CHAPTER 2

Affordability of Exchange Coverage for Children Now Covered by CHIP

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Key Points

- MACPAC's analysis of premiums and cost sharing for children's exchange coverage compared with CHIP estimates that average additional costs for exchange coverage for two children are more than twice the cost of CHIP if the children's parents are already enrolled in exchange coverage and more than six times the cost of CHIP if the children's parents are not enrolled.
  - Parents' enrollment affects premium contributions required for children's exchange coverage, even after tax credits are applied.
  - Premiums for stand-alone dental plans and higher cost sharing for exchange plans also increase family costs relative to CHIP.
- For children with exceptionally high health needs who would reach their out-of-pocket cost-sharing maximum in an exchange plan, a family's total potential exposure for children's coverage could exceed 11.7 percent of family income at 160 percent of the federal poverty level (FPL) and 18.8 percent at 210 percent FPL.
- Differences in the costs to families of CHIP versus exchange coverage reflect the different policy goals and program rules for these sources of coverage.
  - CHIP was designed to provide coverage to low-income children who do not qualify for Medicaid. Premiums tend to be nominal and the cost of premiums and cost sharing combined is limited to 5 percent of a family's annual income.
  - Exchanges were designed primarily to assist uninsured working adults and their families in securing insurance coverage. Premiums and cost-sharing levels reflect product designs in the private market, with federal subsidies providing some assistance in paying for exchange premiums and cost sharing.
- Consumer decisions to enroll in coverage or seek care are affected not only by the absolute costs of coverage, but also by those costs relative to other family and household expenses.
  - Research has consistently shown that premium prices influence decisions to enroll low-income children in coverage and that low-income consumers are sensitive to the price of point-of-service cost sharing.
  - The relationship between cost sharing and access to care is of particular concern for children who need frequent and ongoing services.
  - Low- and moderate-income families spend a substantial portion of their incomes on basic living expenses and have few remaining resources to cover health care costs.
- The Commission is assessing options to address affordability concerns for children's coverage, including how possible approaches might be designed, their benefits and drawbacks, and their cost implications from the perspectives of families, state and federal governments, and other stakeholders.

CHAPTER 2: Affordability of Exchange Coverage for Children Now Covered by CHIP

In examining what the experience of children now covered by the State Children's Health Insurance Program (CHIP) would be if federal funding for the program came to an end, MACPAC's June 2014 report to Congress noted that families would face substantially higher costs for exchange and employer-sponsored coverage than they do now for CHIP. Since then, the Commission has been conducting additional analyses of the costs of premiums and cost sharing associated with such coverage in order to more fully describe how moving to these sources of coverage would affect families with children now covered by CHIP. Our analyses have focused on estimating enrollment in other coverage sources based in part on family decisions about the cost of care (as described in Chapter 1), comparing the costs of exchange and employer-sponsored coverage to those of CHIP, and understanding such costs within the context of the household expenses of low- to moderate-income families.

MACPAC estimates that the average additional cost of exchange coverage for two children is more than twice that of CHIP coverage if the children's parents are already enrolled in exchange coverage and more than six times higher than CHIP if the children's parents are not enrolled in such coverage, depending on income. (Parents' enrollment affects the additional premium contributions required for children's exchange coverage, even after tax credits are applied.) This finding is based on our analysis of premiums and cost sharing under several scenarios of family size, income, and current parent coverage. These scenarios were designed to reflect the realities that families with children now covered by CHIP would experience if program funding were to come to an end.

Premiums for pediatric dental coverage and the consistently higher service-level cost sharing in exchange plans also contribute to the higher overall costs for children in an exchange relative to what families have experienced under CHIP. For children with exceptionally high health needs who reach their out-of-pocket cost-sharing maximum in an exchange plan, a family's total potential financial exposure for children's coverage (reflecting premiums and the maximum amount of out-of-pocket cost sharing) could exceed 11.7 percent of family income at 160 percent of the federal poverty level (FPL) and 18.8 percent of family income at 210 percent FPL.

The fact that premium and cost-sharing amounts differ so dramatically between the exchanges and CHIP is not surprising. The rules affecting the level of premiums and other out-of-pocket costs reflect fundamentally different policy goals. CHIP was designed to provide coverage to low-income children who do not qualify for Medicaid, in some cases with a design that looks more like private coverage than Medicaid, but with greater affordability protections than are typically found in private coverage. Although states can require enrollees to make much greater financial contributions to the cost of their coverage than is typically allowed in Medicaid, CHIP explicitly limits the amount families pay—in premiums and cost sharing combined—to 5 percent of family income. CHIP cost sharing is relatively modest compared to cost sharing in the private market. CHIP premiums are also modest and are not designed to cover a significant share of program spending.

By contrast, the exchanges were designed primarily to assist uninsured working adults and their family members secure health insurance coverage, often because their employers do not offer such coverage or the available coverage (either through an employer or the individual market) is not

affordable. Premiums and cost-sharing levels are set by issuers and thus reflect product designs in the private market. Federal subsidies provide some assistance in paying for exchange premiums and cost sharing, but even the subsidized cost of coverage represents a significant expense for some families. Those with high levels of health care use and those receiving lower subsidies will face significant out-of-pocket costs.

Although the costs to cover children in employer-sponsored coverage are important to consider in discussions about the future of CHIP, in this chapter, we focus here on comparing CHIP and exchange coverage, primarily because comprehensive data are not available to make direct comparisons between CHIP and employer-sponsored coverage. As described in Chapter 1, we know that average premiums for children in employer-sponsored coverage are higher than for exchange coverage. But that analysis also found wide variation in premiums among employer-sponsored health plans, making it more difficult to accurately compare costs with those families now face in CHIP. Moreover, there is no readily available source of data on cost sharing for children in employer-sponsored coverage that can be used to estimate the overall costs for families.

The chapter begins by providing context for understanding how out-of-pocket costs affect enrollment in coverage and use of health services. It then provides an overview of CHIP and exchange premiums and cost-sharing rules, concepts, and terminology. Next, the chapter presents the analysis of the relative costs of CHIP and exchange coverage. It ends by describing some possible policy options for addressing concerns about how the higher costs of care in the exchange would affect family decisions about signing up for coverage and seeking care when needed. The Commission will develop and analyze policy options more thoroughly in future reports.

Affordability in Context

The absolute cost of coverage and services, as well as those costs relative to families' other household expenses, can affect whether low-income consumers enroll in coverage or seek care. In fact, the use of premiums and cost sharing in CHIP reflects a philosophy that everyone should pay something for their care and that families should make careful and considered decisions when both purchasing coverage and when going to the doctor or the emergency room. On the other hand, there is concern that if costs are too high, they could deter families from enrolling their children in coverage or getting the care they need. Policymakers must consider the impact of not only premiums but also cost sharing at the point of service. While plans with lower premiums may be attractive to families because of the lower monthly payment required, point-of-service cost sharing tends to be higher in lower-premium plans than in plans with higher premiums.

Premiums. Research has consistently found that premium prices influence decisions about whether to enroll low-income children in coverage. Use of premiums in public coverage programs such as CHIP have been associated with lower enrollment in coverage and greater rates of uninsurance, particularly among children in families with incomes below 150 percent FPL who do not have access to employer-sponsored coverage (Abdus et al. 2014, Hadley et al. 2006, Liu and Chollet 2006). This price sensitivity, even at the relatively nominal levels of CHIP premiums (which averaged $18 per child per month at 151 percent FPL in January 2015), gives weight to concerns about the effects of higher premiums charged for exchange coverage (Brooks et al. 2015). Parents of children with chronic health conditions, however, are less sensitive to the cost of premiums and are less likely to disenroll their children from coverage when premiums are increased (Marton et al. 2014, Marton and Talbert 2010), which might leave health plans exposed to adverse selection.

Cost sharing. Low-income consumers are also sensitive to the price of cost sharing—copayments, coinsurance, or deductibles—that may be required of enrollees at the point of service. In some CHIP programs where cost sharing is required, there have been reductions in service use (Liu and Chollet 2006). More generally, a study by the RAND Corporation (2006) found reduced use of a range of services such as physician visits, hospitalizations, dental care, and mental health care by low-income consumers, including children, as enrollee cost sharing increased. In addition, cost sharing does not lead only to the reduction of services that might be considered unnecessary. In fact, cost sharing can reduce the use of health care services for children even when care seeking is appropriate and services are needed (Lohr et al. 1986).

The relationship between cost sharing and access to care is of particular concern for children who need frequent and ongoing services and are therefore more likely to incur greater out-of-pocket costs than those with routine health care needs (Selden et al. 2009). Although little information is available about utilization patterns among children now covered by separate CHIP, an estimated 24 percent of these children have special health care needs and may require ongoing use of medications, services, or therapies. Relatively common conditions among this population include asthma and behavioral health conditions (MACPAC 2015a). Regular use of medications and visits to clinicians could thus present a particular burden for these children's families or result in lapses in care.

Health care costs in relation to other household expenses. A family's use of health care services does not happen without regard to other expenses. Data from the 2013 Consumer Expenditure Survey indicate that families with children and income between 140 and 180 percent FPL had average before-tax incomes of $39,088 per year and annual expenses of $41,137—that is, expenses actually exceeded income by 5 percent. Families with children and income between 180 and 240 percent FPL had average before-tax incomes of $50,928 and annual expenses of $47,764 (KFF 2015).[1]

Families at these income levels spend a substantial portion of their incomes on basic living expenses, such as housing, transportation, food, clothing, and education, and have less income remaining to cover the costs of health care. In the 140–180 percent FPL range, the average family with children spent 82 percent of their income on basic living expenses. Those in the 180–240 percent FPL range spent 71 percent of their income on basic living expenses. By contrast, across all families with children, the average income is $77,928 (332 percent FPL) and just 55 percent of income is spent on basic living expenses (KFF 2015).[2]

Low-income families have few resources to spend on health care and little cushion to pay for expenses such as a costly car or home repair, or to sustain a short-term loss of income resulting from time taken off from work to care for an ill family member or other circumstance.

In 2013, total out-of-pocket health expenses for families with children averaged about 6 percent of family income for those between 140 and 240 percent FPL, compared to 4 percent on average for all families with children. In both cases, health insurance premiums account for about two-thirds of these expenses, and cost sharing (for medical services, prescription drugs, and medical supplies) accounts for the remaining one-third of all out-of-pocket health expenses, on average (KFF 2015).[3]

CHIP and Exchange Premiums and Cost-Sharing Rules

To help understand MACPAC's analysis of how the costs for the typical family are likely to change if children currently enrolled in CHIP move to coverage in the exchange, we provide a review of the general premium and cost-sharing rules that apply to CHIP and exchange plans. Premium and cost-sharing

requirements vary somewhat at the state and plan level; those details are not described here.

Because premiums and cost-sharing rules vary by family income and other family characteristics, it is important to keep in mind the demographic characteristics of children currently covered by separate CHIP. First, despite the fact that some states allow enrollment in CHIP at higher income levels, 96.2 percent of children enrolled in separate CHIP lived in families with incomes below 250 percent FPL in 2013 (MACPAC 2015b).[4] Second, these children tend to live in two-parent families. MACPAC's analysis of the National Survey of Children's Health for 2010–2012 found that 64 percent of children projected to be eligible for separate CHIP lived in two-parent families (MACPAC 2015a). Third, families with incomes between 150 and 250 percent FPL have on average 1.9 children per family, with state averages across the country ranging from 1.4 to 2.5 children per family (MACPAC 2015c).

CHIP premiums

States set CHIP premiums within federal guidelines. The premiums are described in the CHIP state plan and are subject to approval by the Centers for Medicare & Medicaid Services (CMS). The cost of premiums and cost sharing is limited to 5 percent of a family's annual income.

While CHIP premiums can help to offset state and federal costs of coverage and signal the importance of enrollees contributing to the costs of care, in practice they are relatively modest and, particularly for lower-income families, lower than private coverage premiums. For example, at 151 percent FPL, more than half of states do not charge premiums for separate CHIP coverage. In the 11 states that charge premiums for separate CHIP coverage at this income level, the average monthly premium is about $18 per child per month (ranging from $3 to $40 per child per month).[5] For families at 201 percent FPL, half of states with separate CHIP charge premiums of less than $10 per child per month. In the 22 states charging premiums at this income level, the average monthly premium is about $24 per child per month (ranging from $2 to $76 per child per month). Missouri has the highest separate CHIP premiums of any state ($186 per child per month at 251 percent FPL). Six separate CHIP states offer CHIP buy-in programs, which provide access to CHIP benefits at even higher premiums to higher income families that do not qualify for separate CHIP assistance (Brooks et al. 2015, Kenney at al. 2008).

Exchange premiums

Premiums for exchange coverage vary depending on an enrollee's age, rating area, and metal tier of the exchange plan selected (bronze, silver, gold, or platinum). Exchange plan issuers set the unsubsidized premium rates (that is, the cost of enrolling in an exchange plan before premium tax credits are applied). The unsubsidized premium rates are subject to approval by the state insurance commissioner or CMS, depending on the state's exchange model.[6]

Premium tax credits and premium contributions. To help pay for exchange premiums, individuals and families with incomes between 100 and 400 percent FPL can receive a premium tax credit if they are not eligible for Medicaid or other minimum essential coverage and if they do not have access to employer-sponsored coverage that is deemed affordable.[7] The tax credit can be applied to the purchase of an exchange plan at any metal tier.[8] The amount of the premium tax credit is calculated as the difference between the cost of the second-lowest-cost silver plan and a set maximum-expected premium contribution based on family income (Table 2-1).

A family's maximum-expected premium contribution for exchange coverage does not vary based on the number of family members enrolled. Therefore, if the children's parents are already paying the maximum-expected premium contribution for parent-only exchange coverage,

TABLE 2-1. Income and Maximum-Expected Premium Contribution for the Second-Lowest-Cost Silver Plan, Family of Four, 2015

Income as a percent of FPL	Annual income	Maximum-expected premium contribution (annual)	
		Percent of income	Amount
100%	$23,850	2.00%	$477
133	31,721	3.00	952
150	35,775	4.00	1,431
200	47,700	6.30	3,005
250	59,625	8.05	4,800
300	71,550	9.50	6,797
350	83,475	9.50	7,930
400	95,400	9.50	9,063

Note: FPL is federal poverty level.

Source: MACPAC calculation based on the U.S. Department of Health and Human Services 2014 poverty guidelines (used to calculate 2015 premium tax credits) for the 48 contiguous states and the District of Columbia and the maximum-expected premium contribution percentages specified in Internal Revenue Service regulations (26 CFR 1.36B-3(g)(2)).

then there is no additional premium contribution required for adding children to the second-lowest-cost silver exchange plan. Most low-income parents of children eligible for exchange subsidies will likely fall into this scenario. In some cases, parents enrolled in exchange coverage would not be paying their maximum-premium contribution for parent-only coverage and thus would face additional costs for adding children. These include higher income families, whose maximum-expected premium contribution is greater than the maximum-expected premium contribution for families at lower incomes, and families with lower parent-only premiums, such as single-parent families.[9]

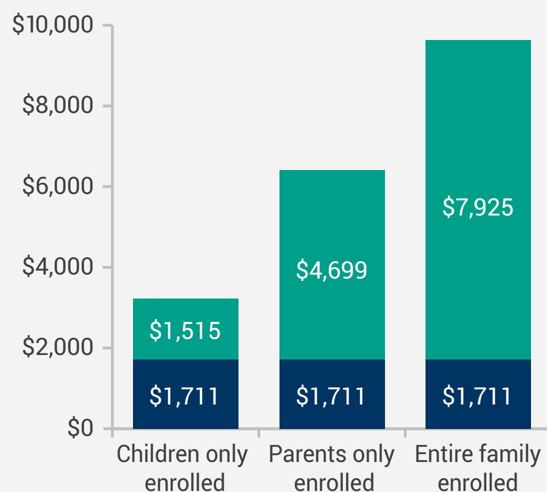
Most parents of children eligible for exchange subsidies will also be eligible for the subsidies for their own coverage. The exceptions would be parents who receive an affordable offer of employee-only coverage (estimated to affect 3.1 percent of children who are now covered by separate CHIP and projected to be eligible for exchange coverage) and parents who are undocumented immigrants (Dubay et al. 2015).

Adding children affects what families pay in premiums. The cost of adding children to exchange coverage depends on income, parents' enrollment in exchange plans, and what exchange plan is purchased. To illustrate how these factors and exchange premium rules affect what families pay for exchange coverage, consider a family of four, two parents and two children, with annual income at 160 percent FPL ($38,160 in 2014) (Figure 2-1).

The unsubsidized premium for the second-lowest-cost silver plan changes according to how many family members are enrolled and their ages. In this illustrative example, the average annual unsubsidized second-lowest-cost silver plan premium is $3,226 for two children. Covering the two parents without children would be $6,410, and covering the entire family would be $9,636.

The maximum-expected premium contribution for the second-lowest-cost silver plan is the same, regardless of how many family members are enrolled in the plan. For a family of four at 160 percent FPL, the maximum-expected premium contribution for the second-lowest-cost silver

FIGURE 2-1. Average Annual Premium Tax Credits and Maximum-Expected Premium Contributions for the Second-Lowest-Cost Silver Plan under Different Enrollment Scenarios, 2015



Credits and contributions for a family of four (two parents, two children), 160% FPL

Notes: FPL is federal poverty level. Our calculations of the average premium tax credits shown are based on 2015 exchange data from all 35 states with federally facilitated exchanges; in calculating the example tax credits, we assumed two non-smoking parents age 38 and 40. Actual family premiums may vary depending on rating area, age, smoking status, and the particular exchange metal tier and plan selected. Amounts shown do not include the cost of stand-alone dental plans. The 2014 federal poverty guidelines are used to determine eligibility for 2015 premium tax credits.

Source: MACPAC analysis of ASPE 2015.

plan is $1,711 per year. This family is eligible for a premium tax credit to cover the difference between the maximum-expected premium contribution (which in all scenarios is $1,711) and the remaining cost of the unsubsidized premium for the applicable second-lowest-cost silver plan.

If the family is already paying its maximum-expected premium contribution for parent-only coverage prior to enrolling the children in an exchange plan, there would be no additional premium cost to the family associated with adding the children. However, if parents are not already enrolled in an exchange plan, the family will face additional costs for enrolling their children in exchange coverage.

Premiums for dental coverage. Families will incur additional premium costs if they choose to purchase a stand-alone dental plan. Exchange plans are not required to provide pediatric dental benefits if stand-alone dental plans are offered on the exchange. (See Chapter 3 for additional discussion of this issue.) In 23 of the 26 states with separate CHIP and federally facilitated exchanges, at least some (and in some states, all) of the second-lowest-cost silver exchange plans exclude pediatric dental coverage (MACPAC 2015d).[10]

Moreover, the cost of stand-alone dental plan premiums is not included in the calculation of a family's premium tax credit and there is no additional premium subsidy for purchasing stand-alone dental coverage. Therefore, a family purchasing a second-lowest-cost silver exchange plan without pediatric dental coverage would need to pay an additional premium to obtain this coverage. Using 2015 exchange data, the estimated average annual cost of such coverage is at least $238 per child (MACPAC 2015d).[11] If a family purchases an exchange plan with a premium that is less than the second-lowest-cost silver plan, any remaining tax credit (after it is first applied to the cost of the exchange plan) can be used toward the cost of the stand-alone dental plan (45 CFR 155.340(e)). In comparison, CHIP enrollees pay one premium for all covered services, including dental care.

Overview of CHIP and Exchange Cost Sharing

Cost sharing is the amount enrollees pay for health care services in the form of copayments, coinsurance, or deductibles. Cost-sharing amounts vary according to many factors, including health plan design, type or site of service, and whether or not the service is provided by an in-network provider. However, the generosity of a plan's cost-sharing requirements can be broadly assessed using actuarial values and out-of-pocket cost-sharing maximums.

Actuarial value measures the percentage of covered health care expenses an insurer would pay, on average, for a standard enrollee population. For example, a plan with an actuarial value of 87 percent would pay for 87 percent of covered medical spending and enrollees in that plan would pay the remaining 13 percent, on average. Individual enrollee spending will vary based on actual health care services used. Those who use more services than average (which might include those with chronic conditions) will pay more.

The out-of-pocket cost-sharing maximum is the maximum total cost sharing that enrollees will pay for covered benefits in a plan year. After an individual or family reaches the out-of-pocket cost-sharing maximum, the health plan is typically responsible for cost sharing for covered services for the remainder of the plan year.

CHIP cost sharing

Twenty-eight separate CHIP programs require cost sharing for at least some types of services, typically in the form of copayments (Bly et al. 2014, Cardwell et al. 2014).[12] Cost sharing is not permitted for preventive services, and cost sharing for other services is limited to nominal levels for children below 150 percent FPL (42 CFR 457 Subpart E). For example, some state CHIP programs charge enrollees copayments between $1 and $5 for prescription drugs. For children above 150 percent FPL, cost sharing is permitted in CHIP with no specific limits, although total family spending on cost sharing combined with premiums may not exceed 5 percent of income (§2103(e)(3)(B) of the Social Security Act). Twenty-two separate CHIP programs use the 5 percent cap, and 20 programs use a lower cap (Cardwell et al. 2014). Out-of-pocket maximums in separate CHIP range from $0 to $950 (excluding premiums) for families with income at 160 percent FPL and $0 to $1,995 (excluding premiums) for families with income at 210 percent FPL (Bly et al. 2014).

Exchange plan cost sharing

Exchange plans have flexibility within federal rules to implement cost-sharing requirements, including the type and amount of cost sharing, as long as the required actuarial values are met.[13] Like CHIP, exchange plans are not permitted to charge cost sharing for preventive services, including well-child visits. However, exchange plans are more likely than CHIP to charge cost sharing for routine services (e.g., routine vision services, eyeglasses, and pediatric dental services).

The Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) established four metal tiers and corresponding actuarial values for unsubsidized exchange plans: bronze—actuarial value of 60 percent; silver—actuarial value of 70 percent; gold—actuarial value of 80 percent; and platinum—actuarial value of 90 percent.[14] Generally, plans with higher actuarial value have lower cost sharing, but enrollees pay a higher premium for that coverage.

The ACA also established out-of-pocket cost-sharing maximums for exchange plans, which in 2015 are $6,600 for individuals and $13,200 for families in unsubsidized exchange plans.[15] However, in practice, exchange plans with higher actuarial values typically have lower out-of-pocket maximums. For example, in 2015, the average bronze plan on the federally facilitated exchange

had a family out-of-pocket cost-sharing maximum of $12,746, and the average platinum plan had a family out-of-pocket cost-sharing maximum of $3,867 (MACPAC 2015d). In-network cost-sharing expenses for essential health benefits for all family members enrolled in an exchange plan are counted toward a family's out-of-pocket cost-sharing maximum. Unlike CHIP, the out-of-pocket cost-sharing maximums in exchange plans do not include premium expenses.

To lower out-of-pocket cost sharing for individuals and families with household incomes between 100 and 250 percent FPL buying silver-level exchange plans, the ACA provides cost-sharing reductions. Individuals eligible for such reductions can enroll in a silver plan and receive a version of that plan with higher actuarial value and lower out-of-pocket maximums at no additional cost (Table 2-2). Even so, the highest actuarial value for an exchange plan once federal cost-sharing reductions are considered is 94 percent, which is still below that of most CHIP plans.[16]

Cost-sharing reductions are only available to those purchasing silver plans. Gold and platinum plans, with actuarial values of 80 and 90 percent respectively, generally pay for a greater proportion of the cost of covered services than some silver plans with cost-sharing reductions, depending on enrollee income. However, a gold or platinum plan is likely to have a higher premium than a silver plan.

Cost-sharing reductions are not available for stand-alone dental plans. Those plans are only offered at two tiers, a high option (90 percent actuarial value) and a low option (70 percent actuarial value), and enrollees are responsible for cost sharing commensurate with those actuarial values. Stand-alone dental plans have out-of-pocket cost-sharing maximum limits that are separate from those of exchange health plans. In 2015, the out-of-pocket cost-sharing maximums for stand-alone dental plans are $350 for one covered child and $700 for two or more covered children (45 CFR 156.150(a)).

TABLE 2-2. Actuarial Value and Maximum Out-of-Pocket Cost for Silver Exchange Plans with Federal Cost-Sharing Reduction by Income, 2014

Income as a percent of FPL	Actuarial value for silver plan with federal cost-sharing reduction	Out-of-pocket maximum for individual coverage	Out-of-pocket maximum for family coverage
100–150%	94%	$2,250	$4,500
150–200	87	2,250	4,500
200–250	73	5,200	10,400
>250	70	6,350	12,700

Note: FPL is federal poverty level. Generally, there are no cost-sharing reductions above 250 percent FPL. American Indians receive higher cost-sharing reductions, which eliminate cost sharing for silver exchange plans. Massachusetts provides cost-sharing subsidies in addition to federal cost-sharing reductions.

Source: CMS 2013.

Comparing the Costs of CHIP to Exchange Coverage

The Commission analyzed several family scenarios that are illustrative of what might happen to children who are now covered by CHIP if they were to move to exchange coverage. The Commission estimates that the total average additional cost for covering two children in the exchange is more than twice the cost of CHIP coverage if the children's parents are already enrolled in exchange coverage, and that the average additional costs for exchange coverage is more than six times the cost of CHIP coverage if the children's parents are not already enrolled in exchange coverage, depending on income. (Parents' enrollment affects the additional premium contributions required for children's exchange coverage, even after tax credits are applied.) For children with exceptionally high health care utilization who reach their out-of-pocket cost-sharing maximum, a family's total potential financial exposure associated with covering those children through an exchange could exceed 11.7 percent of family income at 160 percent FPL and 18.8 percent of family income at 210 percent FPL.

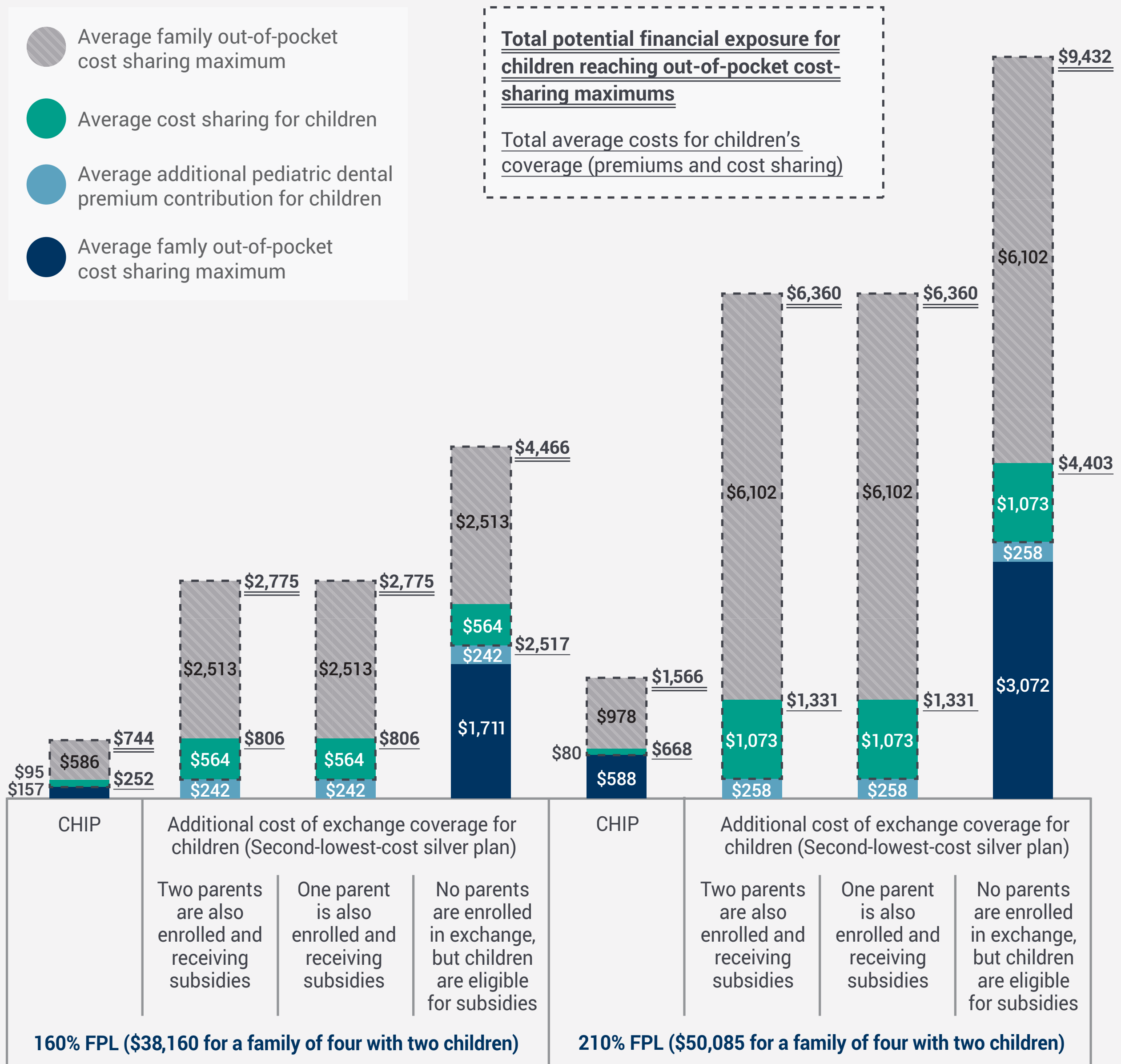
To compare the costs of enrolling in exchange coverage with costs under existing CHIP coverage, we examined two illustrative families, each with two children—one family at 160 FPL and one family at 210 FPL (Figure 2-2).[17] We estimated average premiums, cost sharing, and out-of-pocket cost-sharing maximums that families would experience under CHIP and under subsidized exchange plans (including stand-alone dental plans, if needed, for children to access pediatric dental coverage). We compare CHIP to the additional cost of covering the children in the exchange under three scenarios: (1) one parent already enrolled in exchange coverage, (2) both parents already enrolled, and (3) neither parent enrolled in the exchange. Below we present costs for premiums and cost sharing combined, as well as total financial exposure, which includes premiums and out-of-pocket cost-sharing maximums. We then discuss each element separately.

These findings are based on data on CHIP in 31 states with separate CHIP coverage as of 2014, and exchange data from 23 states with separate CHIP and a federally facilitated exchange.[18] We note that the experience of specific children and their families will differ based on where they live, the metal tier of the plan they select, the age of enrollees, and their health care use. More information about the methods used is provided in Appendix 2A.

For two children at 160 percent FPL, the total average costs for premiums and cost sharing in CHIP are $252 a year. The average additional costs for covering two children in an exchange are three times higher ($806) if one or both parents are already enrolled in an exchange plan and 10 times higher ($2,517) if neither parent is enrolled (Figure 2-2). At 210 percent FPL, the average cost of CHIP is $668. The cost of covering two children in the exchange is also higher at 210 percent FPL than it is at 160 percent FPL, but the relative increase in costs for the average family is lower. The average additional costs for children's exchange coverage are two times higher than CHIP ($1,311) if one or both parents are already enrolled in an exchange plan and more than six times higher than CHIP ($4,403) if neither parent is enrolled.[19]

We also looked at the combined impact of premiums and out-of-pocket cost-sharing maximums to assess total financial exposure for the family. The total potential financial exposure for families at 160 percent FPL with children with exceptionally high health care use is $744 in CHIP, which is 1.9 percent of family income. This amount increases to 7.2 percent of family income in an exchange plan with one or two parents enrolled and 11.7 percent of family income in an exchange plan with no parents enrolled. At 210 percent FPL, the total potential financial exposure for families with children with exceptionally high health care use is 3.1 percent of family income in CHIP, 12.7 percent in an exchange with one or two parents enrolled, and 18.8 percent in an exchange with no parents enrolled.[20]

FIGURE 2-2. Average Additional Annual Cost of Covering Two Children with CHIP Versus Subsidized Exchange Coverage, Family of Four, 2015



Notes: FPL is federal poverty level. This figure illustrates the average additional annual cost to families of covering two children beyond any coverage costs for their parents. This means that the total cost to a family for covering two children and both parents is higher than what is shown here. Numbers may not add due to rounding.

The average annual costs for CHIP coverage are calculated using data from 31 states with separate CHIP coverage as of 2014, and the average annual costs of exchange coverage are calculated using data from 23 of these states that participate in the federally facilitated exchange. More information about the methods used and the components of MACPAC's calculations is provided in Appendix 2A.

Source: MACPAC analysis of Brooks et al. 2015, Bly et al. 2014, Cardwell et al. 2014, CMS 2014, and BLS 2014b.

Premiums. The differences in cost between CHIP and exchange premiums are highly dependent on family circumstances. This is because the costs of covering children in the exchange cannot be entirely separated from the coverage status of their parents. In the examples above, if the children's parents are not enrolled in exchange coverage, a family's average additional expected premium contribution for covering children in the exchange is about 11 times higher than CHIP at 160 percent FPL and 5 times higher than CHIP at 210 percent FPL.[21] But if the children's parents are already enrolled in exchange coverage, there is no additional expected premium contribution for enrolling children in the exchange because the family would already be paying its maximum-expected premium contribution for parent-only coverage.

If families also enroll their children in a stand-alone dental plan, they would face additional premiums for those plans, which may by themselves exceed the cost of CHIP premiums. For example, at 160 percent FPL for the illustrative family in Figure 2-2, the average CHIP premiums are $157 and the average additional premiums for pediatric dental coverage alone are $242.

Cost sharing. Average annual cost sharing for children's coverage in an exchange in this example is estimated to be about six times higher than CHIP at 160 percent FPL and about 13 times higher than CHIP at 210 percent FPL.[22] Unlike premiums, this difference does not vary by the number of family members enrolled in exchange coverage. It would, however, vary depending upon service utilization. In particular, children with high health care use, whether due to ongoing care or an acute illness or injury, would have higher than average cost-sharing expenses.

Even in the states with the highest levels of cost sharing under CHIP, exchange coverage is more expensive. Utah has the highest annual CHIP cost sharing at 160 percent FPL (88.7 percent actuarial value) and Louisiana has the highest annual CHIP cost sharing at 210 percent FPL (86.9 percent actuarial value). Even so, these actuarial values are still greater than the actuarial value for a silver exchange plan with cost-sharing reductions at those income levels (87 percent actuarial value at 160 percent FPL and 73 percent actuarial value at 210 percent FPL) (Bly et al. 2014).

Out-of-pocket maximums. For children who reach their out-of-pocket cost-sharing maximum, exchange coverage offers less financial protection than CHIP. Out-of-pocket cost-sharing maximums for exchange coverage are about four times higher than CHIP at 160 percent FPL and about six times higher than CHIP at 210 percent FPL. The out-of-pocket maximums for family exchange coverage are 6.6 percent of family income at 160 percent FPL and 12.2 percent of family income at 210 percent FPL.[23]

In this example, the out-of-pocket cost-sharing maximums for children's exchange coverage are the same regardless of whether the children's parents are enrolled because the maximums are set at the family level. However, if parents are not enrolled in exchange coverage, any out-of-pocket costs they incur for their own health care would not count toward the exchange out-of-pocket maximum.

Comparison to employer-sponsored coverage

Although our ability to compare the costs of CHIP and employer-sponsored coverage is limited, the available data indicate that employer-sponsored coverage is even more expensive than exchange coverage for families in the CHIP income range. Considering the coverage available to children currently enrolled in CHIP, the average additional family premium for covering a child under employer-sponsored coverage is $3,751 per year, higher than the cost of exchange premiums for two children at either 160 or 210 percent FPL, even in the scenario where the children's parents are not enrolled in exchange coverage. However, the costs of adding children to employer-sponsored coverage

varies widely: it is estimated to be less than $125 for one quarter of families and more than $8,814 for one quarter of families (Dubay et al. 2015). (See Chapter 1, Table 1-1, for additional discussion of this issue.)

The majority of employer-sponsored insurance plans are estimated to have actuarial values below 88 percent, which is lower than CHIP and generally higher than exchange plans with cost-sharing reductions (ASPE 2011). But the wide variation between plans makes direct comparisons based on actuarial value difficult as well. Compared to other employer-sponsored coverage, health maintenance organizations have been estimated to have the highest actuarial values (93 percent on average), and high-deductible health plans have been estimated to have much lower actuarial values (76 percent on average) if employers do not make any contribution to a health savings account (Peterson 2009). However, because the benefits offered in employer-sponsored coverage vary so widely, it is difficult to interpret these data or estimate the average annual cost sharing that a family would face.[24]

Possible Approaches for Addressing Affordability

In making its recommendation to extend federal CHIP funding for a transition period of two years, the Commission stressed that during this period, issues related to affordability of coverage should be addressed. Since making this recommendation, MACPAC has assessed newly available data. The Commission remains concerned that the higher costs for exchange coverage would increase the financial burden on low-income families and may raise barriers to low-income children's access to care.

The design of policy options to lessen this burden is not straightforward. A policy that narrowly targets children eligible for or currently enrolled in CHIP would be complex to administer (especially over time) and would make permanent an eligibility structure that is now both variable and dynamic. On the other hand, broader policy changes, for example, those focused on a specific income threshold, would affect many more individuals than those now covered by CHIP.

The Commission is considering several key questions for designing an approach to make children's coverage more affordable for families with children who may move from CHIP to exchange coverage:

- To what extent should approaches to improve affordability of children's coverage address affordability of premiums, cost sharing, or both? What would have the greatest impact? What approach would be the most feasible and efficient to implement and administer?
- Which children should an affordability option target? Would it be available to all children in the CHIP income range or a subset?
- How much of the enrollees' share of premiums and cost sharing should be subsidized? What is the appropriate balance between cost sharing that encourages more careful use of health care services and the risk that cost sharing could cause some families to forgo coverage and care altogether?
- Should additional subsidies be available only after families have reached out-of-pocket expenses of 5 percent of income, the current CHIP maximum on out-of-pocket spending?
- What are the costs (for both benefits and administration) to state and federal governments, and how would they be paid for?

The Commission has not yet come to a conclusion about how to address affordability concerns for children enrolled in CHIP who might transition to exchange coverage if CHIP funding is exhausted. In its deliberations, the Commission will consider which approaches would be most effective in

addressing these concerns, looking at the question from the perspective of families, states, and the federal government. Below, we preview some possible approaches.

Augmenting existing exchange subsidies

Existing exchange subsidies—the premium tax credit and cost-sharing reductions—could be augmented to give families more help. An enhanced premium tax credit could pay for a greater share of families' exchange premiums and may allow some families to purchase gold or platinum exchange plans. These exchange plans have higher premiums than silver plans, but also have lower baseline cost sharing, which some families may prefer. (However, cost-sharing reductions are available only for silver plans and enrollees would need to compare which metal tier would offer the greatest cost-sharing protection.) The premium tax credit could also be enhanced by taking into account the premium costs of stand-alone dental plans and could assist families in purchasing such plans. This approach may encourage some families who would have forgone stand-alone dental coverage due to premium cost to purchase such coverage. However, families of different income and composition are likely to experience differing magnitudes of premium changes by moving children to exchange coverage, which could create challenges in developing a targeted enhanced premium tax credit.

Increasing cost-sharing reductions in exchanges could help to lower expected cost sharing for families after they enroll in an exchange plan. Existing exchange cost-sharing reductions could be expanded either by increasing the amount of assistance provided to families that already receive a cost-sharing reduction or by providing the reductions to families with incomes greater than 250 percent FPL. The out-of-pocket maximum levels for families of children moving from CHIP to exchanges could also be reduced (or possibly capped at the current CHIP out-of-pocket spending limit) but such a change would need to be accompanied by an increase in the allowable actuarial value for the silver-level plans. Additional cost-sharing assistance would help families with children who only need routine services as well as those with special health care needs.

Augmenting premium and cost-sharing subsidies could build on existing mechanisms for the subsidies, so no new ones would need to be developed. Premium and cost-sharing subsidies in the exchange are available to all those who meet eligibility requirements, without any targeting to subpopulations. Thus augmented subsidies could reach a broader population than just children who had been enrolled in CHIP.

Providing wrap-around coverage for premiums or cost sharing

Premium and cost-sharing wrap-around coverage could be developed to improve affordability of exchange coverage for families in the CHIP income range. Models for wrap-around coverage exist within Medicaid and CHIP already via premium assistance for the purchase of private health insurance. Although little has been reported publicly about how effective these programs are in ensuring that consumers obtain health insurance coverage, states generally view them as successful even while acknowledging some operational challenges. Challenges include high administrative costs associated with providing premium assistance, communicating with health plans to obtain needed information, and educating consumers and providers about the coverage (KFF 2013, GAO 2010).

Recently, some state Medicaid programs (Massachusetts, New York, Rhode Island, and Vermont) have started subsidizing premiums for adults enrolled in exchange coverage through Section 1115 demonstrations. These Medicaid-financed premium wrap-around programs are

limited to adults that would have been eligible for Medicaid coverage under state programs that were phased out in 2014, and the amount of the premium wrap-around subsidies are tied to pre-2014 Medicaid premium levels. These state premium wrap-around programs are relatively new and there are few details so far on how they have been operationalized.

A cost-sharing wrap-around benefit would help families of children currently enrolled in CHIP that will purchase exchange coverage with out-of-pocket cost sharing, which will be higher in exchanges than CHIP. Cost-sharing wrap-around benefits would be particularly helpful to families of children with special health care needs who require frequent and ongoing services and who may thus incur greater out-of-pocket cost-sharing expenses.

Some Medicaid and CHIP programs provide cost-sharing wrap-around benefits to those receiving premium assistance for the purchase of employer-sponsored coverage. However, such programs have historically faced operational challenges in tracking how much cost sharing an enrollee has paid, providing and reconciling the subsidy paid, and educating enrollees and providers (GAO 2010).[25] Some states are testing cost-sharing wrap-arounds as part of demonstrations in which they purchase exchange coverage for the newly eligible Medicaid adult population.[26] In these programs, states purchase an exchange plan with a high actuarial value and cover certain cost-sharing expenses, such as deductibles and costs that exceed 5 percent of a family's income.

Providing premium or cost-sharing wrap-around benefits could be administratively complex; could create confusion for families, providers, and plans; and in most states would require development and implementation of a mechanism for providing the benefit. The existing models for premium assistance provide some insights into possible challenges, which could be accounted for if an option to provide premium wrap-around benefits were developed.

Alternatives to exchange coverage

Providing Medicaid to children within the CHIP income range rather than enrolling them into exchange plans is another way to improve affordability of coverage for this population. States could raise the minimum Medicaid eligibility level for children from 138 percent FPL to another set level, such as 200 percent FPL. This approach would address both affordability of premiums and cost sharing and would provide greater uniformity of program eligibility for children across states. Children also would receive the Medicaid benefit package, including Early and Periodic Screening, Diagnostic, and Treatment services, which would help ensure adequacy of covered benefits. However, this would expand the number of children entitled to public coverage and states would experience greater costs in covering this population at the regular Medicaid matching rate. Finally, there are concerns about the capacity of Medicaid providers and provider networks to care for an expanded Medicaid population.

Next Steps

The Commission will continue evaluating options to address concerns about the affordability of children's health coverage if CHIP funding is not renewed. The assessment will include a more detailed look into the possible approaches described above and how they might be designed to improve affordability of coverage. The Commission also will assess the benefits, drawbacks, and cost implications of the approaches from the perspective of families, health plans, providers, states, and the federal government.

Endnotes

[1] Consumer expenditure data reflect consumer units with at least one child under age 18. The analysis did not include after-tax income because adjusted-gross-income and tax-credit calculations underwent substantial changes in 2013 (BLS 2015). For families at lower income levels, after-tax income may be somewhat higher than before-tax income as a result of refundable tax credits. For those at higher income levels, after-tax income may be lower than before-tax income. Based on published 2013 data for all consumer units (with and without children), the 40 percent of consumer units with incomes in the two lowest quintiles had after-tax incomes amounts that exceeded before-tax incomes amounts. Consumer units in the third-lowest income quintile had average before-tax income of $45,826 and after-tax income of $43,592, meaning that they paid 4.9 percent of their gross income in taxes (BLS 2014a).

[2] As noted earlier, incomes provided here are before taxes, and tax payments are an additional liability that can reduce a family's available income. Based on MACPAC calculations using published 2013 data noted earlier, families between 140 and 180 percent FPL are likely to have similar before-tax and after-tax incomes, while those between 180 and 240 percent FPL may have tax payments that lower their after-tax incomes.

[3] Over-the-counter drug costs are not included in the Consumer Expenditure Survey measure of health spending.

[4] In 2014, the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) required all states to expand Medicaid to all children below 138 percent FPL and to convert separate CHIP eligibility levels to modified adjusted gross income. These changes will affect the income distribution of children enrolled in separate CHIP.

[5] Some separate CHIP programs charge premiums on a quarterly or annual basis instead of on a monthly basis. In addition, some states charge a per-family premium rather than per-child premium and other states cap premiums once a certain number of children are enrolled. For the purpose of comparison, these premiums were converted to their monthly equivalent for one child.

[6] In states with federally facilitated exchanges where CMS is conducting plan management functions, CMS reviews and approves rate requests.

[7] Based on federal rules, employer-sponsored coverage is considered affordable if the cost of that coverage for just the employee, rather than the family, is less than 9.5 percent of family income.

[8] Families receive the same premium tax credit amount regardless of the exchange plan that they enroll in. However, the premium tax credit cannot exceed the cost of the exchange plan premium.

[9] For example, in 2015, two-parent (ages 38 and 40), two-child families with incomes above 290 percent FPL would pay additional premiums for adding their children to an exchange plan. Single parent (age 40), two-child families would face additional premium costs for children's exchange coverage at a lower income threshold, 226 percent FPL (MACPAC 2015e). The examples in Figures 2-1 and 2-2 are based on the average second-lowest-cost silver exchange plans offered in the federally facilitated exchange for two non-smoking parents. Actual family premiums will vary depending on their rating area, age, smoking status, and the particular exchange metal tier and plan they select.

[10] MACPAC analyzed 2015 federal exchange data and found that of states with separate CHIP and federally facilitated exchanges, eight do not have any second-lowest-cost silver plans with embedded dental coverage, 15 have a mix of second-lowest-cost silver plans with or without embedded dental coverage, and three have embedded dental in all second-lowest-cost silver plans (MACPAC 2015d).

[11] Estimate for the average annual cost of stand-alone dental plans is based on the average premium costs for the lowest-cost stand-alone dental plans available in states with separate CHIP offering stand-alone dental plans in the federally facilitated exchange.

[12] Only a few separate CHIP programs require coinsurance or a deductible (Cardwell et al. 2014).

[13] Federally recognized American Indians and Alaska Natives with incomes between 100 and 300 percent FPL are exempt from cost sharing for essential health services covered by an exchange plan.

[14] The metal tier actuarial value requirements do not apply to catastrophic plans.

[15] The out-of-pocket maximum levels apply to all plans required to conform to essential health benefit requirements under the ACA as well as large and self-insured plans.

[16] Separate CHIP has an average actuarial value of 98 percent for families with incomes of 160 percent FPL and an average actuarial value of 97 percent for families with incomes of 210 percent FPL (Bly et al. 2014).

[17] MACPAC analyzed the cost of coverage for two children at 160 percent FPL and 210 percent FPL, using illustrative examples that are intended to represent the typical CHIP family: In 2013, 96.2 percent of separate CHIP children lived in families with incomes below 250 percent FPL, and in 2014, families with incomes between 150 and 250 percent FPL had an average of 1.9 children per family, with state averages across the country ranging from 1.4 to 2.5 children per family (MACPAC 2015a, 2015b). MACPAC's analysis relied on CHIP cost-sharing data from the Wakely Consulting Group, which was only available at 160 and 210 percent FPL (Bly et al. 2014).

[18] Data for 2015 exchange plans were not readily available in the nine states with separate CHIP operating state-based exchanges (CO, CT, ID, KY, MA, NV, NY, OR, and WA). CHIP cost-sharing information at 210 percent FPL was not available for seven states with separate CHIP at this income level (DE, FL, KY, ME, MI, MS, and NC) (Bly et al. 2014). In addition, six states included in the Wakely Consulting Group study at 160 percent FPL were excluded from MACPAC's analysis because these states currently cover children at this income level through Medicaid instead of separate CHIP (IA, IN, KY, ME, MI, and SD) (Bly et al. 2014).

[19] See Appendix 2A for source data used for comparison.

[20] In 2014, 160 percent of the FPL for a family of four was $38,160, and 210 percent of the FPL for a family of four was $50,085. The 2014 federal poverty guidelines are used to calculate 2015 exchange subsidies.

[21] See Appendix 2A for source data used for comparison.

[22] See Appendix 2A for source data used for comparison.

[23] See Appendix 2A for source data used for comparison.

[24] Because actuarial value measures the percentage of covered health benefits an insurer would pay, on average, for a typical enrollee population, variation in covered health benefits affects the comparability of actuarial values.

[25] A 2010 GAO study found that 34 Medicaid or CHIP premium assistance programs paid for some or all cost sharing for some or all of the covered population, and that five programs limited enrollees' annual out-of-pocket expenditures. CMS regulations on monitoring of cost sharing for Medicaid managed care plans strongly discouraged the practice of enrollee tracking of cost-sharing expenses for retrospective reimbursement (42 CFR 447.50-56).

[26] The Arkansas and Iowa Section 1115 premium assistance programs also include cost-sharing subsidies that are entirely paid for by the state Medicaid program.

References

Abdus, S., J. Hudson, S.C. Hill, and T.M. Selden. 2014. Children's health insurance program premiums adversely affect enrollment, especially among lower-income children. *Health Affairs* 33, no. 8: 1353–1360.

Assistant Secretary for Planning and Evaluation (ASPE), U.S. Department of Health and Human Services. 2015. *Health plan choice and premiums in the 2015 health insurance marketplace.* Washington, DC: ASPE. http://www.aspe.hhs.gov/health/reports/2015/premiumReport/healthPremium2015.pdf.

Assistant Secretary for Planning and Evaluation (ASPE), U.S. Department of Health and Human Services. 2011. *Actuarial value and employer-sponsored insurance.* Washington, DC: ASPE. http://aspe.hhs.gov/health/reports/2011/av-esi/rb.shtml.

Bly, A., J. Lerche, and K. Rustagi. 2014. *Comparison of benefits and cost sharing in children's health insurance programs to qualified health plans.* Englewood, CO: Wakely Consulting Group. http://www.wakely.com/wp-content/uploads/2014/07/FINAL-CHIP-vs-QHP-Cost-Sharing-and-Benefits-Comparison-First-Focus-July-2014-.pdf.

Brooks, T., J. Touschner, S. Artiga, et al. 2015. *Modern era Medicaid: Findings from a 50-state survey of eligibility, enrollment, renewal, and cost-sharing policies in Medicaid and CHIP as of January 2015.* Washington, DC: Kaiser Family Foundation. http://kff.org/health-reform/report/modern-era-medicaid-findings-from-a-50-state-survey-of-eligibility-enrollment-renewal-and-cost-sharing-policies-in-medicaid-and-chip-as-of-january-2015.

Bureau of Labor Statistics (BLS). U.S. Department of Labor. 2015. Consumer expenditure survey frequently asked questions. Washington, DC: BLS. http://www.bls.gov/cex/faq.htm#q23.

Bureau of Labor Statistics (BLS), U.S. Department of Labor. 2014a. Consumer expenditures 2013. Washington, DC: BLS. http://www.bls.gov/cex/2013/combined/quintile.pdf.

Bureau of Labor Statistics (BLS), U.S. Department of Labor. 2014b. 2014 Current population survey annual social and economic supplement. Washington, DC: BLS. http://www.bls.gov/cps/.

Cardwell, A., J. Jee, C. Hess, et al. 2014. *Benefits and cost sharing in separate CHIP programs.* Washington, DC: Georgetown University Center for Children and Families and National Academy for State Health Policy. http://ccf.georgetown.edu/wp-content/uploads/2014/05/Benefits-and-Cost-Sharing-in-Separate-CHIP-Programs.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2014. Health and dental plan datasets for researchers and issuers, 2015 plan data for individuals and families. https://www.healthcare.gov/health-and-dental-plan-datasets-for-researchers-and-issuers.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2013. Patient Protection and Affordable Care Act: HHS notice of benefit and payment parameters for 2014. Final rule. *Federal Register* 78, no. 47 (March 11): 15409–15541. http://www.gpo.gov/fdsys/pkg/FR-2013-03-11/pdf/2013-04902.pdf.

Dubay, L., M. Buettgens, and G.M. Kenney. 2015. *Estimates of coverage changes for children enrolled in separate Children's Health Insurance Programs in the absence of additional federal CHIP funding—key findings and methodology.* Washington, DC: MACPAC. https://www.macpac.gov/publication/estimates-of-coverage-changes-for-children-enrolled-in-separate-childrens-health-insurance-programs-in-the-absence-of-additional-federal-chip-funding/.

Hadley, J., J.D. Reschovsky, P. Cunningham, et al. 2006. Insurance premiums and insurance coverage of near-poor children. *Inquiry* 43, no. 4: 362–377.

Kaiser Family Foundation (KFF). 2015. Analysis for MACPAC of consumer expenditure panel survey.

Kaiser Family Foundation (KFF). 2013. *Premium assistance in Medicaid and CHIP: An overview of current options and implications of the Affordable Care Act.* Report no. 8422. Washington, DC: KFF. http://kff.org/medicaid/issue-brief/premium-assistance-in-medicaid-and-chip-an-overview-of-current-options-and-implications-of-the-affordable-care-act/.

Kenney, G.M., L. Blumberg, and J. Pelletier. 2008. *State buy-in programs: Prospects and challenges.* Washington, DC: Urban Institute. http://www.urban.org/UploadedPDF/411795_state_buyin_programs.pdf.

Lohr, K.N., R.H. Brook, C.J. Kamberg, et al. 1986. *Use of medical care in the RAND health insurance experiment: Diagnosis- and service-specific analyses in a randomized control trial.* Santa Monica, CA: RAND Corporation. http://www.rand.org/content/dam/rand/pubs/reports/2006/R3469.pdf.

Liu, S., and D. Chollet. 2006. *Price and income elasticity of the demand for health insurance and health care services: A critical review of the literature.* Washington, DC: Mathematica Policy Research, Inc.. http://www.mathematica-mpr.com/~/media/publications/PDFs/priceincome.pdf.

Marton, J., and J.C. Talbert. 2010. CHIP premiums, health status, and the insurance coverage of children. *Inquiry* 47, no. 3: 199–214.

Marton, J., P.G. Ketsche, A. Snyder, et al. 2014. Estimating premium sensitivity for children's public health insurance coverage: selection but no death spiral. *Health Services Research.* August 15, 2014. doi:10.1111/1475-6773.12221.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2015a. Analysis of national survey for children's health, 2010–2012.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2015b. Analysis of the CMS 2013 CHIP statistical enrollment data aystem.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2015c. Analysis of BLS 2014b.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2015d. Analysis of CMS 2014.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2015e. Analysis of ASPE 2015.

Peterson, C.L. 2009. *Setting and valuing health insurance benefits.* CRS report no. R40491. Washington, DC: CRS. http://assets.opencrs.com/rpts/R40491_20090406.pdf.

RAND Corporation (RAND). 2006. *The Health Insurance Experiment, a classic RAND study speaks to the current health care reform debate.* Research brief no. RB-9174-HHS. Santa Monica, CA: RAND. http://www.rand.org/content/dam/rand/pubs/research_briefs/2006/RAND_RB9174.pdf.

Selden, T.M., G.M. Kenney, M.S. Pantell, and J. Ruhter. 2009. Cost sharing in Medicaid and CHIP: How does it affect out-of-pocket spending? *Health Affairs* 28, no. 4: w607–w619.

U.S. Government Accountability Office (GAO). 2010. Letter from GAO to Max Baucus, Charles E. Grassley, Henry A. Waxman, and Joe Barton regarding “Medicaid and CHIP: Enrollment, benefits, expenditures, and other characteristics of state premium assistance programs.” January 19, 2010. GAO-10-258R. Washington, DC: GAO. http://www.gao.gov/new.items/d10258r.pdf.

APPENDIX 2A: Methodology and Data Used to Estimate Average Premiums and Cost Sharing for Illustrative Families in CHIP and Exchange Coverage

In this chapter, MACPAC used a variety of data sources to estimate average premiums, cost sharing, and out-of-pocket cost-sharing maximums for two children at 160 percent of the federal poverty level (FPL) and 210 percent FPL (Figure 2-2). We compare CHIP costs to the additional cost of exchange coverage for children for an illustrative family of four under three scenarios: one parent already enrolled in exchange coverage, both parents already enrolled, and neither parent enrolled in the exchange.

These family scenarios use data from 31 states that have separate CHIP at 160 percent FPL or 210 percent FPL. Exchange plan cost estimates rely on data from 23 of these states that participate in the federally facilitated exchange. Exchange plan data from 2015 were not readily available in the nine states with separate CHIP programs that are operating state-based exchanges (CO, CT, ID, KY, MA, NV, NY, OR, and WA). CHIP cost-sharing information at 210 percent FPL was not available for seven states with separate CHIP at this income level (DE, FL, KY, ME, MI, MS, and NC) (Bly et al. 2014). In addition, six states included in the Wakely Consulting Group study at 160 percent FPL were excluded from MACPAC's analysis because these states currently cover children at this income level through Medicaid instead of separate CHIP (IA, IN, KY, ME, MI, and SD) (Bly et al. 2014).

CHIP premiums were based on premiums in effect on January 1, 2015 (Brooks et al. 2015). State policies that adjust CHIP premiums based on the number of children enrolled were also taken into account to calculate each state's annual premium for two children (Cardwell et al. 2014).

MACPAC calculated exchange plan premiums for the second-lowest-cost silver plan using its own analysis of 2015 exchange premiums (CMS 2014). In the states studied, the unsubsidized average exchange premium for two children is $3,270 per year. This figure is similar to other published estimates for children's coverage among all states with federally facilitated exchanges, which averages $3,226 per year for two children in 2015 (MACPAC 2015e).

Family premium contributions after tax credits were based on 2014 federal poverty guidelines, which were used to calculate 2015 exchange tax credits. The maximum-expected premium contribution for a family of four is $1,711 at 160 percent FPL and $3,352 at 210 percent FPL.

MACPAC also used federal exchange data to calculate average premiums for additional pediatric dental coverage based on the lowest-cost stand-alone dental plan in rating areas where the second-lowest-cost silver plan did not include pediatric dental coverage. In 20 of the 23 states with federally facilitated exchanges used in this analysis, at least some (and in some states, all), of the second-lowest-cost silver plans exclude pediatric dental coverage. In 2015, the average annual premium of stand-alone dental plans in these states is $432 for two children. If pediatric dental coverage was included in the second-lowest-cost silver plan, the additional cost for pediatric dental coverage was assumed to be $0 for the averages presented in Figure 2-2. After adjusting for exchange plans with pediatric dental coverage, the average premiums for pediatric dental coverage vary slightly between 160 and 210 percent FPL ($242 versus $258) because of the different states that offer separate CHIP coverage at each income level.

Cost sharing estimates for both CHIP and exchange coverage reflect the average annual costs that a family is expected to pay based on each health plan's actuarial value and an estimate of the average allowed claims cost for children's coverage in each state. The average allowed claims cost is estimated by dividing the second-lowest-cost silver plan premium by an actuarial value of 70 percent, after accounting for health plan administrative

costs (assuming a medical loss ratio of 20 percent). Average cost sharing for pediatric dental services was estimated using a similar method. This method does not take into account benefit variation between CHIP and exchange plans (except for dental coverage) and assumes that exchange plan premiums for children's coverage reflect the actual cost of coverage. In practice, there are other benefit variations between CHIP and exchange coverage (as described in Chapter 3), and exchange plan rating rules also impose limits on the extent to which health plans can set special rates for children.

MACPAC relied on CHIP actuarial values calculated by the Wakely Consulting Group (Bly et al. 2014). These actuarial values were determined using the 2015 Federal Actuarial Value Calculator (available at http://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Marketplaces/qhp.html#Application Resources). By April 1, 2015, the U.S. Department of Health and Human Services is required to publish an assessment of whether cost sharing in CHIP and exchange plans is comparable, and at that time may provide updated estimates of CHIP actuarial values.

National averages for coverage costs under CHIP and exchange plans are calculated using a weighted average based on the number of families at the specified income level in each state (BLS 2014b).

TABLE 2A-1. Average Additional Annual Cost of Covering Two Children with CHIP Versus Subsidized Exchange Coverage, Family of Four, 2015

Average cost	160% FPL ($38,160 for a family of four)			210% FPL ($50,085 for a family of four)		
	CHIP	Additional cost of exchange coverage for children (Second-lowest cost silver plan)		CHIP	Additional cost of exchange coverage for children (Second-lowest cost silver plan)	
		With parent(s) also enrolled in exchange and receiving subsidies	Parent(s) are not enrolled in exchange, but children are still eligible for subsidies		With parent(s) also enrolled in exchange and receiving subsidies	Parent(s) are not enrolled in exchange, but children are still eligible for subsidies
Premiums for children's medical coverage	$157	$0	$1,711	$588	$0	$3,072
Additional premiums for children's dental coverage	n/a	242	242	n/a	258	258
Cost sharing for children's coverage	95	564	564	80	1,073	1,073
Total additional cost to families for children's coverage	**252**	**806**	**2,517**	**668**	**1,331**	**4,403**
Premiums paid for children's medical coverage	157	0	1,711	588	0	3,072
Additional premiums for children's dental coverage	n/a	242	242	n/a	258	258
Out-of-pocket cost-sharing maximum	586	2,513	2,513	978	6,102	6,102
Total potential financial exposure	**744**	**2,755**	**4,466**	**1,566**	**6,360**	**9,432**

Notes: FPL is federal poverty level. This table summarizes the average additional annual cost to families of covering two children in addition to any coverage costs for their parents. This means that the total cost to a family for covering two children and both parents is higher than what is shown here. Numbers may not add due to rounding.

The average annual costs for CHIP coverage are calculated using data from 31 states with separate CHIP coverage as of 2014, and the average annual costs of exchange coverage are calculated using data from 23 of these states that participate in the federally facilitated exchange.

Source: MACPAC analysis of Brooks et al. 2015, Bly et al. 2014, Cardwell et al. 2014, CMS 2014, and BLS 2014b.