CHAPTER 6

Improving Medicaid and CHIP Data for Policy Analysis and Program Accountability

Section 1900(b)(3) of the Social Security Act directs the Commission to: "(A) review national and State-specific Medicaid and CHIP data; and (B) submit reports and recommendations to Congress, the Secretary, and States based on such reviews."

Chapter Summary

Medicaid and CHIP data are critical to the work MACPAC is charged to conduct. They are a means to answer policy questions that affect enrollees, states, the federal government, providers, and others. Medicaid and CHIP data are also a means to ensure accountability for taxpayer dollars.

At the federal level, states report data to the Centers for Medicare & Medicaid Services (CMS) on enrollment, service use, and spending in their Medicaid and CHIP programs. They also report information on policies such as eligibility levels and covered benefits. Such federal administrative data can help to answer key policy and accountability questions for Medicaid and CHIP. For example, do enrollees receive appropriate care? Which policy choices most affect that care and its costs? Do federal legislators and administrators have a clear picture of how Medicaid and CHIP dollars are spent?

Issues such as data timeliness, consistency, and availability, however, have presented longstanding challenges. Different Medicaid and CHIP data are collected from states at different times for different purposes, with states reporting some information on their Medicaid and CHIP programs more than once. In addition to these redundancies, there are gaps in some of the data sources created in this process that limit their usefulness.

CMS is taking steps to address Medicaid and CHIP data issues, including developing a plan to modernize its computer and data systems. The Commission encourages the agency to continue these efforts and to seek input from states and other stakeholders. Areas for improvement that the Commission suggests CMS consider include the reporting of encounter data by managed care plans, the timeliness of enrollment and other data, consistency of data across sources, and information about state program policies.

CHAPTER 6

Improving Medicaid and CHIP Data for Policy Analysis and Program Accountability

Although data reported by the states on their Medicaid and CHIP programs provide an important source of information for the Commission in carrying out its statutory duties, the collection of those data is never an end in itself. Instead, it is a means to answer policy questions that affect enrollees, states, the federal government, providers, and others, as well as to ensure accountability for taxpayer dollars.

In this chapter we highlight ways in which existing federal administrative data can help to answer key policy and accountability questions. For example, do enrollees receive appropriate care? Which policy choices most affect that care and its costs? Do legislators and administrators have a clear picture of how Medicaid and CHIP dollars are spent?

We then describe major federal administrative data sources that are used for most national and cross-state analyses of enrollment, service use, and spending in Medicaid and CHIP. Other sources of information on state program policies, such as eligibility levels and covered benefits, are also discussed.

Finally, we note areas where better federal administrative data on Medicaid and CHIP are needed and provide examples of how improvements to these data could allow for better analysis of policy and program accountability issues. These areas include:

- the ability to understand service use among managed care enrollees and children in separate CHIP programs;
- the timeliness and consistency of various data sources; and
- the availability of information on state program policies.

A number of these areas could be addressed through current Centers for Medicare & Medicaid Services (CMS) efforts to modernize its computer and data systems. The Commission encourages the agency to continue its development of a strategic plan for Medicaid and CHIP data, with input from states and other stakeholders. To the extent that decisions about Medicaid and CHIP—including those made by the Congress—are guided by these data, both states and the federal government have an interest in improving their quality.

What are Administrative Data?

In the course of administering the Medicaid and CHIP programs, states and the federal government generate large amounts of data. For example:

- States outline certain program policies (e.g., regarding eligibility levels and covered benefits) in state plan and waiver documents that must be approved by CMS.
- Enrollees report eligibility-related information (e.g., income, age, and other characteristics), some of which may vary by eligibility group and state.
- Claims processing systems generate records of services provided to enrollees and associated payments.
- States complete accounting statements to obtain federal funds for a share of their Medicaid and CHIP costs.

At the state level, Medicaid and CHIP administrative data are maintained in systems and formats that vary across and sometimes within states. For example:

- Multiple states may use the same private company to process claims from providers, but each may require providers to bill for their services using state-specific codes.
- Certain services (e.g., those delivered in schools) may be paid using alternative systems.
- Although federal law requires them to operate under the authority of a single state Medicaid agency, multiple state—and often local—agencies may have responsibility for different program functions such as determinations of eligibility and payments to providers.

At the federal level, most administrative data on Medicaid and CHIP are generated from information reported by states to CMS. For many states, prior to FY 1999 the data reported on spending, enrollment, and service use consisted only of aggregate statistics. Currently reported data provide detailed person-level and claims-level information on Medicaid enrollees,[1] in addition to a variety of aggregate statistics. Looking forward, CMS is considering how to integrate clinical data that could provide information on health outcomes among program enrollees as the implementation of electronic health records and health information exchanges proceeds.[2]

Federal administrative data on Medicaid and CHIP provide a national picture of the programs and some degree of comparable information across states because they have been translated from multiple systems into a standard format. One

[1] Person-level data provide eligibility-related and other information on each enrollee, such as age. Claims-level data provide a record of individual services provided to enrollees.

[2] For a discussion of electronic health records and health information exchanges (which differ from health *insurance* exchanges), see NGA 2009.

of the fundamental purposes of collecting these data is to ensure the appropriateness of federal payments to states for their Medicaid and CHIP programs. At the same time, however, states require their own particular reports and analyses to manage their programs and account to their legislatures. They may consider federal reporting requirements burdensome as they face budget pressures and competing demands. States may also see the data as having little use, except as a benchmark for comparing themselves to others. In light of these issues, the success of efforts to improve the quality and timeliness of federal administrative data on Medicaid and CHIP may depend in part on the ability of CMS to provide states with technical and other assistance, as well as to demonstrate the value of this information for states.

Improvements to federal administrative data could ultimately reduce both state and federal burdens by eliminating redundancies in what is currently reported. They could also allow the federal government, including the Commission, and others to expand or replicate analyses that now are possible only by using administrative data maintained by individual states. This would be particularly valuable as many states find themselves with limited analytic resources due to budget constraints.

What Can Be Learned from Federal Administrative Data?

The Commission acknowledges that states' own administrative data provide a rich picture of their individual Medicaid and CHIP programs. The remainder of this chapter, however, focuses on federal administrative data that attempt to provide comparable information on these diverse programs. Often these data may be the best, and sometimes the only, national source of state-level information on Medicaid and CHIP due to the sample size and other limitations of surveys.

Here we give examples of how federal administrative data can be used to analyze a variety of issues and meet the needs of administrators and legislators—including CMS and the Congress—by providing information on enrollees' access to care, the value received for dollars spent on that care, and the integrity of the programs. Some general uses of the data include:

- **Projections.** For example, historical trends are an important factor for projections of future enrollment and spending under current law and alternative proposals made by the Congressional Budget Office (CBO) and CMS.
- **Analysis of spending growth.** For example, such analyses can show the extent to which growth in spending is due to increases in enrollment versus increases in spending per enrollee.
- **Analysis of service use and spending by enrollee characteristics.** This allows, for example, identification of enrollees who account for a disproportionate share of program spending.
- **Analysis of the quality and appropriateness of care.** For example, receipt of recommended care, such as preventive dental services by children, can be examined.

- **Analysis of program characteristics.** For example, such analyses can assess the extent to which policies such as those regarding care management and coordination may affect program costs and enrollee outcomes.
- **Analysis of billing and utilization patterns.** For example, in addition to states' own efforts, CMS is exploring claims data to identify potential fraud and abuse in the programs.
- **Enhancement of other data sources.** Administrative and survey data sources are being linked with each other to provide a richer picture of Medicaid and CHIP than can be obtained from these sources in isolation.

Access to Care

As noted in Chapter 4, the Commission intends to examine access to care in Medicaid and CHIP on a number of dimensions. Access is also discussed in Chapter 5—along with efficiency, economy, and quality—in the context of payments to providers. With regard to these topics, federal administrative data can shed light on a number of issues.

For example, the data can provide information on the characteristics of Medicaid and CHIP enrollees and the services they use. The data can also provide information on the cost of care for various populations, which affects states' budgets and thus their ability to implement policies that could improve access. Although they account for only about a quarter of Medicaid enrollment, federal administrative data indicate that individuals age 65 and older and persons with disabilities account for about two-thirds of Medicaid spending on benefits (Figure 2-2). Similarly, individuals enrolled in both Medicaid and Medicare ("dual eligibles") account for 15 percent of Medicaid enrollment and about 40 percent of Medicaid spending on benefits (Rousseau et al. 2010). Among non-elderly adults with disabilities enrolled only in Medicaid, mental illness is nearly universal among the highest-cost, most frequently hospitalized individuals (Boyd et al. 2010).

Analyses of service use may seem straightforward at first glance, but they require extensive cross-walking of state-specific information into standard service definitions at the federal level. Although some anomalies remain after this cross-walking occurs, the resulting federal administrative data on Medicaid and CHIP can be used to examine whether enrollees receive recommended care such as preventive dental services; monitor patterns of care among enrollee subgroups such as children in foster care; and identify opportunities for improvement such as potentially avoidable hospital readmissions (GAO 2010, Gilmer and Hamblin 2010, Green et al. 2005). Administrative data sources are also being linked with each other to examine, for example, Medicaid and Medicare service use and spending together for dual eligibles. The Medicare Payment Advisory Commission (MedPAC) has begun examining these linked data on dual eligibles (MedPAC 2010), and this Commission will coordinate its analysis with MedPAC and the Federal Coordinated Health Care Office at CMS.

Value Received for Dollars Spent

Federal administrative data can be used to examine Medicaid and CHIP program spending growth and some of its broad underlying factors. For example, between FY 1975 and FY 2002, about 40 percent of the growth in overall spending for Medicaid benefits was due to a rising number of recipients

and about 60 percent was due to increases in real (inflation-adjusted) treatment costs per recipient (CBO 2006). An analysis of more recent data indicates that, between FY 2000 and FY 2007, growth in overall spending for Medicaid benefits was largely driven by enrollment and—as with other payers—underlying health care inflation; increases in real treatment costs have played a smaller role (Holahan and Yemane 2009).

A more difficult issue to address is whether state spending on Medicaid and CHIP is efficient. Although there are many definitions of efficiency and little agreement about which is preferable, one recent study suggested examining state Medicaid programs in terms of the access, quality, and health outcomes they produce for a given level of spending (Lipson et al. 2010). Federal administrative data sources provide useful information on program spending, but analyzing these data can be complicated for a number of reasons (e.g., the fact that some providers receive both standard and supplemental payments). In addition, the outcomes obtained from federal administrative data—primarily those that measure service use, such as hospital readmissions or receipt of preventive and other recommended care—may be somewhat limited.

In any consideration of Medicaid and CHIP efficiency, the ultimate goal is to identify policies that increase value received for dollars spent on the programs, which may be defined in many ways. This is a particularly difficult task given that other factors—such as enrollee and local health care market characteristics—may also contribute to variation in costs and outcomes. However, to the extent that federal administrative data provide relevant state-by-state information (e.g., provider payment methodologies, efforts to increase fee-for-service or managed care provider networks, changes to covered benefits), they may be a useful resource for examining how policy choices influence both costs and outcomes. Even in cases where federal administrative data do not have the level of detail desired for a particular analysis, they may provide a useful starting point for gathering information from additional sources.

Program Integrity

As noted in Chapter 2, discussions of Medicaid program integrity are often limited to issues of fraud and abuse by Medicaid providers, as well as enrollees. However, a broader view encompasses other issues (e.g., policy development and execution) that affect the ability of states and the federal government to ensure that enrollees receive quality care and that taxpayer dollars are spent appropriately. Many of the federal administrative data sources discussed in this chapter can be used to address a variety of program integrity issues. For example, CMS is working with other federal agencies to supplement existing federal data on Medicaid and CHIP with additional information from states for purposes of identifying, and developing policies to mitigate, fraud and abuse in the programs (CMS 2009).

Federal Sources of Administrative Data

The following section describes major federal sources of administrative data that serve as the basis for most national and cross-state analyses of program enrollment, expenditures, and service use. It also describes those sources that provide information on state program policies, such as

eligibility levels and covered benefits.[3] These sources are summarized in Table 6-1.

Funding for data-related activities at CMS is generally provided by annual appropriations, but dedicated funding may also be provided by the Congress for specified purposes.[4] When states incur Medicaid and CHIP administrative costs for data collection, reporting, and other activities, the federal government reimburses them for a share of the total. For Medicaid, routine activities receive a 50 percent federal match and data systems may be eligible for 75 or 90 percent if certain criteria are met.[5] Administrative costs related to CHIP may receive a federal match that varies by state from 65 to about 80 percent. Administrative costs, however, are limited to 10 percent of a state's annual federal CHIP spending.

Medicaid and CHIP Budget and Expenditure Systems (MBES/CBES)

Financing for the Medicaid and CHIP programs is shared by the federal government and the states. States incur Medicaid and CHIP costs by making payments to providers and managed care plans and by performing administrative activities. They then receive federal reimbursement for a share of their costs by submitting quarterly expenditure reports through an online MBES/CBES maintained by CMS. Actual expenditures for regular Medicaid and Medicaid-expansion CHIP programs are reported on Form CMS-64; actual expenditures for separate CHIP programs are reported on Form CMS-21. Supporting documentation for the amounts on these forms must be readily available for review by CMS as necessary. Projected Medicaid expenditures are reported on Form CMS-37. With a few exceptions, these data provide a comprehensive picture of total federal and state spending on Medicaid and CHIP by major benefit and administrative categories.[6]

Medicaid Statistical Information System (MSIS)

MSIS is a data source compiled by CMS from detailed eligibility and claims information reported by all states since FY 1999. Previously, states were only required to provide aggregate statistics on Medicaid enrollment, service use, and spending in an annual report. Currently, states must submit five MSIS files every quarter: one containing eligibility-related information on each person enrolled in the state Medicaid program (e.g., months of Medicaid enrollment, basis of eligibility, dual enrollment in Medicare, demographics such as age, sex, and race/ethnicity) and four containing information on paid claims for inpatient hospital, institutional long-

[3] Although additional references are cited throughout, descriptions of many federal administrative data sources in this chapter were informed by Borden et al. 2010 and numerous links on the CMS website at www.cms.hhs.gov.

[4] For example, funding for certain data activities related to program integrity is provided through the Health Care Fraud and Abuse Control account (HHS and DOJ 2011).

[5] A recent proposed rule from CMS describes the availability of federal reimbursement for Medicaid data systems under current law (CMS 2010a).

[6] Expenditures not reported through MBES/CBES include amounts for the Vaccines for Children program (which is authorized under the Medicaid statute but otherwise operates as a separate program), State Medicaid Fraud Control Units, and Medicaid survey and certification of nursing and intermediate care facilities.

term care, drugs, and other services (e.g., type of service, place of service, amount paid by Medicaid, and diagnoses). States have the option of reporting information on separate CHIP enrollees in MSIS and about half do so.

Each quarterly file submitted by a state undergoes quality review; those that do not pass are returned to states for correction and resubmission. Known issues that cannot be resolved for a given state (e.g., due to problems associated with upgrades or changes to a computer system) are detailed in a report of data anomalies. Once accepted, CMS processes the MSIS files in a number of ways. For example, it produces state-level statistics for months, quarters, and fiscal years; person-level data files with summary information for each fiscal year; and Medicaid Analytic eXtract (MAX) data files with detailed person-level and claims-level information for each calendar year.

TABLE 6-1. Federal Sources of Administrative Data

Source	Brief Description
Medicaid and CHIP Budget and Expenditures System (MBES/CBES)	Reports (Forms CMS-64, CMS-21, and CMS-37) detailing aggregate spending that are submitted by states to receive federal reimbursement for a share of their Medicaid and CHIP costs.
Medicaid Statistical Information System (MSIS)	Eligibility-related information on each person enrolled in Medicaid, as well as a record of each claim paid for most services an enrollee receives.
Statistical Enrollment Data System (SEDS)	Aggregate statistics on CHIP and child Medicaid enrollment.
Form CMS-416	Aggregate statistics on children receiving Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) services.
Form CMS-372	Aggregate statistics on enrollees and spending under home and community-based waivers.
Medicaid Drug Rebate System (MDR)	Aggregate statistics on drug utilization and payments for calculating rebates to states from drug manufacturers.
State Medicare Modernization Act (MMA) files	Monthly eligibility-related information on “dual eligibles” enrolled in Medicaid and Medicare used for Medicare Part D purposes.
Incurred But Not Reported Survey System (IBNRS)	Accounting data submitted by states to CMS for its fiscal year Annual Financial Report.
State plan documents	Documents that describe a state’s Medicaid and CHIP policies under regular statutory rules.
Waiver documents	Documents that describe a state’s Medicaid and CHIP policies under a statutory waiver of certain federal requirements.
Medicaid Managed Care Data Collection System (MMCDCS)	Aggregate statistics on managed care enrollment, along with basic descriptive information on each managed care plan and program within a state.
CHIP Annual Report Template System (CARTS)	Variety of information on CHIP programs such as eligibility and other policies and performance measures regarding receipt of care.

Statistical Enrollment Data System (SEDS)

States report aggregate statistics on CHIP enrollment and child Medicaid enrollment through SEDS. The enrollee data are broken out by separate CHIP, Medicaid-expansion CHIP, and regular Medicaid; age, gender, and race/ethnicity; specified income ranges as a percentage of the federal poverty level; and type of delivery system (fee for service, comprehensive managed care, or primary care case management).

Form CMS-416

Under Medicaid's Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit for individuals under age 21, states must cover certain periodic screening, vision, dental, and hearing services and any medically necessary service listed in the Medicaid statute, including optional services that are not otherwise covered by the state. States report aggregate statistics for EPSDT by age group on an annual basis via Form CMS-416, including services provided under both fee-for-service and managed care arrangements. Information collected includes the number of: individuals eligible for EPSDT; expected and actual screenings; eligible enrollees receiving at least one screen, referrals for corrective treatment, or dental/oral health service (with specific breakouts that most recently include sealants and non-dentist providers); and blood lead screening tests.

Medicaid Drug Rebate (MDR) System

For purposes of calculating rebates from drug manufacturers through a Medicaid Drug Rebate system at CMS, states are required to report drug utilization and payment information on a quarterly basis. These data are reported by national drug code (NDC), which is a unique number that identifies a drug's manufacturer, product information, and package size and type.

State Medicare Modernization Act (MMA) Files

States report monthly MMA files that contain eligibility-related information on dual eligibles enrolled in Medicaid and Medicare. These data are used to determine Medicare Part D low-income subsidies for dual eligibles and to facilitate their enrollment in prescription drug plans under Part D. In addition, the data are used in the calculation of phased-down state contribution (often referred to as "clawback") payments to the federal government. These payments offset Medicare's cost of assuming primary responsibility for prescription drug coverage for dual eligibles, which had been provided through Medicaid prior to 2006.

Incurred But Not Reported Survey (IBNRS) System

CMS uses IBNRS to prepare its fiscal year Annual Financial Report as required by P.L. 103-356. States submit accounting information for Medicaid and CHIP through IBNRS using two forms (CMS-R199 and CMS-10180) that allow CMS to accrue an accounts payable for the services rendered by providers as of the end of the fiscal year and an accounts receivable for all amounts due to the states from various sources, excluding the federal government.

State Plan Documents

A state plan is a comprehensive written statement that describes the nature and scope of a Medicaid or CHIP program (e.g., regarding state administrative structure and operations, eligibility, covered benefits, payment methods) and must be approved by the federal government in order for a state to receive federal funds. State plans consist of both preprinted material that covers basic requirements and individualized narratives that reflect the characteristics of a particular state's program. As federal requirements and state policies change over time, updates are made via state plan amendments (SPAs). Including attachments, state plans may be hundreds of pages long.

Waiver Documents

The Social Security Act (the Act) contains multiple waiver authorities that allow states flexibility in operating their Medicaid and CHIP programs without regard to certain federal requirements that would otherwise apply.

- Section 1115 of the Act is the demonstration authority applicable to Medicaid and certain other programs under the Act (e.g., cash welfare assistance and child support enforcement under title IV). Under Section 1115 the Secretary of Health and Human Services (HHS) may waive a broad range of Medicaid state plan requirements to enable a state to carry out a demonstration project that is judged to promote the objectives of the program. CHIP requirements can also be waived (Sections 2107(e)(2)(A) and (f) of the Act). Section 1115 waivers have evolved over the years and many states have used savings estimated to accrue under these waivers to finance coverage for populations not otherwise eligible for Medicaid or CHIP. States submit Section 1115 waiver proposals in paper formats. CMS outlines the terms and conditions of approved proposals in documents that are specific to each waiver.
- Section 1915(b) of the Act authorizes the Secretary to waive a more limited set of Medicaid state plan requirements pertaining to freedom of choice of providers, statewide implementation (statewideness), and the provision of comparable benefits (comparability) for enrollees. Section 1915(b) waivers have traditionally been used to require enrollment in managed care and to provide additional benefits, although a waiver is no longer required for mandatory enrollment of most populations. Applications for 1915(b) waivers contain both structured and narrative information and may be submitted through an online system at state option.
- Section 1915(c) of the Act allows the Secretary to waive the Medicaid statewideness and comparability requirements, as well as certain income and asset requirements, in order to provide home and community-based services to enrollees who would otherwise require the level of care provided in a nursing home or other institution. Section 1915(c) waiver applications and renewals are required to be handled through an online system that also collects Form CMS-372 aggregate statistics on enrollees and spending by type of service for each waiver.

Medicaid Managed Care Data Collection System (MMCDCS)

States report information through MMCDCS on an annual basis. CMS uses it to create a managed care enrollment report that provides aggregate enrollment statistics and other basic information for each managed care plan within a state, along with national and state-level summary information. CMS also uses it to create a national summary report that describes the managed care programs within a state, each of which may include several plans.

CHIP Annual Report Template System (CARTS)

CARTS was designed to help states meet a statutory requirement to assess the operation of their CHIP programs each fiscal year and report results to the Secretary of HHS by January 1. A variety of both structured and narrative information is collected. Topics include eligibility and other policies; performance measures regarding receipt of care; enrollment data from SEDS and data on uninsured children from a federal survey; state progress towards meeting goals; budget information; and most recently, dental information of the type reported for Medicaid children in the CMS-416.

Areas Where Improvements Could Be Made

As described in this chapter, Medicaid and CHIP data are collected from states at different times in different formats for different purposes, with states reporting some information on their Medicaid and CHIP programs more than once. In addition to these redundancies, gaps in some of the data sources created in this process limit their usefulness.

At CMS, a Medicaid and CHIP Business Information Solutions (MACBIS) council has been established and is overseeing a project to transform the agency's data strategy and environment (Plewes 2010, Thompson 2010). As part of this effort, the council commissioned a review of existing Medicaid and CHIP data sources and their uses (Borden et al. 2010). CMS has also released a plan for modernizing its computer and data systems, which includes convening a state advisory panel to make recommendations in 2011 on a strategy that lessens burdens on states and other stakeholders but still meets the need for standardized information (CMS 2010b).

CMS activities to inventory its existing data sources provide a valuable starting point for addressing both redundancies and gaps in the information reported by states. The Commission supports these efforts and encourages the agency to continue its development of a strategic plan for Medicaid and CHIP data. Here we note a number of areas for CMS to consider in this process and provide examples of how improvements to federal administrative data could allow for better analysis of policy and program accountability issues.

Managed Care Encounter Data

The federal government currently has little information on the services used by the growing number of Medicaid enrollees in managed care. Under most of these arrangements, a managed care entity receives a single payment to provide a defined set of services. Depending on the definition of managed care that is used, half or more of Medicaid enrollees receive some or all of their services through managed care, which

accounts for nearly a quarter of Medicaid spending on benefits (Box 2-2).

All states that contract with managed care plans collect "encounter data" that provide a record of the services furnished to Medicaid enrollees. However, many do not report these data to the federal government in MSIS as required (OIG 2009a). Among states that do report encounter data in MSIS, the quality of the data is largely unknown. CMS recently began a project to explore this issue and provide technical assistance to states. It is also developing a regulation on the submission of encounter data in MSIS.

- If complete managed care encounter data were collected, CMS could directly calculate certain measures reported elsewhere by states. These might include EPSDT statistics reported for children on the CMS-416, as well as certain child and adult quality measures that would otherwise be voluntarily reported by states (HHS 2010b, c).
- To the extent that directly calculated measures could substitute for existing reports, burdens on states could be reduced.
- In addition, federally reported encounter data could be used to make national and cross-state comparisons of the quality of care received by Medicaid and CHIP enrollees whose benefits are delivered through fee-for-service versus managed care systems, which some states already do on an individual basis (Thomson Medstat 2006, Ku et al. 2009).

Information about Enrollees in Separate CHIP Programs

There is currently no requirement for states to report enrollees in separate CHIP programs in MSIS. Only about half of the 44 states with combination or separate CHIP programs choose to do so in addition to their reporting of aggregate enrollment in SEDS (MPR 2010). CMS is developing regulations on separate CHIP reporting but the scope and content of the data have yet to be determined.

- Because children may move between Medicaid and CHIP as their family circumstances change, the lack of person-level data on enrollees in separate CHIP programs hampers analysis of transitions that may leave them uninsured for periods of time.
- A lack of claims-level data on separate CHIP enrollees also prevents detailed examinations of their service use and spending, which may vary in part due to differences between Medicaid and CHIP benefit packages. However, because most children in separate CHIP programs receive services through a comprehensive managed care plan (Table 5 in MACStats), the submission of encounter data would be necessary for this purpose.

EPSDT

As described earlier, Medicaid requires states to cover a broad range of services for enrolled children through the EPSDT benefit; states report annually on EPSDT-related activities via Form CMS-416. With regard to dental services, the Government Accountability Office (GAO) has indicated that CMS-416 data are limited in terms

of the information they provide on utilization and their usefulness for oversight (GAO 2009). CMS recently began collecting additional information on the CMS-416 regarding receipt of dental care; the agency has also convened an EPSDT improvement workgroup.

As with other federal administrative data, there are concerns about the comparability of CMS-416 information across states. For example, states may require different levels of reporting from managed care plans and certain providers (e.g., federally qualified health centers that are paid a flat cost-based amount per visit) (OIG 2009a, Schneider et al. 2005). In addition, methods used by states to determine service use among children in managed care for purposes of CMS-416 reporting are not well documented.

- As noted earlier, if complete managed care encounter data were collected, CMS could directly calculate certain measures reported elsewhere by states. These might include EPSDT statistics reported for children on the CMS-416.
- Improvements in the data used to monitor care, including the CMS-416 or another source such as MSIS, could be used to better target outreach efforts aimed at enrollees in need of services.[7]

Timeliness

Timeliness of federal administrative data on Medicaid and CHIP is a frequently cited concern. Although aggregate expenditures from the CMS-64 and CMS-21 are available with a lag of only a few months, enrollment and other data reported in MSIS take much longer to produce. For example, more than a year after the close of the fiscal year many states do not have complete MSIS data for FY 2009. Without up-to-date federal administrative data on state-level Medicaid enrollment, information collected by outside organizations and through surveys is used as a supplement. However, these data sources may differ in the types of Medicaid enrollees who are counted and in how enrollment is measured (Table 1 in MACStats). CMS plans to conduct a pilot to address data timeliness and to automate checks of data quality; it also plans to address enforcement of timely reporting in future regulations.

- More timely data would give administrators and legislators a clearer picture of the programs as they operate now—rather than as they did two or three years ago.
- In addition to state efforts that make use of their own administrative data, federal efforts to prevent fraud, waste, and abuse could be bolstered by more timely federal administrative data (OIG 2009b).

Consistency

Consistency of information across data sources is an ongoing issue. For example, among states that do report CHIP enrollees (Medicaid-expansion, separate, or both) in MSIS, enrollment figures do not always match those reported in SEDS. In addition, analyses comparing CMS-64 and MSIS spending data have found that even after adjusting for differences in scope and design, MSIS consistently produces lower numbers than the

[7] Despite potential problems with the CMS-416, aggregate statistics on dental and other utilization measures in the CMS-416 might still be more complete than those computed from MSIS in its current form, due to missing or unverified managed care encounter data in MSIS.

CMS-64 (Plewes 2010). Another recent analysis of MAX (a source derived from MSIS) and CMS-64 spending data for long-term services and supports found significant differences between the two (Wenzlow et al. 2008).

These inconsistencies have many possible explanations but they are difficult to document clearly and comprehensively. Historically CMS has not used MSIS data to analyze expenditures reported by states on the CMS-64 (GAO 2006). Further exploration of differences between these two sources could, however, highlight issues relevant for both policy analysis and program accountability.

- For example, CMS could provide useful context for analyses of detailed spending data in MSIS by explicitly identifying settings in which payments are made outside of each state's primary claims processing system (e.g., services delivered in schools, certain services provided in home and community settings) and might therefore be missing from that data source. Although it is well known that MSIS generally excludes supplemental payments that are made to institutional providers such as hospitals, the extent to which other amounts may not be reported in MSIS is less clear.
- In addition, a detailed exploration of differences between the two sources would inform the possibility of using MSIS as the basis for calculating most CMS-64 expenditure amounts. This could reduce state reporting redundancies and make it easier for CMS to connect a state's request for its federal share of Medicaid costs to claims paid by the state.[8] However, a number of other issues (e.g., states' ability to produce MSIS data on a schedule that allows them to receive timely federal reimbursement) would need to be addressed before this could occur.

Information about State Program Policies

A recent report examining data challenges faced by CMS identified the capture of information on state program policies in a more structured (i.e., non-narrative) format as a critical need (Borden et al. 2010). With the exception of 1915(c) and some 1915(b) waivers, these program data are largely submitted, reviewed, and approved in paper or electronic formats that cannot be easily summarized or linked with other data sources. State plans contain hundreds of pages that are stored in paper form in CMS regional offices; although state plan amendments are submitted electronically, they are often stored in paper form. Information on Section 1115 waivers is manually entered into a database that is updated periodically but is not always current.

In order to provide consumers with state-specific information on Medicaid and CHIP eligibility and benefits via the healthcare.gov website, CMS recently abstracted information from Medicaid and CHIP state plan and waiver documents using a set of standardized forms; they then verified the information with states. CMS is considering how it will continue to update this information and how it might expand its efforts to collect Medicaid and CHIP state program policies in a more structured

[8] Currently, if CMS has questions about a request for federal reimbursement on the CMS-64, it must obtain supporting information that will vary by state.

format. In addition, the agency recently rolled out a web-based submission process for states opting to provide a new "health home" benefit for enrollees with chronic conditions (CMS 2010c).

As noted earlier, CMS has efforts underway to modernize its computer and data systems. Ideally, this would include the construction of a fully automated system that directly links data on program policies with data on the populations served by Medicaid and CHIP and the benefits they receive. Realistically, it will take a number of years to implement such changes. In the meantime, existing information can be made more readily available.

- Medicaid state plans are not published in their entirety on the CMS website. The Commission supports plans to do so (HHS 2010a). Current online access to Medicaid state plan information is limited to SPAs.
- CHIP state plans and SPAs are available on the CMS website but they do not always include attachments that elaborate on elements of the state plan and are not always up to date.
- Certain Medicaid and CHIP waiver documents are published online but they are not always complete and up to date.

Increasing access to these data would be beneficial for a variety of reasons:

- The federal government could strengthen its program oversight by providing consistent and comprehensive information on state activities for use by CMS and other agency staff.
- States could more easily learn about the policy choices made by others as they consider their own program changes.
- Analysts could better identify the range of policies in place across states as they examine the number of people who are covered by Medicaid and CHIP, the services they use, and the amount spent on those services.

Looking Forward

The Commission supports efforts by CMS to address redundancies and gaps in the Medicaid and CHIP data reported by states and will continue to monitor and make use of these data in its work. It also encourages the agency to continue its development of a strategic plan for Medicaid and CHIP data with input from states and other stakeholders. Although this chapter has considered administrative data exclusively, the Commission also intends to examine routinely collected survey data that provide information on Medicaid and CHIP enrollees and providers, as well as special studies that collect data for targeted purposes.

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