United States Government Accountability Office

Report to Congressional Requesters

August 2019

MEDICAID

Efforts to Identify, Predict, or Manage High-Expenditure Beneficiaries

Why GAO Did This Study

Medicaid, a joint federal-state health care financing program, is one of the nation's largest sources of health care coverage for low-income and medically needy individuals. A 2016 report published by the National Governors Association noted that high-expenditure Medicaid beneficiaries typically have poorly managed chronic conditions and a host of unmet social needs that result in potentially preventable use of costly services, such as emergency department visits. The report also noted that identifying and better managing those beneficiaries are key to reducing costs and improving outcomes.

GAO was asked to examine state and federal efforts to manage costs and improve care coordination for high-expenditure Medicaid beneficiaries. This report describes (1) approaches selected states used to identify or predict high-expenditure Medicaid beneficiaries; (2) strategies selected states used to manage beneficiaries' health care costs while ensuring quality of care; and (3) resources CMS provided to states to help them identify, predict, or better manage high-expenditure beneficiaries.

GAO interviewed officials from CMS, as well as Medicaid officials from a nongeneralizable sample of seven states (Indiana, Nevada, Pennsylvania, South Carolina, South Dakota, Vermont, and Washington) and five MCOs. States were selected for variation in their total Medicaid enrollment, enrollment in Medicaid managed care, percentage of state population living in rural settings, and percentage of state population with disabilities. MCOs were selected based on state suggestions, and varied in terms of whether they operated nationally or on a state or regional basis.

What GAO Found

GAO previously reported that in fiscal years 2009 through 2011, the most expensive 5 percent of Medicaid beneficiaries accounted for nearly half of the expenditures for all beneficiaries; others have also found that a small percentage of beneficiaries account for a disproportionately large share of Medicaid program expenditures. These high-expenditure beneficiaries are an extremely diverse population with varying needs. GAO found that the seven selected states identified or predicted high-expenditure Medicaid beneficiaries using statistics and other approaches. For example, states used risk scores, which estimate an individual beneficiary's expected health care expenditures relative to the average expenditures for beneficiaries in the group. Other approaches included examining service utilization data to identify statistical outliers and using diagnoses, service utilization and claims expenditure thresholds, or clinical judgment to identify or predict high-expenditure beneficiaries.

To manage costs and ensure quality of care for high-expenditure beneficiaries, the seven selected states used care management and other strategies.

- **Care management**. All the selected states provided care management—providing various types of assistance such as coordinating care across different providers to manage physical and mental health conditions more effectively—for beneficiaries in their fee-for-service delivery systems. Five of the states also contracted with managed care organizations (MCO) to deliver services for a fixed payment and required the MCOs to ensure the provision of care management services to high-expenditure beneficiaries.
- **Other strategies**. Some of the seven selected states used additional strategies to manage care for high-expenditure beneficiaries. For example, Indiana officials described a program to restrict, or "lock in," a beneficiary who has demonstrated a pattern of high utilization to a single primary care provider, hospital, and pharmacy, if other efforts to change the beneficiary's high utilization were unsuccessful.

The Centers for Medicare & Medicaid Services (CMS), which oversees the Medicaid program at the federal level, offered optional tools and other resources to support states' efforts to identify or better manage high-expenditure beneficiaries. For example, CMS officials said states received access to resources and technical assistance on establishing health home programs—which seek to better coordinate care for those with chronic conditions—including how to focus on high-expenditure beneficiaries. CMS officials noted that they supported 23 states' and the District of Columbia's health home programs. CMS also offered several resources that, while not designed specifically to target high-expenditure beneficiaries, have been used to support states in identifying or better managing their care. For example, CMS's Medicaid Innovation Accelerator Program offered targeted technical support to states' Medicaid agencies in building their data analytic capacity as they designed and implemented delivery system reforms, which could be used to identify high-expenditure beneficiaries. Officials in two selected states reported that these tools were beneficial for managing the health care costs associated with high-expenditure beneficiaries. HHS provided technical comments, which GAO incorporated as appropriate.

_____ **United States Government Accountability Office**

Contents

Abbreviations

ACO	accountable care organization
CMS	Centers for Medicare & Medicaid Services
MCO	managed care organization

August 13, 2019

The Honorable Charles E. Grassley
Chairman
Committee on Finance
United States Senate

The Honorable Greg Walden
Republican Leader
Committee on Energy and Commerce
House of Representatives

The Honorable Michael C. Burgess
Republican Leader
Subcommittee on Health
Committee on Energy and Commerce
House of Representatives

Medicaid, a joint federal-state health care financing program, is one of the nation's largest sources of health care coverage for low-income and medically needy individuals. In fiscal year 2018, Medicaid covered an estimated 75 million beneficiaries and expenditures totaling about $629 billion. Annual expenditures are projected to reach $1 trillion by 2026 and are placing a growing strain on federal and state budgets.[1]

We and others have found that a small percentage of beneficiaries account for a disproportionately large share of Medicaid program expenditures.[2] These high-expenditure Medicaid beneficiaries are an extremely diverse population with varying medical, behavioral, and psychosocial needs. For example, some high-expenditure Medicaid beneficiaries may have chronic conditions, such as diabetes or behavioral

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[1]See Department of Health and Human Services, Centers for Medicare & Medicaid Services, Office of the Actuary, *2017 Actuarial Report on the Financial Outlook for Medicaid* (Washington, D.C.: 2018).

[2]For example, see GAO, *Medicaid: Demographics and Service Usage of Certain High-Expenditure Beneficiaries*, GAO-14-176 (Washington, D.C.: Feb. 19, 2014); and *Medicaid: A Small Share of Enrollees Consistently Accounted for a Large Share of Expenditures*, GAO-15-460 (Washington, D.C.: May 8, 2018); as well as S. A. Pires, K. E. Grimes, K. D. Allen, T. Gilmer, and R. M. Mahadevan, *Examining Children's Behavioral Health Service Utilization and Expenditures* (Hamilton, N.J.: Center for Health Care Strategies, Inc., 2013).

health issues; some may be children staying in a hospital or elderly receiving long-term services and supports; some may need housing or food assistance. A 2016 report published by the National Governors Association noted that high-expenditure Medicaid beneficiaries typically have multiple poorly managed chronic conditions and a host of unmet social needs that result in potentially preventable use of costly services, such as emergency department visits.[3] That same report noted that key components of reducing costs and improving outcomes include identifying high-expenditure beneficiaries whose needs are best served through well-coordinated services and linking those beneficiaries to appropriate providers. Although federal Medicaid regulations do not require states to identify high-expenditure beneficiaries, some states have taken steps to do so.

In the context of these issues, you asked us to examine state and federal efforts to manage costs and improve care coordination for high-expenditure Medicaid beneficiaries. This report describes

1. approaches selected states used to identify or predict high-expenditure Medicaid beneficiaries;

2. strategies selected states used to manage the health care costs while ensuring quality of care for such beneficiaries; and

3. resources the Centers for Medicare & Medicaid Services (CMS) provided to states to help them identify, predict, or better manage high-expenditure Medicaid beneficiaries.

To answer all three questions, we interviewed officials from a nongeneralizable sample of seven state Medicaid agencies; specifically, Indiana, Nevada, Pennsylvania, South Carolina, South Dakota, Vermont, and Washington. We selected these states to obtain variation in (1) their total Medicaid enrollment as of July 2016; (2) the degree to which the state's Medicaid population was enrolled in managed care as of July 2016; (3) the percentage of the state's total population living in rural settings based on 2010 Census data; and (4) the percentage of the state population with disabilities based on the 2017-2018 Area Health

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[3]See S. Wilkniss and C. Kelleher, *Medicaid High-Need, High-Cost Programs: Promising Practices for Evaluation Metrics* (Washington, D.C.: National Governors Association Center for Best Practices, 2016).

Resource File.[4] We also interviewed officials from a nongeneralizable sample of five managed care organizations (MCO) in five of the selected states (Indiana, Nevada, Pennsylvania, South Carolina, and Washington); Vermont's all-payer accountable care organization (ACO); and officials from CMS and its contractors.[5] We selected these MCOs after asking the officials from each of the five state Medicaid agencies to identify which of their Medicaid MCOs might be able to provide good examples of practices related to our objectives. We then selected the organizations to provide us with variation in whether they operated nationally or on a state or regional basis. South Dakota does not use managed care, so we only spoke with state officials. In conducting this work, we relied on officials from states and organizations to explain how they identified, predicted, or managed beneficiaries they considered to be high-expenditure, and their definitions and responses varied widely. For the purpose of this report, we use the term "high-expenditure" to refer to beneficiaries who account for a disproportionately large share of Medicaid expenditures, or are at risk for doing so in the future.

We conducted this performance audit from August 2018 through September 2019 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

At the federal level, CMS, within the Department of Health and Human Services, is responsible for overseeing the design and operation of states' Medicaid programs, and states administer their respective Medicaid programs' day-to-day operations. As a comprehensive health benefit program for vulnerable populations, each state Medicaid program, by law, must cover certain categories of individuals and provide a broad array of benefits. Within these requirements, however, states have significant flexibility to design and implement their programs, resulting in more than

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[4]The Area Health Resource File is a federal data set comprised of data collected from more than 50 sources and contains thousands of variables related to health care access at the county level.

[5]An MCO is an organization that contracts with the state to provide health care services to Medicaid beneficiaries. An ACO is a group of coordinated health care providers that are held responsible for the care of a group of patients.

50 distinct state-based programs. These variations in design have implications for program eligibility and services offered, as well as for how expenditures are reported and services delivered.

Medicaid Service Delivery

In administering their own programs, states may provide Medicaid services under a fee-for-service delivery model or a managed care service delivery model. Under a fee-for-service model, states make payments directly to providers for services provided, and the federal government generally matches state expenditures for such services on the basis of a statutory formula. Under a managed care model, states pay MCOs a capitation payment, which is a fixed periodic payment per beneficiary enrolled in an MCO—typically, per member per month. MCOs pay health care providers for the services delivered to enrollees.[6] In contrast, ACOs are organizations of health care providers and suppliers that come together voluntarily to provide coordinated care to patients with the goal of reducing spending while improving quality. States vary in terms of the types of managed care arrangements used, the populations enrolled, and the parts of the state covered by managed care.
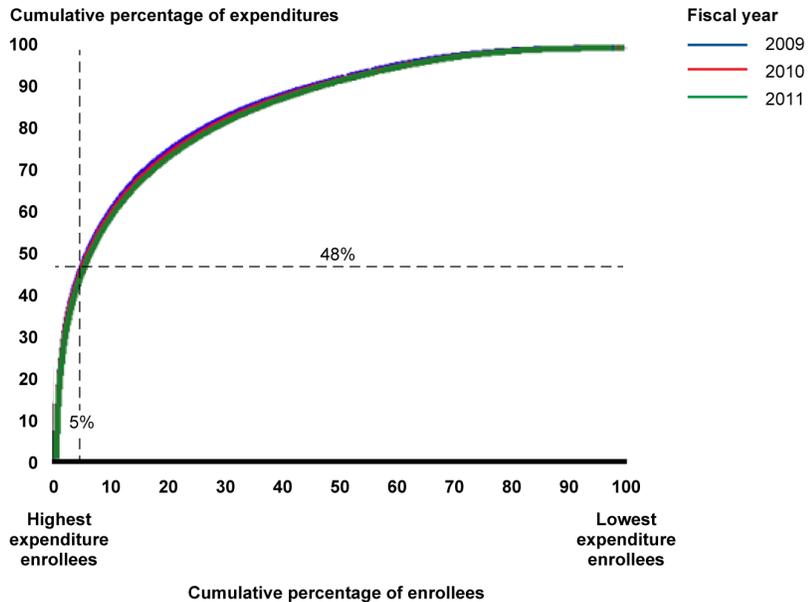
Service Utilization and Expenditures

We previously reported that a small share of beneficiaries in each state collectively accounted for a disproportionately large share of total Medicaid expenditures.[7] We found that in fiscal years 2009 through 2011, the most expensive 5 percent of Medicaid beneficiaries consistently accounted for almost half of the expenditures for all Medicaid beneficiaries. (See fig. 1.)

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[6]States may have different types of Medicaid managed care arrangements, some of which have a limited benefit package or do not assume financial risk for the services provided. Except as otherwise noted, in this report, we are referring to comprehensive, risk-based managed care, which is the most common managed care arrangement. An MCO contracts with a state to provide comprehensive health care services through its network of providers, is responsible for ensuring access to Medicaid services, and is at financial risk for the cost of providing those services.

[7]See GAO, *Medicaid: Demographics and Service Usage of Certain High-Expenditure Beneficiaries*, GAO-14-176 (Washington, D.C.: Feb. 19, 2014), which reported findings based on 2009 data for dually eligible beneficiaries and for those who were only enrolled in Medicaid; and *Medicaid: A Small Share of Enrollees Consistently Accounted for a Large Share of Expenditures*, GAO-15-460 (Washington, D.C.: May 8, 2018), which reported findings based on data from 2009 through 2011 for those who were only enrolled in Medicaid.

Figure 1: Distribution of Medicaid Expenditures Among Beneficiaries Only Enrolled in Medicaid, Fiscal Years 2009 through 2011

Source: GAO analysis of data from the Centers for Medicare & Medicaid Services. | GAO-19-569

Examining beneficiaries who were enrolled only in Medicaid, we also found that the most expensive 5 percent of beneficiaries were much more likely to have certain conditions—such as asthma, diabetes, and behavioral health conditions—than all other beneficiaries enrolled only in Medicaid. Examining 2009 data, we found that about 65 percent of the total expenditures for high-expenditure beneficiaries enrolled only in Medicaid were for hospital services and long-term services and supports, with the remaining 35 percent of expenditures for drugs, payments to managed care organizations and premium assistance, and non-hospital acute care.

Other studies have also found similar patterns of service utilization and expenditures within the Medicaid population. For example, a January 2018 report noted that while beneficiaries who are dually eligible for Medicare and Medicaid constituted about 15 percent of Medicaid beneficiaries in 2013, they accounted for nearly one-third of Medicaid

GAO-19-569 High-Expenditure Beneficiaries

spending.[8] A study examining data on children's use of behavioral health services in Medicaid found that in 2005, about 10 percent of children in Medicaid received behavioral health services, but those services accounted for about 38 percent of spending on the overall Medicaid child population.[9]

Care Management

Care management programs can be used as efforts to manage the cost and quality of health care services delivered to high-expenditure Medicaid populations, with the aim of improving outcomes and achieving cost savings. Generally, care management programs seek to assist consumers manage physical and mental health conditions more effectively, for example, by assessing patient needs and coordinating care across different providers. The general goal of care management is to achieve an optimal level of wellness and improve coordination of care while providing cost effective, non-duplicative services. Specific definitions for care management and other related terms such as care coordination, case management, and disease management vary. For the purpose of this report, we use care management to refer to these activities unless otherwise specified.

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[8]Some Medicaid beneficiaries are also eligible for Medicare—a federally financed health insurance program for persons 65 years of age or over, certain individuals with disabilities, and individuals with end-stage renal disease—and are characterized as "dually eligible." While dually eligible beneficiaries are diverse in terms of health care needs and service utilization, they include many with extensive health needs and high health care costs. See Medicare Payment Advisory Commission and Medicaid and Children's Health Insurance Program Payment and Access Commission, *Data Book: Beneficiaries Dually Eligible for Medicare and Medicaid* (Washington, D.C.: January 2018).

[9]See S. A. Pires, *Examining Children's Behavioral Health Service Utilization and Expenditures*.

Selected States Identified or Predicted High-Expenditure Medicaid Beneficiaries Using Statistics and Other Approaches

Through interviews with officials, we found that all seven selected states, five MCOs, and the ACO took at least one approach to identify or predict high-expenditure beneficiaries, and some took more than one approach. State officials said they used these approaches to identify or predict high-expenditure beneficiaries among different segments of their Medicaid populations, such as beneficiaries in fee-for-service delivery systems or those with certain chronic conditions. The approaches were as follows:

Risk Scores

Officials from most state agencies, MCOs, and the ACO said they used risk scores to identify or predict high-expenditure beneficiaries.[10] Officials from four of the seven selected states, four MCOs, and the ACO said they used software or hired vendors who computed beneficiaries' risk scores based on Medicaid service utilization data.[11] Washington state officials said that in addition to Medicaid service utilization data, they used utilization data from Medicare Parts A, B, and D to compute risk scores for their dual-eligible population.[12] Officials also discussed using the risk scores they computed in different ways. For example, Washington officials said they considered beneficiaries with a risk score of 1.5 or greater to be high expenditure, and they used that risk score as one of the eligibility criteria that must be met to receive certain care management services. In contrast, officials from an MCO in Nevada said they considered risk scores alongside other contextual information, such as the recent diagnosis of a chronic condition, to predict whether the beneficiary would likely generate high expenditures in the future and should be assigned care management services. Officials from three

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[10]A risk score is the ratio of expected—or predicted—health care expenditures for that beneficiary relative to the average health care expenditures for all beneficiaries in a reference population (e.g., adults in Medicaid who qualify for coverage based on a disability). For example, a beneficiary with a risk score of 1.05 would have expected expenditures that were 5 percent greater than the average beneficiary, who is assigned a risk score of 1.00.

[11]The four states were Nevada, South Dakota, Vermont, and Washington. The four MCOs were from Indiana, Nevada, Pennsylvania, and South Carolina.

[12]Medicare consists of Parts A, B, C, and the Part D prescription drug program. Parts A and B, which generally cover physician and hospital services, are known as traditional Medicare or Medicare fee-for-service. Medicare Part C, also known as Medicare Advantage, is a private plan alternative to traditional Medicare, and generally covers all traditional Medicare services.

states, an MCO in South Carolina, and the ACO we interviewed said their software or vendors identified or predicted high-expenditure beneficiaries by using the risk scores they computed to stratify beneficiaries into risk tiers, such as low, medium, and high risk.[13]

Statistical Outliers

Officials from South Carolina's state Medicaid agency and two MCOs from Pennsylvania and Washington said they identified high-expenditure beneficiaries by examining service utilization data to identify statistical outliers or trends. Officials from the two MCOs said they looked for statistical outliers for various types of service utilization, such as emergency department visits, inpatient stays, and pharmacy use. Officials from South Carolina said they built internal software tools to help them easily examine service utilization for various subsets of beneficiaries and services. These officials said they looked for beneficiaries whose utilization appeared to be significantly higher or lower compared with other beneficiaries with similar characteristics, such as among children with Type 1 diabetes or among children in foster care. The officials also said that after they identified those outliers, they examined the reasons for those beneficiaries' utilization patterns to better understand why those beneficiaries were outliers and to take corrective action if appropriate. The officials explained that they did not simply focus on a discrete list of beneficiaries with the highest overall expenditures, because many of those beneficiaries have medical needs that are inherently expensive and cannot be meaningfully improved through intervention.

Diagnoses

Officials from three of the seven state Medicaid agencies and four MCOs said they identified high-expenditure beneficiaries based on diagnoses or other group categorization.[14] Officials commonly said they used chronic conditions, such as end-stage renal disease, the human immunodeficiency virus or acquired immune deficiency syndrome, chronic obstructive pulmonary disease, diabetes, or Hepatitis C. Pennsylvania officials said their list was developed based on clinical experience. Officials from South Carolina said their list of diagnoses was based on a review of conditions associated with high expenditures.

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[13]The three states were Nevada, South Dakota, and Vermont. Risk tiering assigns beneficiaries to distinct risk levels or categories based on multiple factors, including case complexity and cost.

[14]The three states were Pennsylvania, South Carolina, and South Dakota. The four MCOs were from Indiana, Nevada, Pennsylvania, and Washington.

Service Utilization and Claims Expenditure Thresholds	Officials from two state Medicaid agencies—Indiana and Nevada—and all five MCOs said they identified high-expenditure beneficiaries as beneficiaries who exceed certain service utilization or claims expenditure thresholds.[15] Indiana officials said they used service utilization thresholds, such as visiting the emergency room six or more times in the past 6 months. Nevada officials said one of their programs identified high-expenditure beneficiaries as those whose treatment costs exceeded $100,000 over a 12-month period. Officials from the five MCOs offered varying thresholds, such as claims exceeding $100,000 over a 6-month period; claims exceeding $40,000 during a state fiscal year; or stays in a neonatal intensive care unit exceeding 15 days.
Clinical Judgment	Officials from two state Medicaid agencies—Nevada and Pennsylvania—four MCOs, and the ACO said they relied on clinical judgment to decide whether a beneficiary was likely to be high expenditure.[16] Officials from one MCO in Washington said the MCO conducted health assessments of new members to obtain a baseline understanding of their clinical states, which were then used to stratify beneficiaries and identify appropriate staff to address their needs. Similarly, officials from Pennsylvania and three MCOs said clinical reviews of beneficiaries' needs or histories were triggered by providers, caregivers, or self-referrals for care management or other services. Officials from the ACO said that while risk scores made initial predictions about beneficiaries' risk for generating high expenditures, those predictions could be overridden by clinical judgment.

Selected States Used Care Management and Other Strategies to Manage Costs for High-Expenditure Medicaid Beneficiaries

Officials from all seven selected states, all five MCOs, and the ACO we interviewed said they used care management to manage the costs and quality of care for high-expenditure Medicaid beneficiaries. In addition, some states used other strategies, such as strategies involving coverage policies, payment incentives, and restrictions on the number of providers certain beneficiaries could use. Across states that evaluated these efforts to manage costs and quality of care, results were mixed.

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[15]The five MCOs were from Indiana, Nevada, Pennsylvania, South Carolina, and Washington.

[16]The four MCOs were from Indiana, Nevada, Pennsylvania, and Washington.

All Selected States Used Care Management to Manage Costs for High-Expenditure Medicaid Beneficiaries

Officials from all of the seven state Medicaid agencies we interviewed reported that they provided care management for high-expenditure beneficiaries in their fee-for-service delivery systems, for example, by assessing patient needs and coordinating care across providers, in an attempt to manage costs and ensure quality care. Further, the six selected states with MCOs or ACOs required these organizations to provide care management to high-expenditure beneficiaries enrolled in managed care. Officials also reported barriers to their efforts to provide care management.

Care Management in Fee-for-Service Medicaid

Officials from all of the seven state Medicaid agencies we interviewed reported that they provided care management for high-expenditure beneficiaries in their fee-for-service delivery system, to manage the cost and quality of their care. The organization and scope of the care management programs they described vary in some cases. For example:

- Pennsylvania provided care management for beneficiaries in fee-for-service through the state's "intensive case management" unit, a unit of providers that contact beneficiaries by phone to ensure that they get the care they need. Care management is provided to newly enrolled Medicaid beneficiaries who are identified as high-expenditure until the beneficiary selects a managed care plan, typically within 30 days, and to certain other beneficiaries.[17] State officials said that of the approximately 150,000 beneficiaries in fee-for-service, they provide care management to about 1,000 each month.

- Nevada implemented mandatory care management services for high-expenditure fee-for-service beneficiaries in rural areas of the state through a contract with a care management organization, which was paid to reach out to high-expenditure beneficiaries, assess their needs, and connect them with their medical providers.[18] The organization delivered care management through regional care teams geographically located in beneficiaries' communities, which coordinated with the beneficiaries' providers to implement personalized care plans and manage follow-up appointments and

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[17]Care management was also provided to high-expenditure beneficiaries dually eligible for Medicaid and Medicare, a group that was not historically eligible for managed care in Pennsylvania, but is beginning to be enrolled in managed care, according to state officials.

[18]The Care Management Organization was not a risk-based managed care organization, in that it was not at risk for the cost of medical care provided to these beneficiaries. In Nevada, beneficiaries in the two most populous counties are generally enrolled in managed care, and those in other counties are in fee-for-service.

services. High-expenditure beneficiaries were assigned to one of eight care management programs based on the beneficiary's qualifying condition, such as whether they had cancer, chronic kidney disease, or a mental health diagnosis.

- South Dakota implemented a health home program in 2013, which paid local primary care clinics, community mental health centers, and Indian Health Service facilities to provide care management to high-expenditure Medicaid beneficiaries.[19] Each clinic or center had a care coordinator who reached out to high-expenditure beneficiaries to initiate care management and connect them with their primary care providers. These beneficiaries were placed in one of four categories indicating the level of care coordination they needed based on the severity of their illness and risk of future costs. The program helped beneficiaries create a care plan, set goals to address their particular care needs, and manage their conditions. In state fiscal year 2018, around 5,800 recipients received services through more than 100 health home clinics in South Dakota.[20]

- Washington State also implemented a health home program in 2013 in which care management activities were coordinated through "lead" entities, such as Area Agencies on Aging and other community-based organizations.[21] These entities established networks of care coordination organizations representing primary care, mental health, long term care, chemical dependency providers, and specialty providers. The lead entities conducted outreach to high-expenditure beneficiaries to connect them with a care manager, who might be a

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[19]In 2010, the Patient Protection and Affordable Care Act established a state option to provide health homes for Medicaid enrollees with chronic conditions, beginning January 1, 2011, which is called the Health Home State Plan Option. Health homes integrate physical and behavioral health (both mental health and substance abuse) and long-term services and supports for high-need, high-cost Medicaid populations. See Pub. L. No. 111-148, § 2703, 124 Stat. 119, 319 (codified as amended at 42 U.S.C. § 1396w-4).

[20]See South Dakota Department of Social Services, *South Dakota Medicaid Report, SFY18* (November, 2018).

[21]Area Agencies on Aging are public or private nonprofit agencies designated by states to coordinate services at the regional and local level that help older adults, including social and nutrition services supported by federal funds authorized under the Older Americans Act of 1965, as amended. See 42 U.S.C. § 3001, et seq.

nurse, physician assistant, social worker, behavioral health professional, or chemical dependency professional.[22]

Care Management in Managed Care

State Medicaid officials who have MCOs and ACOs within their states said that they required these organizations to provide care management to high-expenditure beneficiaries to manage the cost and quality of their care.[23] Examples of states' care management requirements included steps such as beneficiary and provider outreach, conducting screenings or health assessments, and developing care plans (see sidebar). Some requirements specified the minimum frequency for conducting outreach and what information and data must be reported to the state regarding care management activities (see sidebar).

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[22]Washington's Health Homes Program was incorporated into the state's Managed Fee-for-Service model demonstration under the Financial Alignment Initiative, a program created by CMS to test integrated care models for dually eligible beneficiaries.

[23]The states with MCOs were Indiana, Nevada, Pennsylvania, South Carolina, and Washington, and the state with an ACO was Vermont.

Officials from the MCOs and the ACO that we interviewed in these six states confirmed that they provided care management to high-expenditure beneficiaries. MCO and ACO officials described various aspects of their care management programs. For example:

• According to officials from an Indiana MCO, the MCO operated different care management programs for high-expenditure beneficiaries depending on their clinical condition or other characteristics. Examples include programs for beneficiaries with certain chronic conditions (such as diabetes, congestive heart failure, and asthma), programs for beneficiaries with complex medical conditions who are at high risk of not following their prescribed treatment, and programs for pregnant women with identified conditions that put them at high risk for poor outcomes.

• Officials from the South Carolina MCO told us that the MCO had a standard model of care management for high-risk beneficiaries, but each clinical department in the MCO—for example, Obstetrics or Cardiology—established specific plans for care management within their area of care. Care managers in these departments—nurses or social workers—were responsible for coordinating with a beneficiary's primary care provider to ensure that the beneficiary is appropriately referred to specialists. Care managers can contact beneficiaries by phone, but they are also based in the community, such as at hospitals and state mental health clinics.

• Officials from the ACO in Vermont said that the ACO paid providers that were part of their network—such as primary care offices, home health agencies, and mental health agencies—to serve as beneficiaries' care managers. Beneficiaries select one provider to be their "lead care coordinator" based on who they have the strongest relationship and trust with, and this provider receives enhanced payments from the ACO to support coordination with other providers in the beneficiary's care team. Care team members communicate with each other through a software tool provided by the ACO, which maintains updated information on beneficiaries' conditions and the care received.

Barriers to Care Management for High-Expenditure Beneficiaries

Officials we spoke to from the selected states, MCOs, and the ACO identified barriers to implementing care management for some high-expenditure Medicaid beneficiaries, including the inability to contact beneficiaries, the lack of social supports—that are part of what is referred

to as "social determinants of health"—and shortages of providers or care management staff in rural areas.[24]

- **Difficulties contacting beneficiaries.** The lack of valid contact information can result from missing or outdated information, transiency and homelessness, and beneficiary reliance on cell phones with limited minutes. Officials described efforts they had taken to address this barrier, including asking pharmacies to confirm and get updated information when beneficiaries pick up prescriptions; using e-mail, which officials stated is more consistent than physical addresses; and conducting direct outreach in emergency rooms.

- **Social determinants of health.** The effectiveness of care management in addressing the health needs of high-expenditure beneficiaries can be hindered by the lack of social supports. Officials said that in order to help beneficiaries manage their medical needs, care managers sometimes needed to address these social determinants of health, such as lack of transportation to medical appointments, lack of stable housing, and inconsistent access to food and other basic resources (see sidebar). At the same time, states and MCOs can face challenges to addressing social determinants of health, such as lack of data on social determinants of health and a lack of understanding about the effect of social determinants of health on health care utilization, which if available could help bolster program investments in those areas.[25]

- **Staff shortages in rural areas.** Efforts to provide care management and medical services can be hindered by staff shortages in rural areas. Officials with one state Medicaid agency's health home program said there was a shortage of individuals in rural areas willing to provide care management to high-expenditure beneficiaries. MCO officials in another state said their ability to care for beneficiaries in rural areas was also affected by a shortage of care managers.

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[24]Social determinants of health include factors like socioeconomic status, education, neighborhood and physical environment, employment, and social support networks, as well as access to health care. Addressing these is important for improving health and reducing longstanding disparities in health and health care.

[25]While there are certain Medicaid program options available to states that allow them to address some aspects of social determinants of health for beneficiaries, there are also restrictions on the use of Medicaid funds for certain purposes. For example, states generally cannot use Medicaid funds to pay for room and board, but they can provide referral to community and social support services.

In Addition to Care Management, Some Selected States Used Other Strategies to Manage High-Expenditure Beneficiaries

Other strategies, in addition to care management, reported by selected states—South Carolina, Nevada, Pennsylvania, and Indiana—to manage the cost and care for high-expenditure Medicaid beneficiaries included coverage policy changes, payment incentives, and restrictions on the use of providers.

Coverage policy changes. South Carolina Medicaid officials said that in certain cases they reviewed their coverage policy to see if changes could reduce costs and improve health outcomes for high-expenditure beneficiaries. For example, according to officials, the state had a small number of high-expenditure beneficiaries with Type 1 diabetes that officials thought could benefit from continuous glucose monitoring, which was not covered by their state Medicaid program. The officials said that they wrote a proposal into their state budget and drafted state plan amendment language to address this, though they noted that the proposal had not been implemented as of January 2019.

Payment incentives. Medicaid officials in Nevada and Pennsylvania described efforts to use payment incentives to manage costs for high-expenditure beneficiaries.

- Nevada officials told us that the state's arrangement with its care management organization for high-expenditure beneficiaries included payment incentives related to reductions in cost, as well as performance on certain quality measures, such as immunization rates and treatments for specific conditions such as asthma, coronary artery disease, and heart failure. However, state officials said that they faced difficulties measuring these outcomes. The care management organization did not receive incentive payments for the first year of operation of the program (2014-2015) and state officials said they did not have results on incentive payments for subsequent years.

- Pennsylvania officials told us that in response to the high cost of drugs to treat Hepatitis C, Pennsylvania's Medicaid agency created a risk-sharing arrangement with MCOs that had high-expenditure beneficiaries with Hepatitis C. According to state officials, the MCOs were required to submit their enrollees' Hepatitis C test scores to show whether beneficiaries were obtaining treatment and experiencing improvement. The state then allocated additional funds to MCOs that demonstrated positive quality outcomes, thus saving the cost of re-treating beneficiaries who failed to follow through on treatment.

- The Pennsylvania officials also told us that the state provided payment incentives to MCOs in its Integrated Care Plan Program, in which physical health and behavioral health MCOs coordinate with each other in the care of high-expenditure beneficiaries with persistent serious mental illness, such as schizophrenia, depression, or psychosis.[26] To quality for incentive payments, these MCOs had to create an integrated care plan for each beneficiary with a qualifying condition. The state's Medicaid agency identified outcome measures that MCOs were held accountable to in calendar year 2018 related to emergency department utilization, inpatient admissions, inpatient readmissions, prescription medication adherence, and engagement in treatment for substance use disorders. As metrics improved, MCOs become eligible for incentives. According to state officials, Pennsylvania allocated $10 million for Integrated Care Plan program incentive payments for calendar year 2018.

Restrictions on the use of providers. Indiana Medicaid officials described their program to address over-utilization of services by certain high-expenditure beneficiaries who may be engaged in doctor or pharmacy shopping—a strategy of using multiple providers that results in over-utilization or improper utilization of prescription drugs or other services. According to the officials, if other efforts to address a beneficiary's over-utilization fail over a 2- to 4-month period, the beneficiary may be enrolled in Indiana's Right Choices Program. This program restricts, or "locks in," the beneficiary to a single physician, pharmacy, and hospital. Officials said that this program has helped to ensure that the provider is aware of the beneficiary's history and has proven effective in getting beneficiaries to change their behavior. In addition to using the program for Medicaid beneficiaries enrolled in fee-for-service, MCOs are provided with a report of their beneficiaries who have high-utilization levels so that the MCO can determine if any of these beneficiaries should be enrolled in the program.

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[26]Pennsylvania's state Medicaid agency contracts with limited benefit plans that provide a narrow set of benefits such as behavioral health services.

| Across Selected States that Assessed the Effect of their Strategies on Medicaid Expenditures and Other Outcomes, Results Were Mixed | While some of the selected state Medicaid agencies reported that their efforts to manage costs and care for high-expenditure beneficiaries showed positive results, officials in other states reported mixed or inconclusive findings. Medicaid officials in four states—Pennsylvania, South Dakota, Vermont, and Washington—said their assessment of efforts to manage costs and care for high-expenditure beneficiaries showed positive results, such as cost savings or reductions in the use of expensive services. |

- Pennsylvania Medicaid officials said that their Integrated Care Plan Program for high-expenditure beneficiaries with persistent serious mental illness resulted in improvements in utilization, including reductions in inpatient hospitalizations and readmissions.

- South Dakota Medicaid officials found that for 2017, health home participants cost $204 less per month than the comparison group, and experienced an 8 percent decline in emergency room visits from the prior year compared with a 10 percent increase in emergency room visits for the comparison group.[27] The state estimated $7.7 million in costs were avoided.

- Vermont Medicaid officials analyzed utilization of high-expenditure beneficiaries in care management before and after they enrolled. The state reported in 2018 that the rate of inpatient visits per thousand beneficiaries decreased from 600 to 393, and the annual rate of emergency visits per thousand beneficiaries decreased from 1,536 to 1,003.[28]

- An independent evaluation of a demonstration program for dually eligible beneficiaries in Washington that incorporated its Health Homes program found $107 million in Medicare cost savings over its

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[27]See Department of Social Services of South Dakota, *The State of the South Dakota Health Home Program CY 2017,* accessed April 30, 2019, https://dss.sd.gov/docs/healthhome/financial_analysis_word.pdf.

[28]See State of Vermont Agency of Human Services, *Global Commitment to Health 11-W-00194/1, Annual Report for Demonstration Year 2017, January 1, 2017 to December 31, 2017* (March 29, 2018). The decline in utilization rates occurred between the 6-month period January to June 2016 and the 6-month period January to June 2017.

GAO-19-569 High-Expenditure Beneficiaries

first 42 months.[29] As part of the state's Financial Alignment Initiative, part of those savings went to the state Medicaid program.

In contrast with the results reported by the four states, officials from Indiana and Nevada Medicaid agencies reported mixed or inconclusive findings related to the impact on cost or quality of their programs for high-expenditure Medicaid beneficiaries.

- Officials with Indiana's Medicaid agency told us that an assessment of the Right Choices Program found relatively low cost savings generally, with the exception of pharmacy costs, where the program curbed excessive drug use among beneficiaries with substance use disorders and led to cost savings.

- Nevada Medicaid officials said that their fee-for-service care management organization appeared to achieve some cost savings, but had little effect on quality of care after the program was implemented in 2013. They also said that it was difficult to determine the true effect of the program, because the state implemented several other cost savings policies at the same time as the care management organization. Nevada let the program expire in 2018 and is researching other potential ways to manage high-expenditure beneficiaries in the state's fee-for-service program.

CMS Offered Optional Tools and Technical Assistance That Could Be Used To Identify or Better Manage High-Expenditure Medicaid Beneficiaries

CMS offered optional tools, as well as technical assistance and other educational resources that state Medicaid agencies used to identify or better manage high-expenditure beneficiaries.

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[29]See RTI International, *Report for Washington Health Home Managed Fee-for-Service (MFFS) Final Demonstration Year 2 and Preliminary Demonstration Year 3 Medicare Savings Estimates: Medicare-Medicaid Financial Alignment Initiative*, prepared for the Centers for Medicare & Medicaid Services (November 2018).

GAO-19-569 High-Expenditure Beneficiaries

CMS Offered Tools That Could Help States Manage High-Expenditure Medicaid Beneficiaries

CMS's optional tools included the Health Home State Plan Option and the Financial Alignment Initiative, though these are not specifically designed for the purpose of identifying and managing high-expenditure beneficiaries. Medicaid officials in two selected states said that these programs improved their efforts to manage care for their high-expenditure beneficiaries.

Health Home State Plan Option. The Medicaid Health Home State Plan Option, authorized under the Patient Protection and Affordable Care Act, allowed states to design health home programs to provide comprehensive care coordination for Medicaid beneficiaries with chronic conditions.[30] CMS officials we spoke with said the states who chose the option received access to resources including planning funds and technical assistance from CMS. For example, CMS issued a brief illustrating how states could focus their health home programs on high-expenditure beneficiaries. CMS officials noted that they supported 23 states' and the District of Columbia's health home programs. Among the state officials we interviewed, South Dakota Medicaid officials said that when they were establishing their health home program, CMS was helpful in connecting them with other states that had created similar programs so that they could learn from other states' experiences. South Dakota Medicaid officials stated they would like CMS to continue to bring health home program managers from several states together to discuss their successes, challenges, and innovations. Nevada Medicaid officials stated they were considering establishing a health home program.

Financial Alignment Initiative. For the Financial Alignment Initiative, CMS oversaw efforts by states to implement improvements in Medicaid service delivery aimed at achieving savings for both Medicare and Medicaid, with one state we spoke with using the initiative to target high-expenditure beneficiaries. As noted earlier, Washington established its Health Homes demonstration program for dually eligible beneficiaries in association with the Financial Alignment Initiative. Washington targeted the demonstration to high-cost, high-risk Medicare-Medicaid beneficiaries based on the principle that focusing intensive care coordination on beneficiaries with the greatest need provided the greatest potential for

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[30]States receive an enhanced Federal Medical Assistance Percentage for specific health home services defined in statute. The enhanced match does not apply to the underlying Medicaid services also provided to beneficiaries enrolled in a health home. The enhanced match is only available for the first eight quarters that the program is in effect. See 42 U.S.C. § 1396w-4(c)(1).

improved health outcomes and cost savings. Washington's Financial Alignment Initiative demonstration was approved through 2020, and Washington officials stated they are hoping to get an extension, because it has yielded cost savings for both Medicaid and Medicare.[31] A feature of the Financial Alignment Initiative is that any cost savings achieved by the program are split between the state Medicaid program and Medicare.

CMS Provided Technical Assistance and Educational Resources to Help States Identify and Manage Care for High-Expenditure Medicaid Beneficiaries

CMS also offered state Medicaid agencies access to several resources that, while not designed specifically to target high-expenditure beneficiaries, have been used to support states in identifying or better managing care for this population. These resources included the Medicaid Innovation Accelerator Program, the State Data Resource Center, and the Medicare-Medicaid Data Integration Initiative.

Medicaid Innovation Accelerator Program. The Medicaid Innovation Accelerator Program is funded by the Center for Medicare and Medicaid Innovation and run by the Center for Medicaid and CHIP Services, both within CMS. The goals of the program were to improve care for Medicaid beneficiaries and reduce costs by supporting states in their ongoing payment and delivery system reforms through targeted technical support. The program offered participating states targeted technical support to Medicaid agencies in building their data analytic capacity as they design and implement delivery system reforms for high-expenditure beneficiaries, one of the program's focus areas.[32] The program worked with five states on issues such as identifying and stratifying beneficiaries with complex care needs and high costs, designing effective care management strategies, and incorporating social determinants of health into program design activities.[33] In addition to working directly with five states, the program also offered a national webinar series under the broader topic of Medicaid Beneficiaries with Complex Care Needs and High Costs. The webinar series covered a variety of topics, including a webinar titled "Identification and Stratification of Medicaid Beneficiaries

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[31]As of April 24, 2019, CMS was accepting new applications for Financial Alignment Initiative demonstrations.

[32]The Medicaid Innovation Accelerator Program's other program focus areas include reducing substance use disorders, promoting community integration through long-term services and supports; and supporting physical and mental health integration.

[33]See CMS, Medicaid Innovation Accelerator Program, *Beneficiaries with Complex Care Needs and High Costs* (Baltimore, Md.: Oct. 31, 2016). The five states discussed were New Jersey, Oregon, Texas, Virginia, and the District of Columbia.

with Complex Care Needs and High Costs," which provided information about different approaches to targeting and assessing the needs of this population. Vermont Medicaid officials we spoke with said it would be helpful to have more information about how social determinants of health impact beneficiaries' ability to manage their own care. CMS hosted other webinars on various technical support and data analytics topics for states. Among the state Medicaid officials we interviewed, Nevada officials mentioned participating in the Innovation Accelerator Program.

State Data Resource Center. State Medicaid agencies have traditionally been hampered in managing the Medicaid portion of care for dually eligible beneficiaries, because they lacked data on the Medicare services these beneficiaries receive, such as hospitalizations, physician visits, prescription drugs, and skilled nursing facility stays. To address this challenge, CMS established the State Data Resource Center to facilitate state access to and use of Medicare data on dually eligible beneficiaries. Through the program, states had access to technical advisors when working with CMS Medicare data, which have allowed states to better predict and identify high-expenditure dually eligible Medicaid beneficiaries, CMS officials told us. The officials said the State Data Resource Center provided states with learning opportunities through webinars and monthly "Medicare Data Workgroup" calls, during which states shared their data use experiences. CMS officials and CMS contractors we spoke with said 29 states have received Medicare data, including all 10 states that participated in the Financial Alignment Initiative, though not all had projects specifically linked to high-expenditure Medicaid beneficiaries. CMS officials said all states had some contact with the State Data Resource Center, whether through data inquiries or participation in webinars.

Medicare-Medicaid Data Integration Initiative. The Medicare-Medicaid Coordination Office and the Center for Medicaid and CHIP Services' Medicaid Innovation Accelerator Program, both within CMS, jointly sponsored the Medicare-Medicaid Data Integration Initiative. The initiative assisted states with integrating Medicare and Medicaid data in order to enhance care coordination and reduce costs for the dually eligible population, which may have included high-expenditure Medicaid beneficiaries. CMS officials we spoke with said the Medicare-Medicaid Data Integration Initiative had assisted 10 states—five participating in the Financial Alignment Initiative (Colorado, Minnesota, Ohio, Rhode Island, and Virginia) and five participating in the Medicaid Innovation Accelerator Program from October 2015 to March 2019 (Alabama, the District of Columbia, New Hampshire, New Jersey, and Pennsylvania).

Agency Comments

We provided a draft of this product to the Department of Health and Human Services for review. The department provided technical comments, which we incorporated as appropriate.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the appropriate congressional committees, the Secretary of Health and Human Services, and other interested parties. In addition, the report will be available at no charge on the GAO website at http://www.gao.gov.

If you or your staffs have any questions about this report, please contact me at (202) 512-7114 or yocomc@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix I.

Carolyn L. Yocom
Director, Health Care

Appendix I: GAO Contact and Staff Acknowledgments

GAO Contact	Carolyn L. Yocom, (202) 512-7114 or yocomc@gao.gov
Staff Acknowledgments	In addition to the contact named above, Lori Achman (Assistant Director), Mary Giffin (Analyst-in-Charge), Matthew Dobratz, Drew Long, and Brandon Nakawaki made key contributions to this report. Also contributing were Julianne Flowers, Vikki Porter, Jennifer Rudisill, and Eric Wedum.