of tax expenditures. To simulate the tax subsidy from exclusion of employer-sponsored insurance premiums from federal income, state income, and Social Security and Medicare payroll taxation, we combine marginal tax rates (simulated using the National Bureau of Economic Research TAXSIM model)⁵ with MEPS HC data on employee premium contributions and employer premium contributions (imputed using regressions estimated with the MEPS Insurance Component survey of employers).⁶ We also simulate the medical expense deduction and the exemption of health care spending from most, but not all, state

4. The MEPS uncompensated care was constructed by comparing event payments with charges that were adjusted for reasonable discounts.

5. Feenberg and Coutts (1993). TAXSIM version 8 was used (accessed September 1, 2013, at <http://www.nber.org/taxsim>).

6. Each family's ESI tax subsidies were allocated across policyholders and their covered dependents in proportion to spending paid for by private insurance (or pro rata across covered persons in families that had no care paid for by private insurance).

and local sales taxation. Finally, we allocate to MEPS individuals national estimates of a variety of smaller tax subsidies, such as the tax exemption of nonprofit hospitals (Bernard, Selden, and Pylypchuk 2015). All differences discussed in the text are statistically significant at the 5 percent level, and all standard errors and statistical tests reflect the complex design of MEPS.

14.3.1 Aggregate Results

The top row of table 14.1 presents the incidence of benefits from public spending on health care in aggregate. Overall, public spending accounted for 57.6 percent of total spending on health care (a slightly lower percentage than in figure 14.1, due to the exclusion of active-duty military and persons residing in institutions). We report expenditures in five subcategories: “Medicaid and CHIP” includes payments for patient care and administration costs, net of premiums paid by households, for Medicaid, the Children’s Health Insurance Program (CHIP), and a small number of similar state-funded programs. “Medicare” is defined similarly. These two categories comprise 67.6 percent of all public outlays. “Other public general” includes the NHEA categories of public health, public investment in structures and equipment, Medicare Graduate Medical Education, and public research—amounts that tend to benefit broad groups of the population and may have public goods attributes. All remaining public outlays are grouped in “other public targeted.” This includes other public third-party programs such as the Veterans Administration, workers’ compensation, and the MEPS expenditure categories of Other Federal and Other State and Local, all of which entail payments linked to specific beneficiaries (i.e., payments that can be measured in MEPS). The “targeted” category also includes Medicaid and Medicare Disproportionate Share payments, which are payments to hospitals based on their caseloads of lower-income populations.⁷ Finally, the “tax expenditures” category includes all of the tax preferences mentioned above, accounting for just over one-quarter (26.6 percent) of all public expenditures on health care (within the civilian noninstitutionalized population).

14.3.2 Age Groups

Public spending in 2010 was strongly related to age, with children from birth to age eighteen receiving \$1,809 on average, versus \$3,539 for adults age nineteen to sixty-four and \$9,678 for seniors (all amounts in 2010 dollars). In part, these differences mirror the overall age gradient in health care spending. Despite the large differences in average public spending between children and seniors, the public share of total spending for seniors (65.2 percent)

7. For instance, Medicare DSH is tied to hospital caseloads of persons receiving Supplemental Security Income (SSI). Medicaid DSH payments are targeted at hospitals treating indigent populations.

Table 14.1 Benefit incidence of public spending on health care by age and poverty level, civilian noninstitutionalized population, 2010

	Population (millions)	Public outlays					Total public expenditures	Public as percentage of total expenditures
		Medicaid/SCHIP	Medicare	Other public targeted ^a	Other public general ^b	Tax expenditures		
All	308.6	852 (57)	1,045 (65)	435 (34)	474 (5)	1,039 (16)	3,913 (112)	57.6 (0.9)
Age groups								
0-18	79.3	831 (73)	24 (18)	133 (29)	318 (6)	491 (13)	1,809 (94)	63.9 (1.8)
19-64	188.1	828 (74)	371 (50)	406 (37)	475 (7)	1,374 (20)	3,539 (105)	52.8 (1.1)
65+	41.2	1,008 (144)	6,094 (374)	1,153 (192)	770 (15)	566 (22)	9,678 (504)	65.2 (1.6)
Poverty level								
< 100% FPL	46.8	3,239 (280)	1,148 (160)	1,010 (165)	470 (16)	120 (14)	6,070 (437)	79.9 (1.9)
100-199% FPL	57.1	1,033 (86)	1,542 (164)	544 (91)	486 (12)	492 (21)	4,196 (230)	67 (1.7)
200-399% FPL	93.0	441 (69)	964 (96)	331 (52)	455 (8)	1,003 (18)	3,262 (136)	53.2 (1.4)
400%+ FPL	111.7	102 (23)	814 (102)	226 (36)	484 (8)	1,734 (24)	3,406 (129)	46.8 (1.2)

Source: Authors' calculations using 2010 Medical Expenditure Panel Survey (MEPS) data aligned with 2010 National Health Expenditure Accounts (NHEA) data and other national benchmarks.

Note: Sample contains 32,846 positively weighted observations. Standard errors (in parentheses) are adjusted for the complex design of the MEPS sample, but do not reflect the uncertainties regarding the adjustments to align the MEPS with national benchmarks.

^a Includes Medicaid and Medicare Disproportionate Share, Department of Veterans Affairs, workers' compensation, Medicare retroactive and capital pass-through payments, and administrative costs of public coverage.

^b Includes Medicare General Medical Education, other federal, state, and local, public health, public research, investment in structures, and equipment.

is very similar to that of children (63.9 percent). On a percentage basis, adults age nineteen to sixty-four receive less than children or seniors (public spending is 52.8 percent of total spending for this group).

The lower public shares for adults age nineteen to sixty-four is not surprising given that Medicare provides nearly universal coverage for seniors and given that public coverage expansions in recent years, prior to the ACA, have been disproportionately targeted at children (Medicaid and CHIP). Medicare and Medicaid/CHIP together comprise only 17.9 percent of total spending for adults under age sixty-five (calculated from table as $[\$828 + \$371]/\$6,703$) versus 30.2 percent for children and 47.8 percent for seniors.

14.3.3 Poverty Level

Table 14.1 also shows the incidence of public benefits by family income as a percentage of the Federal Poverty Line (FPL). Not surprisingly, Medicaid/CHIP spending was targeted at lower-income groups. In contrast, the remaining categories of public health care outlays were somewhat more evenly distributed, and tax subsidies strongly favored high-income families. Overall, public spending accounted for 79.9 percent of total health care among those under 100 percent of FPL. Perhaps more surprisingly, even among those at or above four times the poverty line the public share was 46.8 percent.

14.3.4 Health Status

The top panel of table 14.2 shows the incidence of public benefits by self (or proxy) reported health status.⁸ Our results highlight the extent to which the public sector targets those with the greatest health care needs. This is particularly true for public outlays on third-party reimbursement for care (i.e., Medicaid, CHIP, Medicare, and other public targeted). It is not surprising that public outlays would be highest for those in fair or poor health; these groups also have the highest private expenditures. More noteworthy is that the public share rises as health status deteriorates, so that the public sector in the United States disproportionately cares for those with greatest health risks.⁹

8. Persons with missing health status were excluded from the analysis.

9. Our methodology generally follows that of Selden and Sing quite closely; however, one difference concerns the treatment of private spending in public share calculations. Selden and Sing measure the benefit of private insurance using premiums paid by households (or employers). In this chapter, the benefit of private insurance is based on paid claims (plus an implied load). This is more symmetric with our use of claims paid by public insurers (plus net administrative costs) to value the benefit of public spending on coverage. This refinement has negligible effect on our public share computations based on age, income, insurance, or ACA-relevant groups. It does, however, improve our public share estimates across health risk, lowering the public share estimates for those with high health risks.

Table 14.2 Benefit incidence of public spending on health care by health and insurance status, civilian noninstitutionalized population, 2010

	Population (millions)	Public outlays					Total public expenditures	Public as percentage of total expenditures
		Medicaid/SCHIP	Medicare	Other public targeted ^d	Other public general ^b	Tax expenditures		
Health status								
Excellent	105.6	287 (26)	152 (37)	87 (13)	330 (4)	938 (19)	1,819 (52)	55.5 (1.8)
Very good	92.5	410 (59)	532 (74)	233 (35)	417 (8)	1,182 (20)	2,814 (115)	52.9 (1.4)
Good	73.9	980 (127)	1,273 (9,157)	491 (61)	534 (12)	1,077 (28)	4,428 (249)	55.6 (1.7)
Fair	26.9	2,092 (235)	3,308 (318)	1,496 (279)	787 (23)	923 (37)	8,865 (510)	62.1 (2.0)
Poor	9.0	7,301 (873)	7,825 (967)	2,752 (589)	1,305 (66)	845 (80)	20,265 (1,432)	66.0 (2.9)
Insurance status								
Private	173.5	80 (16)	39 (7)	204 (26)	436 (6)	1,678 (18)	2,490 (40)	42.6 (0.8)
Medicaid	47.5	3,802 (281)	140 (42)	379 (64)	395 (12)	25 (4)	4,740 (315)	91.6 (0.9)
Medicaid & Medicare	8.6	7,951 (794)	8,612 (789)	1,705 (264)	878 (51)	145 (15)	19,291 (1,453)	89.6 (1.2)
Medicare	38.5	0	6,091 (409)	1,147 (206)	806 (17)	631 (24)	8,783 (487)	60.1 (1.7)
Uninsured	40.4	0	0	546 (121)	326 (7)	68 (9)	1,124 (136)	51.6 (3.7)

Source: Authors' calculations using 2010 Medical Expenditure Panel Survey (MEPS) data aligned with 2010 National Health Expenditure Accounts (NHEA) data and other national benchmarks.

Note: Sample contains 32,846 positively weighted observations. Standard errors (in parentheses) are adjusted for the complex design of the MEPS sample, but do not reflect the uncertainties regarding the adjustments to align the MEPS with national benchmarks.

^a Includes Medicaid and Medicare Disproportionate Share, Department of Veterans Affairs, workers' compensation, Medicare retroactive and capital pass-through payments, and administrative costs of public coverage.

^b Includes Medicare General Medical Education, other federal, state, and local, public health, public research, and investment in structures and equipment.

14.3.5 Insurance Coverage

The bottom panel of table 14.2 shows the incidence of public benefits by insurance coverage. Not surprisingly, public expenditures are largest on average (\$19,291) for dual eligibles (persons ever covered by Medicare and Medicaid). Also not surprising is that the public share for persons ever covered by Medicaid/CHIP (but not Medicare or private) is very high (91.6 percent). More noteworthy is that the public share is just over 50 percent for the full-year uninsured (though the absolute amount, \$1,124, is small relative to other insurance groups). Even for persons with private coverage during the year the public share is 42.6 percent, due to \$1,678 in tax expenditures and \$436 in other public general (both per covered person).

14.3.6 ACA-Relevant Subgroups

Table 14.3 shows the incidence of public benefits for adults age nineteen to sixty-four by ACA-relevant subgroups.¹⁰ For simplicity, we focus on US citizens who are never enrolled in Medicare and who do not receive Supplemental Security Income (SSI).¹¹ We identify six groups. The first consists of persons enrolled at any point during the year in Medicaid (or, in a few cases, CHIP). Even after excluding “dual” Medicaid/Medicare enrollees and persons receiving SSI, this group currently benefits from extensive public expenditures (\$4,780 on average), with a public share of 83.3 percent.

The second and third groups consist of persons with modified adjusted gross income (MAGI) under 138 percent of FPL. In group 2 are adults in expansion states who would be eligible for Medicaid as of January 1, 2014 (if not earlier).¹² Group 3 consists of adults in nonexpansion states who will not in general be eligible for Medicaid.¹³ Neither group receives a particularly high benefit from public spending on health care; average amounts for groups 2 and 3 are \$1,536 and \$1,566, respectively.

10. Because income (and thus eligibility) can fluctuate during the year, this portion of our analysis focuses on income measured as of the first interview during 2010 (and we subset the full-year MEPS sample to those in MEPS as of that interview).

11. The ACA main coverage provisions do not apply to persons with Medicare or who receive SSI-related Medicaid coverage for disability. While some ACA coverage provisions apply to some noncitizens (those who are documented and who meet residency tests), immigration status is not measured in MEPS and must be inferred probabilistically based on a number of observed characteristics. Including noncitizens would have very little effect on the estimates in table 14.3.

12. Some adults in these states were eligible for, but not enrolled in Medicaid under pre-ACA rules, and some lived in states that implemented ACA-related expansions prior to the start of 2014.

13. Included in this group are some adults who were eligible for, but not enrolled in Medicaid under prereform rules. Note that in nonexpansion states, persons with MAGI between 100 percent FPL and 138 percent FPL are eligible for subsidized exchange coverage (if they lack access to affordable ESI), so that this group is excluded from group 3. Note also that in nonexpansion states the change from pre-ACA Medicaid income counting rules to MAGI and the elimination of asset tests may make some current enrollees ineligible, while conferring eligibility on some adults who would previously have been ineligible.

Table 14.3 Benefit incidence of public spending on health care by Affordable Care Act subgroups, among adults age nineteen to sixty-four in the civilian noninstitutionalized population, 2010 (\$ amounts are per capita)

	Public outlays (\$)					Total public expenditures (\$)	Total expenditures (\$)	Public as percentage of total expenditures
	Population (millions)	Medicaid/CHIP	Medicare	Other public targeted ^a	Other public general ^b			
ACA eligibility								
Enrolled in Medicaid	12.0	3,887 (461)	0	336 (68)	394 (13)	4,780 (497)	5,741 (504)	83.3 (2.7)
Income < 138% FPL & ineligible for subsidized marketplace coverage								
Living in expansion states	11.8	0	0	717 (205)	368 (11)	1,536 (211)	3,462 (341)	44.4 (4.2)
Living in nonexpansion states	9.2	0	0	638 (139)	426 (33)	1,566 (161)	4,581 (873)	34.2 (5.3)
Eligible for subsidized marketplace coverage	19.0	0	0	613 (164)	378 (12)	1,389 (173)	3,485 (306)	39.9 (3.1)
Income > 138% FPL & offered ESI (own or spouse)	91.8	0	0	268 (33)	461 (9)	2,905 (41)	6,457 (198)	45.0 (1.1)
Income > 400% FPL & no offer	9.6	0	0	508 (265)	414 (19)	1,816 (275)	4,784 (452)	38.0 (4.3)

Source: Authors' calculations using 2010 Medical Expenditure Panel Survey (MEPS) data aligned with 2010 National Health Expenditure Accounts (NHEA) data and other national benchmarks.

Note: Sample contains 32,846 positively weighted observations. Standard errors (in parentheses) are adjusted for the complex design of the MEPS sample, but do not reflect uncertainties regarding the adjustments to align the MEPS with national benchmarks. These results are for persons age nineteen to sixty-four who are citizens due to the cross-state variation in eligibility rules for noncitizens.

^a Includes Medicaid and Medicare Disproportionate Share, Department of Veterans Affairs, workers' compensation, Medicare retroactive and capital pass-through payments, and administrative costs of public coverage.

^b Includes Medicare General Medical Education, other federal, state, and local, public health, public research, and investment in structures and equipment.

The fourth group consists of those gaining eligibility for subsidized marketplace coverage. We define this group as adults who (a) would be ineligible for Medicaid using 2014 rules, (b) have MAGI between 100 and 400 percent of FPL, and (c) lack access to affordable ESI coverage (neither the person nor their spouse is offered ESI through current jobs).¹⁴ From a benefit incidence perspective, this group looks quite similar to lower-income groups 2 and 3.

Group 5 consists of persons with MAGI over 138 percent of FPL who are offered coverage through their own job (or whose spouse is offered coverage)—the offers making them (in most cases) ineligible for subsidized marketplace coverage even if their MAGIs are under 400 percent of FPL. As has been well-documented in prior studies regarding the regressive incidence of the ESI tax subsidy, this group has access to affordable coverage (at least for single coverage), and it receives approximately double the public benefit on average (\$2,905) compared to adults in groups 2, 3, 4—who generally have lower incomes and whose public benefit ranges from \$1,389 to \$1,566.

Looking at these first five groups, benefit incidence analysis clarifies the extent to which the ACA, as designed, targeted Medicaid expansions and private coverage subsidies at groups in-between Medicaid enrollees and those with access to ESI. As designed, the ACA would help to level what was, pre-ACA, a U-shaped pattern of benefits across these groups (see, for instance, Rennane and Steuerle 2011). The actual effects of the ACA on this distribution of public benefits will depend, for groups 2 and 4, on their take up of coverage and their resulting use of medical care. For group 3 the question is whether their states decide to adopt the ACA Medicaid expansions.

The final group consists of persons with MAGI over 400 percent of FPL who lack their own or spousal ESI offers. Compared to groups 2–4, this group currently receives approximately the same level of public outlays and nearly twice as much in tax expenditure (reflecting in part tax preferences for self-employment and retiree coverage). Because of this group's higher income, it was not targeted by the ACA—though members of this group may be affected by ACA provisions regarding guaranteed issue, community rating, and other reforms in the nongroup market.

14.4 Limitations

There are several noteworthy limitations of our study. First, figure 14.1 presents published NHEA estimates that we have modified using tax expen-

14. The ACA also specifies that such coverage must have an actuarial value of at least 60 percent and a single coverage premium under 9.5 percent of MAGI. Also, a spouse's offer would not affect a person's subsidy eligibility unless the person can be covered through the spouse's plan. The MEPS does not provide data on actuarial value and only observes employee contributions and coverage of other family members for plans actually chosen. Given that most ESI plans meet these tests for most employees, we focus solely on own and spousal offers in defining group 4 for table 14.3.

diture estimates drawn from a variety of published and unpublished sources. These tax expenditure estimates can be only imperfectly reconciled and interpolated, raising caveats regarding the consistency of the resulting time series. Second, our incidence analysis focuses on average spending by subgroups, and we do not measure the risk-reducing benefits associated with public insurance or the cash-equivalent valuation by recipients for benefits received. Third, the ultimate beneficiaries of public spending may be different in some cases from those we identify. For instance, public spending on behalf of seniors may offset private transfers from (or increase bequests to) their children (Sloan, Zhang, and Wang 2002). Fourth, tax expenditure estimates were constructed under the assumption that employers shift the burden of employer premium contributions to workers based on the plans they take up (rather than based on their ability to pay or their underlying health risks), and, while this likely has little effect on aggregate estimates (Miller and Selden 2013), alternative assumptions might affect the measured incidence of ESI tax subsidies across workers (Selden and Bernard 2004). Finally, persons in institutions (and active-duty military) are outside the scope of MEPS and thus were not included in our incidence analysis.

14.5 Discussion

The estimates presented in this chapter provide basic background information on the overall public share of health care spending, its growth over time, and the distribution of public benefits across key population subgroups. Overall, the public share of US spending on health care in 2012 totaled 59.2 percent when we include tax expenditures as a form of public spending (and when we treat household-paid premiums for public coverage as being akin to a user fee). Our historical analysis documents a long-term trend toward higher public shares in total spending, with growth in public outlays representing the primary driver over time (versus tax expenditures, which peaked as a percentage of health care spending in the years 1979–1981).

Our incidence results for 2010 show that the distribution of public spending across age, poverty, insurance, and health status have not changed since 2002 (Selden and Sing 2008). Publicly financed health care, both in magnitude and as a percentage of total spending, is largest for seniors, while benefits as a percentage of total spending are lowest for adults age nineteen to sixty-four. Moreover, even though it was public outlays, more than tax expenditures, that drove the rising public share of total health care spending from 1960 to present, our incidence estimates for 2010 show that all income groups (classified by poverty level) share in the benefits of public spending. Even among families with incomes above 400 percent of the poverty line, public spending accounted for nearly half of total spending.

This chapter also presents benefit incidence estimates for ACA-relevant groups of nonsenior adults. Our results highlight the relatively low level of

pre-ACA public benefits flowing to adults under 400 percent of FPL who neither were enrolled in Medicaid nor had access to ESI—precisely those adults the ACA targets for expanded access to government-subsidized, affordable coverage.

In future work, “benefit incidence analysis” can provide a valuable tool to evaluate ACA-related changes in public spending. The Congressional Budget Office (CBO 2013) shows that ACA provisions to expand health insurance will increase the public share of total spending,¹⁵ and an important question for public policy will be the extent to which the ACA evens the distribution of public benefits across adults. Furthermore, tracking the benefit incidence of public spending can provide a useful backdrop for the ongoing debate over further steps the country might take on entitlements and tax policy to ensure long-term fiscal stability.

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15. See also CMS (2013) and Cuckler et al. (2013).

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