

Data Sources for Monitoring Access to Care in Medicaid and CHIP

As major purchasers in the health care market, Medicaid and the State Children's Health Insurance Program (CHIP) help ensure that health care services available to their enrollees provide what the programs intend to pay for: necessary access to quality health care. In fiscal year (FY) 2011, Medicaid financed care for an estimated 70 million people, over a fifth of the U.S. population, at a cost of \$432 billion.¹ CHIP served 8 million children in FY 2011 at a cost of \$12 billion. With such substantial investments and the need for prudent government purchasing, it is crucial for both federal and state governments to have systems in place to monitor access to care for Medicaid and CHIP enrollees.

The Congress gave the Commission two explicit mandates with respect to Medicaid and CHIP enrollees' access to care. The Commission's authorizing legislation (42 U.S.C. 1396) charges MACPAC with reviewing and assessing the effect of payment and other Medicaid and CHIP policies on access to covered items and services. The same legislation also directs MACPAC "to identify provider shortage areas, as well as other factors that adversely affect, or have the potential to adversely affect, access to care by, or the health care status of, Medicaid and CHIP beneficiaries."

The Commission views these mandates as complementary and mutually reinforcing. Medicaid and CHIP policies, including payment policies, are part of a broad spectrum of factors that influence access to care for their enrollees. Monitoring access helps policymakers determine when changes in policy—either within Medicaid and CHIP or more broadly—will help these programs more effectively provide health care services to their enrollees. Monitoring access also provides policymakers with important information on whether programs are purchasing health services that are timely, efficient, and effective. Access is more than linking providers to Medicaid and CHIP enrollees; it is ensuring that enrollees obtain appropriate health services that are of high quality and that result in better health outcomes. Monitoring efforts should be able to detect access issues for the Medicaid and CHIP populations as a whole, as well as for particular subgroups of enrollees. Experiences of different subgroups in gaining access to care may vary and be completely different from service to service.

Furthermore, potential access issues need to be identified not only at the national level, but also at the state and community levels. Factors affecting access to care may be based in state policy (e.g., payment rates) or local factors (e.g., difficulty recruiting providers to rural areas). State and local analysis could help tease out the most effective solutions to address access issues as they are detected.

Effective efforts for monitoring access are ongoing, and focused on both the immediate and the long term. Ultimately, monitoring may detect existing problems, but also to identify emerging and potential access issues for Medicaid and CHIP enrollees. The rapid identification of emerging access issues can help mitigate their effects on enrollee access, while more in-depth work to assess trends in access can provide essential information to state and federal policymakers. Combining the use of activities that identify issues as they emerge with longer-term ongoing monitoring activities is particularly important during a time of potentially significant changes in the Medicaid and CHIP programs.

Section A is a first step toward developing and implementing a strategy for the Commission's work on access in Medicaid and CHIP. The Commission begins with an assessment of available data and other information for measuring access to care at the federal, state, and local levels. In measuring access for the Medicaid and CHIP populations, it is important to understand what data and other sources exist, their strengths and limitations, and which are suitable for creating state- and local-level assessments of access. In addition, it is important to determine whether other data sources are useful for monitoring access in Medicaid and CHIP and if they could help paint a more complete picture of access within the community being analyzed.²

Section A examines:

- the Commission's conceptual framework for monitoring access to care for Medicaid and CHIP enrollees;
- principles for selecting data sources for assessing access for use by policymakers at the federal and state levels;
- approaches for the expedient identification of emerging or potential access issues; and
- existing federal and state data sources for monitoring trends and variations in access to care over a longer time frame.

The Commission's Access Framework

In its March 2011 Report to the Congress, the Commission presented its initial framework for examining access (MACPAC 2011a). As shown in Figure a-1, the framework is tailored to address the characteristics of both Medicaid and CHIP programs and their enrollees. Consideration of how particular measures fit within each of the framework's three major components—enrollees, availability, and utilization—could help guide the selection of key measures for measuring and monitoring access in Medicaid and CHIP.

Enrollees and their unique characteristics are central to access measurement for Medicaid and CHIP, given the broad range of enrollees and the services required to meet their health needs. Potential enrollee-related indicators should reflect the clinical diversity and complex health issues of subpopulations



within Medicaid and CHIP as well as program variation across states.

- Availability of providers to Medicaid and CHIP enrollees is dependent on the overall provider supply in an area and on providers' willingness to participate in Medicaid and CHIP. Measures in this area must be able to detect changes in a state's delivery system landscape and to identify primary and specialty care provider shortages.
- Utilization of health care focuses on the use and affordability of available services³ and on experiences navigating the health care system; low utilization of appropriate services could indicate problems with access to care. Potential utilization-focused measures should reflect the types of services used by Medicaid and CHIP populations and allow for the identification of the potential under- or overuse of services.

These three elements serve as the basis for the Commission's evaluation of access and whether Medicaid and CHIP enrollees have adequate access to health care services that are cost-effective and produce positive outcomes. This Section focuses on monitoring enrollees' access to providers and services. Future Commission analytic efforts will concentrate on assessing the appropriateness, quality, and effectiveness of the health services received and the settings where care is provided.

Principles Guiding the Development of an Access Monitoring Approach

Monitoring access to services in a robust manner involves the examination of several factors such as level of effort, administrative burden, and the potential costs of gathering and tracking information. The unique needs and characteristics of states and what is most feasible in terms of introducing a simple, effective approach that allows for meaningful benchmark comparisons must also be examined in depth.

The Commission has defined a number of principles that may be helpful in the creation and implementation of effective and efficient access monitoring systems. Effective monitoring efforts:

- Reflect unique characteristics of the Medicaid and CHIP programs and their enrollees. The system should use a framework, such as MACPAC's access framework, which emphasizes the unique characteristics and needs of the Medicaid and CHIP programs and their enrollees.
- Complement existing efforts and avoid duplication. Any new monitoring activities should complement and leverage, rather than duplicate or compound, existing efforts by state and federal program administrators to monitor access.
- Are both proactive and reactive. Monitoring should be timely enough to detect problems as they emerge, and should provide information needed for state and federal policymakers, local health care organizations, and providers to intervene appropriately.
- Consider the broader environmental context. Analysis of access monitoring data should consider the broader environment surrounding enrollees' access, including economic, demographic, and social factors that help frame the delivery of care and federal and state health policies.
- Reflect multiple settings. Data sources should be able to measure enrollees' access in both fee-for-service and managed care arrangements as well as in rural and urban areas and should include services provided through programs administered to Medicaid

and CHIP populations outside of the two programs, such as school-based clinics.

- Integrate access and quality performance monitoring. When possible, access measures should be linked to measures that assess health outcomes and quality.
- Create feedback loops. A robust monitoring system should provide a mechanism for gathering feedback, and the system should report the results of that feedback to ensure accountability and information sharing among states, providers, and the federal government.

Monitoring Immediate Changes and Ongoing Trends

Measures for monitoring access to health services are best selected so that, when compiled as a set, they present an accurate picture of access for the program, enrollee group, or geographic area being assessed in a manner that is useful to policymakers. A monitoring system for Medicaid and CHIP should not rely on just one approach. Rather, it should pull selectively from a variety of efforts. When selecting data measures, feasibility, effectiveness, and cost of each type of approach as well as the reliability and validity of data sources are important considerations for policymakers. The wide variation across states with regard to their Medicaid and CHIP programs, health delivery systems, and enrollee populations should also be considered. Monitoring access within states should be tailored to best fit the characteristics, needs, and capacities of each individual state.

Federal, state, and local entities conduct a variety of access monitoring activities and gather a range of data that could be used to identify important trends in both the short and long term. To gain an understanding of state monitoring activities, the Commission contacted all Medicaid directors in late 2010 about their current activities for monitoring and identifying potential problems with access and provider capacity in their Medicaid programs (MACPAC 2011b). States identified a number of approaches they are using for monitoring access for Medicaid enrollees over time as well as ways of identifying immediate access issues. Box a-1 provides an example of one state's approach to monitoring access for its Medicaid enrollees. The Commission also explored efforts underway at a number of federal agencies such as the Centers for Medicare & Medicaid Services (CMS), the Assistant Secretary for Planning and Evaluation (ASPE), and the Health Resources and Services Administration (HRSA). The following sections highlight many of the approaches currently being used by state and federal governments.

Potential sources of information for identifying immediate access to care issues

One of the purposes of a monitoring approach is to detect access issues as they emerge. The relatively quick and immediate identification of possible access problems requires data and analytic tools that can be used to draw rapid, meaningful conclusions about changes in access to services for enrollees. Measures that detect localized and incipient problems in enrollee access require frequent monitoring and must be obtainable in a timely fashion.

Activities that could signal existing or potential access issues in a timely manner generally focus on communications with and outreach to enrollees,

BOX a-1. California's Plan for Monitoring Health Care Access for Medi-Cal Enrollees

California submitted its plan for measuring and monitoring access for its enrollees to CMS in conjunction with a proposed State Plan Amendment to modify Medi-Cal provider payments. The state selected 23 measures in three areas—Medi-Cal beneficiaries, provider availability, and service utilization and outcomes—which will be continuously tracked and reported. In selecting measures, the state considered the availability of the data, the ability to make comparisons geographically by county, and the comparability of measures to national surveys or nationally recognized clinical best practices.

A subset of measures will be used as an "early warning" mechanism to alert the program of potential problems. They include:

- changes in Medi-Cal enrollment;
- provider participation rates;
- service rates per 1,000 member months; and
- helpline calls that are categorized by reason for call and geographic location.

California's health care access monitoring plan details a process for the collection and analysis of data and the interpretation of trends. When variations are identified, an investigation into the problem will be conducted in order to understand the significance of the problem and provide data necessary for policymakers to identify appropriate solutions.

Source: California DHCS 2011

providers, and other stakeholders. It is important to consider that these types of activities are not necessarily reflective of the entire population and may not give an accurate sense of the magnitude of the problem. Instead, they may be used to trigger further investigation to determine whether an issue is real, how large it is, and whether corrective action is needed.

Collecting and analyzing enrollee and provider grievances and complaints. Enrollee and provider complaints and grievances can provide almost instantaneous feedback on potential problems. In the Commission's discussions with Medicaid directors, all indicated that they have procedures in place to capture and track complaints and grievances of Medicaid enrollees often through the use of enrollee or provider hotlines. It is important to note that some enrollees may experience access issues, but may not file a complaint or grievance with their state, designated provider, or managed care plan. However, an increase in the number of complaints might be a sign that a problem exists or is developing.

Communicating with consumers and

providers. Consumer outreach is an important mechanism for use in gathering quick and immediate feedback from Medicaid and CHIP enrollees. States, as well as CMS and other payers and purchasers of health services, can use a number of mechanisms for obtaining first-hand feedback. Routine calls to select consumers or holding focus groups with consumers can provide information on access to providers or particular challenges experienced when seeking services. Including consumer representatives on state agency committees is another mechanism for obtaining ongoing feedback about access.

Similarly, states may actively seek out information they can obtain directly from providers. These methods may include:

- secret shopper calls to providers to gather information on appointment wait times, wait lists, and participation in Medicaid and CHIP;
- calls to safety-net providers, local health departments, and other local government agencies to determine potential problems with obtaining specialty referrals;
- outreach to providers regarding the provider enrollment and claims submission processes and documentation requirements in order to identify barriers to participation; and
- regular communication with a network of health care system stakeholders, who raise warnings on behalf of an individual or community regarding access issues.

Developing a system of sentinel reporting.

U.S. public health surveillance systems use several approaches for detecting and tracking disease, injury, and health behavior patterns. These activities include passive surveillance that relies on individual providers, institutions, or laboratories to file reports; active surveillance that includes disease registries; reporting by sentinel providers selected as a representative sample of a delivery site; repeated surveys; and internet monitoring (Bindman 2010).

Sentinel surveillance systems are promising and cost-effective approaches for access monitoring. These systems conduct surveillance at representative health care delivery sites. For example, sentinel surveillance for influenza-like illnesses conducted at select outpatient facilities helps to determine when influenza enters a community. These systems are less expensive to operate than surveillance systems that aim to capture all cases within a population.

The use of emergency departments (EDs) and safety-net providers as sentinel providers could serve as a resource for detecting changes in patterns of care for Medicaid and CHIP enrollees in a given community. However, as with many other measures, changes detected in such a system would require further investigation to determine whether they were indicative of an access problem. The increased use of EDs for non-urgent care may be, in part, reflective of the availability of primary care within a community but could also be reflective of other factors, such as a disease outbreak or the closing of another facility. While safety-net clinics are often the primary care provider of choice for Medicaid enrollees, an increased use of these clinics may indicate that individuals are facing barriers to obtaining services in private physician offices, but it could also mean an expansion in services being offered by the safety-net provider. These sentinel providers could be responsible for ongoing collection of detailed health information within their community and could also be readily tapped to provide a qualitative understanding of the current landscape underlying a particular problem.

Using information from school health records and clinics. Most U.S. schools provide basic health services to students, and some provide other preventive care or specialty care. Services available in schools vary between states, but generally include:

- state-mandated services, including health screenings, documentation of immunization status, and infectious disease reporting;
- care to students with disabilities or other special health care needs;
- medication administration; and
- assessment and care for minor health complaints or emergency health situations if they arise.

School health records may be a source of data to monitor students' access to and use of health care. According to a national study in 2006 conducted by the Centers for Disease Control and Prevention, at least half of states required information to be obtained and kept in student records on physical health history, authorization for emergency treatment, immunization status, medication needs, and other screening activities (e.g., vision or hearing) (Brener 2007).

In addition, many states operate school-based health centers (SBHCs), which were developed with a mix of federal and state funds to improve children's access to care for under- or uninsured, low-income children. More than 85 percent of states had at least one SBHC in 2006, and in almost 75 percent of those states, SBHCs were Medicaid providers (Brener 2007). SBHCs may provide additional services beyond primary care, including oral health, behavioral health care, and treatment of sexually transmitted diseases. Previous research has demonstrated that SBHCs improve access to and quality of care for underserved adolescents compared with traditional outpatient care sites, resulting in decreased ED visits and increased number of preventive visits and screening for high-risk behaviors (Allison 2007).

Both school records and SBHCs might be a potential source of information about children's access to medical care. For example, an increase in the number of children requiring emergency treatment for asthma during the school day might reflect a lack of access to providers that could help children and their families better manage the disease.

Long-term and ongoing approaches for monitoring access to care

There are many sources of information that could serve as platforms for building a long-term tracking approach to monitor access in Medicaid and CHIP. An array of administrative data and national household and provider surveys could be leveraged for developing measures that capture long-term trends in access for Medicaid and CHIP enrollees. In addition, federal designations of medically underserved areas and provider shortages may potentially benefit Medicaid and CHIP access monitoring by identifying local areas that could warrant closer access monitoring.

Administrative data sources

Administrative data may serve as a source for access measures for Medicaid and CHIP enrollees. Using information from these sources is potentially inexpensive, efficient, and effective. However, when considering whether to use administrative data for access monitoring, it is important to evaluate the validity, reliability, and timeliness of the underlying data, which vary across states and sources. All states maintain administrative data on their Medicaid and CHIP enrollees and providers, including data collected within states' Medicaid management information systems, such as eligibility status, periods of enrollment, and health care utilization. Potential sources of Medicaid and CHIP data that could be used to gauge access and provider supply include claims data, encounter data, managed care plan reporting, quality assessment information, and other data obtained from hospitals and safety net providers.

Fee-for-service claims data. Providers generally submit claims for every service rendered in fee-for-service Medicaid. Claims data could help provide insight into the types of covered services used by enrollees and the providers serving those

enrollees (e.g., an increase in the use of emergency departments for Medicaid and CHIP enrollees, the percent of enrollees who have received a particular service such as a well-child visit).

Several states have developed all-payer claims databases, into which the state's various insurers submit their claims.⁴ These data may provide information on utilization, highlight important differences across payers, and serve as early indicators of potential problems (e.g., increases in ED use by Medicaid enrollees not mirrored by increases in use by commercially insured populations).

There are a number of limitations when using claims data:

- There is a significant lag time between when a service is provided and when the provider submits a claim to Medicaid (often up to a year after the date of service).
- Claims data can confirm which providers are serving at least some Medicaid enrollees, but they do not indicate whether those providers are accepting new Medicaid enrollees as patients.
- Claims data can only provide information for participating fee-for-service providers. Forty-eight percent of Medicaid and CHIP enrollees in 2010 were enrolled in comprehensive risk-based managed care plans (MACStats Table 9); therefore, detailed information on all providers may or may not be available through encounter data.
- It is difficult to capture illness burden and functional limitations in claims data, making it hard to interpret whether differences in utilization reflect differences in access.

The definition of a participating provider varies by state and must be considered in assessing access. Some states consider participating providers as having at least one claim during a year, while others use higher thresholds. Access measurement must also recognize different types of providers serving Medicaid enrollees. For example, Alaska uses alternative providers including community health aides, dental health aides, and behavioral health aides in rural and frontier tribal health clinics. Alaska also gains expanded access through the use of telemedicine (Alaska DHSS 2012).

Managed care encounter data. Since managed care plans are paid by the state on a full or partially capitated basis, and providers submit claims directly to the managed care plan, no claims are submitted directly to the state. Instead, states that contract with managed care plans collect separate encounter data from the plans, providing a record of the services furnished to Medicaid enrollees. These data may be used by states for monitoring access and quality.

Although encounter data might help to fill some of the critical gaps in claims data, they also pose challenges. Some states do not report encounter data to the federal government as required for federal monitoring purposes (OIG 2009). Among states that do report these data to the federal government, the quality of the data that are submitted is variable. CMS is analyzing the usability of encounter data and what types of technical assistance may help states improve the quality of the data.

Managed care plan network monitoring and quality assessments. States often use their contracts with managed care plans to define specific provider network requirements. Some states require managed care plans to meet minimum ratios for primary care and specialty care providers to enrollees, including states that require plans to demonstrate provider-to-population ratios equivalent to or greater than those observed in the fee-for-service environment. Furthermore, states are required under federal law to have a written strategy for assessing and improving quality for their Medicaid managed care programs. Most managed care plans are required to use the Healthcare Effectiveness Data and Information Set (HEDIS) to measure specific quality, access, and effectiveness-of-care measures. HEDIS contains a set of more than 70 performance measures across five domains of care; four categories are useful in monitoring health access: effectiveness of care, access to and availability of care, experience of care, and use of services (NCQA 2012).

In addition, Medicaid agencies use Consumer Assessment of Healthcare Providers and Systems (CAHPS) measures in their data collection efforts. CAHPS is a set of beneficiary surveys that covers a range of topics including access to care and use of services, wait times, appointment scheduling, access to specialty care, and satisfaction with providers.⁵

Information regarding how states monitor plan networks and other quality measures could serve as a platform for selecting access indicators. As was discussed in MACPAC's March 2012 Report to the Congress, little is known about whether or not quality measures commonly used for the Medicaid population are sufficient for assessing care provided to specific populations with special needs, such as Medicaid enrollees with disabilities.

State hospital data. All states have some sort of hospital reporting system and most participate in the Healthcare Cost and Utilization Project (HCUP). Sponsored by the Agency for Healthcare Research and Quality (AHRQ), HCUP is the largest collection of hospital data in the United States. Based on a federal-state-industry partnership, HCUP collects all-payer information from participating states on hospital inpatient care, outpatient emergency department care, and some ambulatory surgery care. For example, the 2010 HCUP Nationwide Inpatient Sample (NIS) contains all discharge data from 1,051 hospitals, approximating a 20-percent stratified sample of U.S. community hospitals. While the number of states included in the NIS varies by year, the number has grown from 8 states in 1988 to 45 states in 2010. The 2009 Nationwide Emergency Department Sample includes almost 29 million ED visits from 964 hospital-based EDs in 29 states. Twenty-seven states now participate in the State Emergency Department Databases (AHRQ 2011).

HCUP national databases provide a tool to identify, track, analyze, and compare hospital statistics at the national, regional, and state levels. For access monitoring, these data can be used to investigate state-specific and multistate trends in health care utilization, access, costs and charges, quality, and outcomes.

Community health center reports. All

community health centers and other HRSA primary care program grantees must submit Uniform Data System (UDS) measures annually to the federal government, making this another potential data source for monitoring primary care access. These data include aggregated information on patient demographics, utilization rates, clinical indicators, and costs. Reported at the grantee, state, and national levels, UDS data are used to track trends over time and to monitor improvements in overall health center performance, including the identification of specific services and interventions that may improve the health status of particular vulnerable communities or populations (HRSA 2011).

National health surveys

There are several national surveys that may be useful for monitoring trends in health outcomes, access, and utilization over time and that provide a baseline understanding of access at the national level. Some examples include the National Health Interview Survey (NHIS), the National Ambulatory Medical Care Survey (NAMCS), the National Hospital Ambulatory Medical Care Survey, the Medical Expenditure Panel Survey (MEPS), and the Behavioral Risk Factor Surveillance System (BRFSS). One strength of most of these surveys is that they allow nationallevel comparisons of populations with different sources of coverage. In Section B of this Report, NHIS and MEPS are used in new analyses of access to care for adults enrolled in Medicaid, compared to uninsured adults and adults with employer-sponsored insurance.

Strengths and weaknesses of these surveys are furthur discussed in Section B. Limitations to their usefulness in access monitoring may include:

- State variation. Many of these surveys are limited in their ability to examine statelevel variations, and none provide local-level estimates. These surveys would need to be modified in order to have large enough samples to provide for state-level estimates of access for Medicaid and CHIP enrollees.
 BRFSS is able to provide state-level estimates each year on behavioral and preventive health concerns (e.g., smoking, obesity, seat belt use) but does not monitor health access aside from preventive care and does not distinguish between Medicaid and private health coverage.
- Lag times. With some exceptions, surveys also tend to have lag times between data collection and reporting of results. For example, NHIS releases a limited set of measures from each quarter approximately six months after the end of the quarter, but does not distinguish between individuals with Medicaid and other sources of insurance in these results. Final datasets are released six months after a calendar year's data collection is completed (NCHS 2010), making them helpful

for monitoring over the longer term, rather than for detecting immediate access issues.

As part of the Commission's work, access measures available in federal surveys—including surveys administered to households and health care providers—are being reviewed and catalogued for their potential as monitoring tools.

Health Resources and Services Administration (HRSA) provider shortage designations

HRSA uses two provider shortage designations, the Health Professional Shortage Area (HPSA) and the Medically Underserved Area (MUA), to identify counties and subcounties in a state that experience health professional shortages or unmet needs for health care services. More than 30 federal programs use HPSA and MUA designations to determine eligibility for federal aid, assistance, and special policy considerations such as reimbursing physician assistants and nurse practitioners in rural clinics for Medicare and Medicaid services, and providing Medicare physician bonus payments to specific providers (HRSA 2012c).

Much of the country has received some type of HPSA or MUA designation. Both HPSAs and MUAs allow for designations specific to Medicaid-eligible populations. However, relatively few areas have sought this designation. The HPSA Medicaid designation details provider shortages based exclusively on the ratio of providers available to Medicaid enrollees. Such designations have been made across only nine states. As of May 2012, there were 74 primary care, 145 dental, and 27 mental health HPSA Medicaid designations (HRSA 2012a).

The MUA designation methodology can also be applied to a specific underserved population within a geographic area, known as a Medically Underserved Population (MUP), including Medicaid-eligible populations. As of May 2012, MUP designations specifically for the Medicaid population were granted in only four states (HRSA 2012a). It is important to note that the small number of areas designated as Medicaid HPSAs or MUPs does not indicate the number of areas that have the potential to qualify as Medicaid provider shortage or medically underserved areas, but only the number of areas for which a Medicaid-based designation has been sought.

The Annex to Section A provides descriptions of the HPSA and MUA designations and highlights current thresholds used in HPSA designations. While HRSA designations may provide some data to assess provider availability, there are a number of key shortcomings in their applicability to monitoring access in Medicaid and CHIP (Salinsky 2010, GAO 2006, OIG 2005).

- In determining whether an area is a HPSA or MUA, HRSA excludes certain types of providers such as mid-level practitioners, National Health Service Corps personnel, and specialists from the provider-to-population ratio. HRSA designations may not accurately portray the overall availability of services to Medicaid and CHIP populations without including these mid-level providers, who may be particularly important in serving Medicaid and CHIP enrollees.
- The application process can be burdensome, favoring areas with previous application experience.
- Information on shortage designations is outdated: MUAs/MUPs are not required to be renewed, and HPSA designations are renewed every three years.
- The pervasive use of designations limits the usefulness of MUAs and HPSAs as a tool for targeting high-need areas. The majority of the United States has received some sort of HRSA designation.

As part of the Affordable Care Act of 2010, a Negotiated Rulemaking Committee on the Designation of MUPs and HPSAs was established and charged with developing new methodologies for designating medically underserved communities and populations with health professional shortages or significant unmet health needs. After 14 months of deliberation, the 28-member committee submitted its final report, which included recommendations to the Secretary of the U.S. Department of Health and Human Services (the Secretary) on October 31, 2011.⁶ As of June 2012, the Secretary has not issued an interim final rule on this issue. The Commission will continue to track changes to HRSA designations methodologies and assess whether the changes make them more reliable and useful for state access monitoring efforts.

Other federal access monitoring efforts

Gaining a better understanding of current Medicaid monitoring activities underway in other federal agencies is important to refining the Commission's work on access.⁷ Approaches used in monitoring access to care in the Medicare program can also serve as potential models for monitoring access in Medicaid, despite important differences between the programs' administrative structures and sources of available data. Determining whether and how these efforts could be leveraged in an access monitoring system for Medicaid and CHIP will be part of the Commission's ongoing activities.

The Medicaid Access Project. A joint endeavor between ASPE and CMS, the Medicaid Access Project is a multidimensional effort to obtain a federal view of what access to care looks like for enrollees of state Medicaid programs. With input from states, the project draws on existing data sources that capture three dimensions of access: utilization of services by enrollees, enrollees' perceptions of access and barriers to care, and provider participation in Medicaid. The project, which is in its initial phases, will identify available data sources, gaps in data sources, and analytical options for measuring access to care among Medicaid enrollees at the state level.

Monitoring access to care in the Medicare program. The Medicare Payment Advisory Commission (MedPAC) reports annually on Medicare beneficiary access to health services as part of its work to evaluate the adequacy of Medicare payments. For example, to evaluate beneficiary access to physician services, MedPAC assesses results from an annual telephone survey of beneficiaries and reports on findings from other relevant surveys, including the NAMCS and a survey of physicians. Where possible, MedPAC makes comparisons with privately insured enrollees to provide benchmarks for assessing relative access. MedPAC also reports on rates of provider participation in Medicare and the volume of services provided, which may help to identify changes in access over time (MedPAC 2012).

CMS has undertaken studies designed to uncover geographic "hotspots" of access problems. One example is a 2003 telephone survey fielded in 11 geographic areas that were thought to be most likely to have access problems, which revealed that relatively few Medicare beneficiaries reported having had trouble obtaining access to care (Lake et al. 2004).

Health Systems Measurement Project. The Health Systems Measurement Project, an ASPE initiative, brings together trend data on a limited set of key health system measures from multiple data sources. The project focuses on 10 dimensions of health systems, including access to care, cost and affordability, and quality. It assesses the status of these dimensions by state, over time, and with respect to subgroups of the population, including those with Medicaid coverage. Access to care measures included in the projects are: usual source of care, people reporting difficulty with seeing specialists, rates of hospitalization for ambulatory-care sensitive conditions for both children and adults, and use of the oral care system in the past 12 months.

Looking Forward

Monitoring and assessing access to appropriate, effective, and efficient care is a priority for MACPAC, given its statutory charge. Through its deliberations and research, the Commission has explored a variety of existing sources that could be used by federal and state policymakers to evaluate access to care in Medicaid and CHIP. The Commission will continue its ongoing efforts to assess the performance of Medicaid and CHIP relative to the fundamental goal of providing access to appropriate and effective services that deliver better outcomes at lower cost. This will require the development of measurement approaches to inform policymakers about whether these programs are meeting each component of this goal. As states develop and implement new delivery system models into their Medicaid and CHIP programs, the Commission will examine their impact on access to care for program enrollees.

Endnotes

1 The federal share of total Medicaid spending nationally is generally 57 percent; the federal share was higher in FY 2011 due to a temporary increase in states' Federal Medical Assistance Percentages (FMAPs) under P.L. 111-5 and P.L. 111-226.

2 Additional information will be provided in a forthcoming MACPAC Contractor Report which was the basis of the information presented in this Section.

3 States can require certain groups of Medicaid enrollees to pay enrollment fees, premiums, deductibles, copayments, or similar cost-sharing amounts. There are specific guidelines regarding who may be charged these fees, the services for which they may be charged, and the amount allowed. Non-financial factors, such as time, transportation, and the need for child care, may also impact utilization. See Table 13 in the Commission's March 2012 Report to the Congress.

4 As of May 21, 2012, nine states (Kansas, Maine, Massachusetts, Maryland, Minnesota, New Hampshire, Tennessee, Utah, and Vermont) were using all-payer claims databases, and five states (Colorado, New York, Oregon, Rhode Island, and West Virginia) were in the process of implementing one (All-Payer Claims Database Council 2012).

5 Many HEDIS measures are only applicable to individuals who have been enrolled in a managed care plan for at least a year. Because Medicaid enrollment is often not continuous, a large percentage of enrollees are excluded. A 2003 Government Accountability Office (GAO) study found that 24 percent to 79 percent of enrolled children were excluded. GAO also found that 10 percent to over 60 percent of children enrolled in Medicaid managed care were excluded from CAHPS because they had not been enrolled long enough (GAO 2003).

6 In voting on recommendations, 90 percent of voting members of the Negotiated Rulemaking Committee endorsed the final report, and individual votes were taken on recommendations for each of the six designation types analyzed by the committee. The final report recommends that the Secretary implement the recommendations that received full consensus from the committee (NRC on MUPs and HPSAs 2011).

7 On May 6, 2011, CMS published the proposed rule, "Medicaid program: Methods for assuring access to covered Medicaid services" consistent with requirements under Section 1902 (a)(30)(A). Public comments were accepted for 60 days after the date of publication. No final rule has been published (CMS 2011).

References

Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services. 2011. Nationwide HCUP databases. Rockville, MD: AHRQ. http://www.hcup-us.ahrq.gov/databases.jsp.

All-Payer Claims Database Council. 2012. Interactive state reports map, as of May 21, 2012. http://www.apcdcouncil. org/state/map.

Allison, M.A., L.A. Crane, and B.L. Beaty, et al. 2007. Schoolbased health centers: Improving access and quality of care for low-income adolescents. *Pediatrics* 120, no. 4: 887–894.

Bindman, A. 2010. An early warning system to monitor health care access among Medicaid and CHIP beneficiaries: Key issues. Presentation before the Medicaid and CHIP Payment and Access Commission, December 10, 2010, Washington, DC. http://www.macpac.gov/home/ transcripts/MACPAC_2010-12_Transcript.pdf.

Brener, N.D., L. Wheeler, and L.C. Wolfe, et al. 2007. Health services: Results from the School Health Policies and Programs Study 2006. *Journal of School Health* 77, no. 8: 464–485.

California Department of Health Care Services (DHCS). 2011. *Monitoring access to Medi-Cal covered healthcare services*. Sacramento, CA: DHCS. http://www.dhcs.ca.gov/ Documents/Rate%20Reductions/Developing%20a%20 Healthcare%20Access%20Monitoring%20System.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2011. Medicaid program: Methods for assuring access to covered Medicaid services. Proposed Rule. *Federal Register* 76, no. 88 (May 6): 26341-26362. http://www.gpo.gov/fdsys/pkg/FR-2011-05-06/pdf/2011-10681.pdf.

Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services. 2012a. Health professional shortage areas. Rockville, MD: HRSA. http://datawarehouse.hrsa.gov/hpsadetail.aspx.

Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services. 2012b. HPSA designation criteria. Rockville, MD: HRSA. http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/designationcriteria. html.

Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services. 2012c. Guidelines for primary medical care/dental HPSA designation. Rockville, MD: HRSA. http:// bhpr.hrsa.gov/shortage/hpsas/designationcriteria/ medicaldentalhpsaguidelines.html. Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services. 2011. Health center data: What is the UDS? Rockville, MD: HRSA. http://bphc.hrsa.gov/healthcenterdatastatistics/index.html.

Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services. 1995. Medically Underserved Areas & Populations (MUA/Ps). Rockville, MD: HRSA. http://bhpr.hrsa.gov/shortage/muaps/index. html.

Jordan, A. 2012. Summary of activities of the HRSA Negotiated Rulemaking Committee on Medically Underserved Areas and Health Professional Shortage Areas. Presentation before the Medicaid and CHIP Payment and Access Commission, May 22, 2012, Washington, DC. http://www.macpac.gov/home/meetings/2012-05.

Lake, T., M. Gold, and A. Ciemnecki, et al. 2004. *Results from the 2003 targeted beneficiary survey on access to physician services among Medicare beneficiaries*. Report to CMS, contract no. 500-01-0025(01). Cambridge, MA: Mathematica Policy Research. http://www.mathematica-mpr.com/publications/ PDFs/targetben.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2011a. *Report to the Congress on Medicaid and CHIP*. March 2011. Washington, DC: MACPAC. http://www. macpac.gov/reports.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2011b. Report to the Congress: The evolution of managed care in Medicaid. June 2011. Washington, DC: MACPAC. http://www.macpac.gov/reports.

Medicare Payment Advisory Commission (MedPAC). 2012. Physician and other health professional services. In *Report to Congress on Medicare payment policy*. March 2012. Washington, DC: MedPAC. http://www.medpac.gov/documents/Mar12_ EntireReport.pdf.

National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. 2010. National Health Interview Survey: The principal source of information on the health of the U.S. population. Hyattsville, MD: NCHS. http://www. cdc.gov/nchs/data/nhis/brochure2010January.pdf.

National Commission on Quality Assurance (NCQA). 2012. Summary table of measures, product lines and changes. http://www.ncqa.org/tabid/187/Default.aspx and http://www.ncqa.org/LinkClick.aspx?fileticket=O-31v4G27sU%3d&tabid=1415. Negotiated Rulemaking Committee on the Designation of Medically Underserved Populations and Health Professional Shortage Areas. (NRC on MUPs and HPSAS). 2011. Final Report to the Secretary. http://www.hrsa.gov/ advisorycommittees/shortage/nrmcfinalreport.pdf.

Office of Inspector General (OIG), U.S. Department of Health and Human Services. 2009. Medicaid managed care encounter data: Collection and use. Washington, DC: OIG. http://oig.hhs.gov/oei/reports/oei-07-06-00540.pdf.

Office of Inspector General (OIG), U.S. Department of Health and Human Services. 2005. *Status of the Rural Health Clinic Program*. Washington, DC: OIG. http://oig.hhs.gov/ oei/reports/oei-05-03-00170.pdf.

Salinsky, E. 2010. Health care shortage designations: HPSA, MUA, and TBD. Washington, DC: National Health Policy Forum. http://www.nhpf.org/library/background-papers/BP75_HPSA-MUA_06-04-2010.pdf.

State of Alaska Department of Health and Social Services. Communication with MACPAC staff. May 14, 2012.

United States General Accounting Office (GAO). 2003. Medicaid and SCHIP: States use varying approaches to monitor children's access to care. Report no. GAO-03-222. Washington, DC: GAO. http://www.gao.gov/assets/240/236839.pdf.

United States Government Accountability Office (GAO). 2006. *Health professional shortage areas: Problems remain with primary care shortage area designation system*. Report no. GAO-07-84. Washington, DC: GAO. http://www.gao.gov/ new.items/d0784.pdf.

Section A Annex

Health Resources and Services Administration Health Professional Shortage Areas and Medically Underserved Areas/Medically Underserved Populations

HRSA has developed special designations to indicate provider shortage areas, including shortages that may affect access to providers for Medicaid and CHIP enrollees. HRSA uses two provider shortage designations—the Health Professional Shortage Area (HPSA) and Medically Underserved Area (MUA)/Medically Underserved Population (MUP)—to identify counties and subcounties in states that experience health professional shortages or unmet needs for health care services.

HPSA Designations. There are HPSA designations for three types of services: primary care, dental, and mental health. Current HPSA criteria are based largely on population-to-provider ratios for primary care physicians, dentists, and mental health providers within a state and can be for the entire population of a geographic area, a specific underserved population within an area, or certain facilities. For each of the three service types, geographic areas, population groups, and facilities able to document population-to-provider ratios exceeding the designated thresholds highlighted in Table a-A1 may be granted HPSA designations.

- **Geographic area designations.** A large portion of primary care and mental health HPSAs are based on shortages experienced by the general population. It is reasonable to assume that the Medicaid and CHIP enrollees residing in these areas also experience a shortage of providers.
- Population group designations. HPSA designations exist for specific population groups such as American Indians or Alaskan Natives, and other populations isolated by linguistic, economic, or cultural barriers. In addition, there are population group designations specific to the low-income population, which would include Medicaid and CHIP enrollees, and a Medicaid-specific designation based on the provider supply available to Medicaid enrollees. There are relatively few Medicaid designations in only nine states, as summarized in Table a-A2.
- Facility designations. Designations may also be granted to individual health care facilities such as federal or state correctional institutions or public or non-profit medical facilities that provide care to HPSA-designated areas or population groups, if the facility can demonstrate that its capacity is insufficient to serve the designated population adequately.

TABLE a-A1. Current Thresholds Used in HPSA Designations									
Service	Geographic HPSAs ¹	Population Group HPSAs	Facility HPSAs ²						
Primary care ³	≥ 3,500:1	≥ 3,000:1	Federal/state correctional internees per year to primary care physicians serving institution ratio \geq 1,000:1. Public and/or non-profit medical facilities must demonstrate they provide primary medical care to an area or population with a primary care HPSA designation and have insufficient capacity to meet those needs.						
Dental	≥ 5,000:1	≥ 4,000:1	Federal/state correctional internees per year to dentists serving institution ratio $\ge 1,500:1.$ Public and/or non-profit private dental facilities must provide general dental care services to an area or population designated as dental HPSA and have insufficient capacity to meet those needs.						
Mental health⁴	Population-to-provider ratio $\geq 6,000:1$ AND Population-to- psychiatrist ratio $\geq 20,000:1$ OR Population-to-provider ratio $\geq 9,000:1$ OR Population-to-psychiatrist ratio $\geq 30,000:1$	Population-to-provider ratio \geq 4,500:1 AND Population-to-psychiatrist ratio \geq 15,000:1 OR Population-to-provider ratio \geq 6,000:1 OR Population-to-psychiatrist ratio \geq 20,000:1	Federal/state correctional internees per year to psychiatrists serving institution ≥ 2,000:1. State and county mental health hospitals' ⁵ number of workload units ⁶ per psychiatrist available at the hospital exceeds 300. Community mental health centers and other public and non-profit facilities. ⁷						

Notes:

1 Population group thresholds may be applied if a geographic area qualifies as "high-need."

2 Federal/state correctional institutions must have at least 250 inmates.

3 Primary care physicians are defined as Medical Doctors and Doctors of Osteopathy practicing in general practice, family practice, general internal medicine, pediatrics, and obstetrics-gynecology.

4 Mental health providers are defined as psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists, and marriage and family therapists.

5 Must have an average daily inpatient amount of at least 100.

6 Calculated using the following formula: total workload units = average daily inpatient census + 2 x (number of inpatient admissions per year) + 0.5 x (number of admissions to day care and outpatient services per year).

7 These facilities must provide or be responsible for providing mental health services to an area or population group designated as having a shortage of mental health professionals and have insufficient capacity to meet the psychiatric needs of the area or population group.
Source: HRSA 2012b

MUA designations. MUA/MUPs are areas or populations designated by HRSA as having: too few primary care providers, high infant mortality, high poverty, and a high proportion of the population that is aged 65 or older. The criteria for MUA/MUP designation is based on the Index of Medical Underservice, which incorporates four variables: (1) ratio of primary care physicians per 1,000 population, (2) percent of population below the federal poverty level, (3) percent of population age 65 and older, and (4) infant mortality rate.

Designations for specific underserved populations within a geographic area are used for populations with economic barriers—such as low-income or Medicaid-eligible populations—or populations facing cultural or linguistic access barriers to primary care services. Populations not meeting the MUA criteria, but experiencing "unusual local conditions which are a barrier to access to or the availability of personal health services," can receive an "exceptional MUP" designation (HRSA 1995). As of May 2012, there were 3,470 MUA designations, 470 MUP designations, and 212 Exceptional MUP designations (HRSA 2012a).

More than 30 federal programs use HPSA and MUA designations to determine the potential for federal aid, assistance, and special policy considerations. Table a-A3 summarizes select federal programs that use the various designations. In addition, a number of health professions training programs in HRSA's Bureau of Health Professionals use HPSA and MUA designations in funding preference criteria, and a variety of state programs use them as well.

	Primary Care	Dental	Mental Health	
Total HPSA-designated areas	5,899	4,551	3,751	
Service area designations	1,434	708	1,043	
Population group designations	1,354	1,470	141	
Medicaid designations	74	145	27	
Facility designations	3,111	2,373	2,567	
States with Medicaid designations	NY, MD, IL, IA, KS, AR	NY, MD, IL, MI, IA, KS, NE	MD, NY, OH	
Note: Data as of May 28, 2012. Source: HRSA 2012a				

TABLE a-A2. HPSA Designations

TABLE a–A3. Selected Programs Using HPSA or MUA/MUP Designations

Shortage Designation Option	National Health Service Corps	Federally Qualified Health Center Program	CMS Medicare Incentive Payment	CMS Rural Health Clinic Program	J-1 Visa Waiver
Geographic Health Professional Shortage Area (HPSA)	Х		Х	Х	х
Population HPSA	Х			Х	Х
Facility HPSA	Х				Х
Medically Underserved Area (MUA)		Х		Х	Х
Medically Underserved Population (MUP)		Х			х
Exceptional MUP		Х			Х
State governor's certified shortage area				Х	

Note: For more detailed information on the selected programs, visit the following sites:

National Health Service Corps: http://nhsc.hrsa.gov/

Federally Qualified Health Center Program: http://bphc.hrsa.gov/

CMS Medicare Incentive Payment: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HPSAPSAPhysicianBonuses

CMS Rural Health Clinic Program: https://www.cms.gov/Center/Provider-Type/Rural-Health-Clinics-Center.html

J-1 Visa Waiver: http://travel.state.gov/visa/temp/info/info_1288.html

Source: Jordan 2012