Report to the Ranking Member, Committee on Ways and Means, House of Representatives

July 2014

MEDICARE ADVANTAGE

CMS Should Fully Develop Plans for Encounter Data and Assess Data Quality before Use

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Why GAO Did This Study

Medicare Advantage—the private plan alternative to the traditional Medicare program—provides health care for nearly 15.5 million enrollees, about 30 percent of all Medicare beneficiaries. After a multiyear rollout, CMS began collecting encounter data in January 2012. GAO was asked to review CMS's plans for using MA encounter data and its efforts to validate the data's quality.

This report examines (1) how the scope of MA encounter data compare with CMS's current risk adjustment data, (2) the extent to which CMS has specified plans and time frames to use encounter data for risk adjustment and other purposes, and (3) the extent to which CMS has taken appropriate steps to ensure MA encounter data's completeness and accuracy. In addition to reviewing laws, regulations, and guidance on MA encounter data collection and reporting, GAO interviewed CMS officials and representatives of MAOs. GAO also compared CMS's activities to the protocol CMS developed to validate Medicaid encounter data—comparable data collected and submitted by entities similar to MAOs.

What GAO Recommends

CMS should establish specific plans for using MA encounter data and thoroughly assess data completeness and accuracy before using the data to risk adjust payments or for other purposes. While in general agreement, HHS did not specify a date by which CMS will develop plans for all authorized uses of encounter data and did not commit to completing data validation before using the data for risk adjustment in 2015.

View GAO-14-571. For more information, contact James Cosgrove at (202) 512-7114 or cosgrovej@gao.gov.

What GAO Found

The Centers for Medicare & Medicaid Services (CMS) is collecting Medicare Advantage (MA) encounter data—information on the services and items furnished to enrollees—that are more comprehensive than the beneficiary diagnosis data the agency currently uses to risk adjust capitated payments to MA organizations (MAO). CMS, an agency within the Department of Health and Human Services (HHS), makes these adjustments to reflect the expected health care costs of MA enrollees. Encounter data have many more elements—including procedure codes and provider payments—from a wider range of provider types—such as home health agencies and skilled nursing facilities—thus expanding the scope of sources for diagnosis and other information.

CMS has not fully developed plans for using MA encounter data. The agency announced that it will begin using diagnoses from both encounter data and the data it currently collects for risk adjustment to determine payments to MAOs in 2015. However, CMS has not established time frames or specific plans to use encounter data for other potential purposes.

CMS has taken some, but not yet all, appropriate actions to ensure that MA encounter data are complete and accurate. (See figure.) The agency has established timeliness and frequency requirements for data submission, but has not yet developed requirements for completeness and accuracy. Also, the agency has certified nearly all MAOs to transmit encounter data. Although CMS performs automated checks to determine whether key data elements are completed and values are reasonable, it has not yet performed statistical analyses that could detect more complex data validity issues. For example, CMS has not yet generated basic statistics from the data by demographic group or provider type to identify inconsistencies or gaps in the data. Also, it has not yet reviewed medical records to verify diagnoses and services listed in encounter data or reported what it has learned about data quality to MAOs. Agency officials told GAO they intend to perform these additional quality assurance activities but have not established time frames to do so.

Status of the Centers for Medicare & Medicaid Services' Activities to Validate Medicare Advantage (MA) Encounter Data, May 2014

ACTIVITY	STATUS
Establish requirements for collecting and submitting MA encounter data	◐
Review MA organizations' capability to collect and submit encounter data	●
Perform automated checks on submitted data for completeness and accuracy	●
Conduct statistical analyses on encounter data for completeness and accuracy	○
Review medical records to verify encounter data	○
Summarize findings on encounter data completeness and accuracy to provide recommendations to MA organizations	○

● Addressed   ◐ Partially addressed   ○ Not yet addressed

Source: GAO. | GAO-14-571

_____ **United States Government Accountability Office**

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Abbreviations

CMS	Centers for Medicare & Medicaid Services
CSSC	Customer Service and Support Center
EQRO	external quality review organization
FFS	fee-for-service
HHS	Department of Health and Human Services
MA	Medicare Advantage
MAO	Medicare Advantage organization
MCO	managed care organization
RAPS	Risk Adjustment Processing System

GAO U.S. GOVERNMENT ACCOUNTABILITY OFFICE

441 G St. N.W.
Washington, DC 20548

July 31, 2014

The Honorable Sander M. Levin
Ranking Member
Committee on Ways and Means
House of Representatives

Dear Mr. Levin:

Since 1990, we have designated Medicare as a high-risk program, given its size, complexity, and susceptibility to payment errors from various causes.[1] Medicare's serious long-term financial challenges heighten the need for the Centers for Medicare & Medicaid Services (CMS) to closely examine expenditures in the Medicare Advantage (MA) program—the private plan alternative to the Medicare fee-for-service (FFS) program.[2] For the MA program, CMS contracts with MA organizations (MAO) to provide covered services to beneficiaries who enroll in one of their plans.[3] As of April 2014, CMS had 571 contracts with MAOs that served nearly 15.5 million enrollees, accounting for approximately 30 percent of all Medicare beneficiaries. The Congressional Budget Office has projected that enrollment in MA plans will increase to about 21 million enrollees by 2023 and that Medicare payments to MAOs will grow from about $154 billion in 2014 to about $250 billion in 2023.[4] As the MA program expands, setting appropriate payments to MAOs and making Medicare a more prudent purchaser of health care services will remain critical.

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[1]GAO, *High-Risk Series: An Update*, GAO-13-283 (Washington, D.C.: February 2013).

[2]Although names have changed over the years, in this report we refer to the agency within the Department of Health and Human Services (HHS) that administers Medicare as CMS and the private plan program as MA.

[3]An MAO may have multiple contracts that cover different geographic regions or offer different types of plans. Each contract may include multiple health plan benefit packages. MA plans must cover all Medicare Part A and Part B services except for hospice care. Part A includes inpatient care in hospitals and skilled nursing facilities and certain home health care services. Part B includes physician services, outpatient care, certain home health services, and durable medical equipment. In addition, MA plans usually offer prescription drug coverage and may offer extra benefits, such as vision, hearing, and dental coverage.

[4]Congressional Budget Office, *CBO's May 2013 Medicare Baseline* (Washington, D.C.: May 14, 2013).

Whereas Medicare pays FFS providers who submit claims for reimbursement after services have been provided, Medicare pays MAOs a fixed monthly amount per enrollee to cover all the services enrollees use. CMS adjusts payments to MAOs to reflect enrollees' expected health care costs, with higher payments for enrollees who are predicted to be sicker and lower payments for those predicted to be healthier—a process known as risk adjustment. MAOs can incur losses if aggregate costs exceed payments but can retain savings if aggregate costs are less than payments.

Since the 1980s, the methodology for setting MAO payments has changed several times to better reflect the expected health care costs of plan enrollees and to mitigate the effects of potential favorable selection.[5] The Tax Equity and Fiscal Responsibility Act of 1982 authorized payment for full-risk Medicare plans on the basis of a fixed per beneficiary rate set at 95 percent of the estimated average cost of beneficiaries in Medicare FFS.[6] We and other researchers criticized the accuracy of the adjustment, which resulted in excess payments to plans that enrolled healthier beneficiaries with below-average health care costs.[7] In an effort to refine the payment methodology, the Balanced Budget Act of 1997 required CMS to use health status measures to adjust plan payments and required the agency to collect inpatient hospital data for this purpose.[8] In implementing these requirements in 2000, CMS selected a risk adjustment method that relied on enrollee demographics augmented with hospital inpatient data to measure health status. This risk adjustment method more accurately matched MA payments to enrollees' expected total Medicare costs compared with the previous method.

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[5]In the MA program, favorable selection can occur if an MAO disproportionately enrolls healthier beneficiaries whose costs are generally lower than those of the average Medicare FFS beneficiary. If the methodology for setting MAO payments is not refined enough to reflect the expected below-average costs of such healthier beneficiaries, payments to the MAO in excess of the MAO's expected actuarial costs would result.

[6]Pub L. No. 97-248, § 114, 96 Stat. 324, 341 (1982). CMS estimated average FFS costs based on the geographic location of the plans and then adjusted these rates using demographic factors such as age, sex, and institutional status.

[7]See GAO, *Medicare HMOs: HCFA Can Promptly Eliminate Hundreds of Millions in Excess Payments*, GAO/HEHS-97-16 (Washington, D.C.: Apr. 25, 1997); and Physician Payment Review Commission, "Risk Selection and Risk Adjustment in Medicare," *Annual Report to Congress* (Washington, D.C.: 1996), ch. 15.

[8]Pub. L. No. 105-33, § 4001, 111 Stat. 251, 274 (1997).

In 2002, CMS transitioned to collecting a larger set of medical data—via the Risk Adjustment Processing System (RAPS)—to risk adjust payments. As required by law, the agency began using information on enrollee demographics and diagnoses collected from MAOs for services provided in physician office, hospital inpatient, and hospital outpatient settings to risk adjust payments in 2004.[9] Using these data in conjunction with FFS beneficiaries' cost and diagnosis information, CMS developed the hierarchical condition categories risk adjustment model that uses one year's diagnoses to predict the following year's health care costs for each MA enrollee. Although this model is better than the previous model— which estimated an MA enrollee's health status from certain inpatient diagnosis and demographic factors—at predicting an enrollee's costs, it has led to overpayments to MAOs because of different diagnostic coding patterns between the FFS and MA programs.

In a 2008 final rule, CMS reasserted its authority to collect more detailed data, referred to as encounter data.[10] Such data include diagnosis and treatment information for all medical services and items provided to an enrollee, with a level of detail similar to FFS claims. In January 2012, after a multiyear rollout, the agency began collecting such data from MAOs via the Encounter Data System. In the 2008 final rule, CMS stated it would use these data for risk adjustment and may also use them for additional payment and oversight purposes. The agency plans to discontinue RAPS after it begins using MA encounter data for risk adjustment purposes.

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[9]The Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 required that risk adjustment payment models use data from both inpatient and ambulatory settings beginning in 2004. Pub. L. No. 106-554, App. F, § 603, 114 Stat. 2763A-463, 2763A-555 (2000).

[10]During the implementation of its initial risk assessment model in 2000, CMS had required MAOs to submit encounter data. When CMS transitioned to RAPS in 2002, the agency relaxed this requirement and allowed MAOs to submit data with fewer data elements via RAPS. CMS's 2008 final rule represents a return to the collection of more detailed encounter data. See 73 Fed. Reg. 48434 (Aug. 19, 2008).

Realizing the benefits of encounter data will depend on the quality of the data and the data's suitability for various uses.[11] CMS has recognized the importance of ensuring that the data collected are complete—representing all encounters for all enrollees—and accurate—representing a correct record of all encounters that occurred—given the important functions to which the data will be put. Furthermore, CMS has stated that the encounter data submitted by MAOs would be used once the agency has reviewed and analyzed the submissions to identify and address any data issues.

You asked us about CMS's plans for using MA encounter data and its efforts to validate the completeness and accuracy of the data. In this report, we examine

1. how the scope and reporting frequency of MA encounter data compare with CMS's current MA risk adjustment data,

2. the extent to which CMS has gathered MA encounter data and specified plans and time frames to use encounter data for risk adjusting MA payments and other purposes, and

3. the extent to which CMS has taken appropriate steps to ensure the completeness and accuracy of MA encounter data.

For all objectives, we reviewed relevant laws, regulations, and guidance pertaining to MA encounter data collection and reporting and RAPS data submissions. We also reviewed documents from meetings that CMS has held with MAOs and from public presentations on MA encounter data collection requirements, the implementation schedule, and specific MAO concerns. In addition, we interviewed CMS officials in the Medicare Plan Payment Group and other agency components, as well as CMS

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[11]In a review of data that MAOs were required to submit during 2010 and 2011, HHS's Office of Inspector General reported that CMS's contractor identified 2,134 data issues in submissions from 513 of 638 MAOs. The data issues included 1,904 outlier incidents that could have reflected either inaccurate reporting or atypical performance. See Department of Health and Human Services, Office of Inspector General, *CMS Regularly Reviews Part C Reporting Requirements Data, but Its Followup and Use of the Data Are Limited*, OEI-03-11-00720 (March 2014).

contractors. We also interviewed representatives of America's Health Insurance Plans and its member MAOs.[12]

To determine the extent to which CMS has taken appropriate steps to ensure the completeness and accuracy of MA encounter data, we compared the agency's activities to the principal activities identified in its 2012 protocol for validating Medicaid encounter data that states receive from managed care organizations (MCO)—entities that provide Medicaid benefits in exchange for a fixed monthly payment. The protocol specifies a procedure for assessing the completeness and accuracy of encounter data that Medicaid MCOs are required to submit to state agencies.[13] Because of the similarities in the type of data—encounter data—and entities gathering the data—managed care entities—we refer to the protocol in assessing CMS's actions to ensure MA encounter data quality.[14] To learn about the practical uses of the protocol, we interviewed external quality review organizations with experience using the protocol and reviewed their documents and other reports on Medicaid encounter data validation.

We conducted this performance audit from July 2013 to June 2014 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

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[12]America's Health Insurance Plans is an industry trade association representing private entities that provide health insurance coverage through employers, the individual market, and public programs.

[13]Certain state Medicaid agencies that have relied on MCOs to provide Medicaid services have been collecting and using encounter data for over 10 years. State Medicaid agencies that contract with MCOs generally must ensure that an independent external quality review organization (EQRO) perform a review of each MCO on an annual basis. CMS developed protocols for EQROs, including one that can be used to evaluate encounter data submissions. See: CMS, *EQR Protocol 4: Validation of Encounter Data Reported by the MCO* (Baltimore, Md.: September 2012).

[14]Because the CMS encounter data protocol was developed for EQROs reviewing the quality of Medicaid encounter data, we adapted it to assess activities that Medicare officials could take to validate MA encounter data. Specifically, we modified the first step, "to review" requirements for collecting and submitting encounter data, to be "to establish" such requirements. We also divided the third step calling for analyzing electronic encounter data into two activities: performing automated checks and conducting statistical analyses.

the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

MA Encounter Data Collection Process

Although MAOs are responsible for collecting and transmitting encounter data to CMS, they rely on the cooperation of providers to submit complete and accurate data that conform to agency requirements.[15] MAOs gather encounter data—which originate from the information in an enrollee's medical record—for their own management and payment purposes. While Medicare pays MAOs a fixed monthly amount per enrollee, MAOs may compensate providers for services rendered to enrollees under different contractual arrangements. Providers paid by their plans on a FFS basis submit claims for payment that include the amounts to be reimbursed by the MAO.[16] In contrast, providers paid by their plans on a capitated basis—that is, that receive a designated amount to cover all services for an assigned enrollee—record a zero if no payment amount information is available. MAOs may include provisions in their contracts with providers that require submission of complete and accurate encounter data.

After collecting and reviewing these data, MAOs transmit the data to CMS. CMS adopted the health insurance industry's standard claims format for reporting MA encounter data. MAOs must use the Health Insurance Portability and Accountability Act of 1996-compliant Accredited Standards Committee X12 Version 5010 format, which all providers and private and public health plans are required to use for electronic claim submissions.[17] By using this standard format, CMS generally avoided placing a new requirement on MAOs.

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[15]In addition to MAOs, other types of Medicare plans, such as Programs for All-Inclusive Care for the Elderly plans and cost plans, also submit encounter data to CMS.

[16]CMS requires that MAOs submit information only from adjudicated claims—those that the MAOs have paid or denied—not those that have been rejected for payment or are pending final payment status.

[17]The Accredited Standards Committee X12 is an organization that develops standards for electronic information exchanges and an implementation guide that health insurers, including MAOs, and providers use to build their claims processing software. Virtually all MAOs submit encounter data electronically.

In January 2012, CMS began phasing-in MA encounter data collection by type of provider. It began by receiving data on professional encounters (such as services performed by physicians), then institutional encounters (such as services performed during an inpatient hospital stay), and finally durable medical equipment (such as hospital beds and wheelchairs). By August 2012, MAOs were submitting data from all types of providers. Although CMS requires that MAOs submit encounter data for all items and services provided to enrollees, the file formats that CMS currently uses preclude MAOs from transmitting data on the utilization of certain supplemental MA benefits, such as dental and vision services. Agency officials told us they are considering how to address this discrepancy.

Risk Adjustment

To risk adjust payments to MAOs, CMS calculates a risk score—the expected health care expenditures for an enrollee compared with the average health care expenditures of all beneficiaries—for each MA enrollee and Medicare FFS beneficiary. CMS calculates risk scores for MA enrollees using diagnosis information provided by MAOs along with cost and utilization information from Medicare's FFS claims systems. This approach assumes that diagnostic coding practices are the same in MA and FFS. Risk scores for beneficiaries with the same diagnoses and characteristics should be identical, regardless of whether the beneficiaries are in MA or Medicare FFS. However, MAOs have a greater incentive than FFS providers to make sure that all diagnoses are coded, as this can increase enrollees' risk scores and ultimately the payments plans receive. In part because of this incentive, risk scores for MA enrollees may tend to be higher relative to the risk scores of FFS beneficiaries who are in similar health and have identical characteristics.

To help ensure that MAOs are not overpaid as a result of these differences in diagnostic coding, CMS makes a separate adjustment to payments to MAOs. In 2012 and 2013, we reported inaccuracies in CMS's methodology for adjusting MA payments.[18] Specifically, we estimated in 2013 that MAOs received excess payments of between $3.2 billion and $5.1 billion from 2010 through 2012 because CMS's

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[18]See GAO, *Medicare Advantage: CMS Should Improve the Accuracy of Risk Score Adjustments for Diagnostic Coding Practices*, GAO-12-51 (Washington, D.C.: Jan. 12, 2012) and GAO, *Medicare Advantage: Substantial Excess Payments Underscore Need for CMS to Improve Accuracy of Risk Score Adjustments*, GAO-13-206 (Washington, D.C.: Jan. 31, 2013).

adjustment to account for differences in risk scores was too low. We recommended that the CMS Administrator take steps to improve the accuracy of the adjustment made for differences in diagnostic coding practices between MA and Medicare FFS. The agency did not formally comment on this recommendation and, as of March 2014, it has not improved the accuracy of this adjustment. Consistent with our finding that this adjustment was too low, Congress has taken steps to increase the statutory minimum annual adjustment.[19]

State Medicaid Agency Uses of and Requirements for Encounter Data

State Medicaid agencies that contract with MCOs typically require them to report encounter data to the state for various purposes.[20] As part of encounter data collection, the agencies may also establish requirements regarding the timeliness, completeness, and accuracy of Medicaid encounter data in contracts with MCOs. For example, to encourage timely submission and promote data quality, they may require MCOs to submit data within a certain time frame and attest that the data submitted are complete and accurate. State Medicaid agencies may then use these data for a variety of purposes, such as setting payment rates, evaluating the performance of MCOs, and providing reports to their legislatures and the public.

State Medicaid agencies may assess encounter data to determine whether MCOs meet requirements for complete and accurate reporting. For example, they may calculate the proportion of encounter data files denied or examine the rates of services used per enrollee against specific benchmarks—target rates. As another example, they may require MCOs to list encounter data that were corrected or voided and provide reasons for these actions. They may also have the medical records examined to verify that the information submitted in encounter data is complete and accurate. For example, this review may determine whether services

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[19]The American Taxpayer Relief Act of 2012 increased the statutory minimum annual adjustment for coding differences beginning in 2014. Pub. L. No. 112-240, § 639, 126 Stat. 2313, 2357 (2013).

[20]The Patient Protection and Affordable Care Act of 2010 strengthened the requirement for Medicaid managed care organizations to provide encounter data to states and permitted the federal government to withhold federal matching payments to states for medical care provided to individuals for whom the state does not report encounter data to the Medicaid Statistical Information System in a timely manner. Pub. L. No. 111-148, § 6402(c), 124 Stat. 119, 757 (2010).

submitted in encounter data were performed or confirm that enrollees have specific diagnoses.

MA Encounter Data Are More Comprehensive and Are Reported More Frequently than Current Risk Adjustment Data

Compared with information available in RAPS data, MA encounter data, with more elements reported, provide CMS with more comprehensive information on all enrollee diagnoses as well as the cost and types of services and items provided to enrollees. Each RAPS data file—an electronic record that contains an enrollee's diagnosis information from one or more providers—contains between 1 and 10 diagnosis groupings. Although all diagnoses are included in these groupings, not all groupings are used in CMS's risk adjustment model. For each diagnosis grouping, there are 9 RAPS data elements, including the "from" and "through" dates of service,[21] the diagnosis code, and the provider type.[22] Each RAPS data file also includes 31 other elements that are used for data processing and other purposes. Thus, depending on the number of diagnosis groupings, each RAPS data file contains between 40 and 121 data elements. In contrast, each encounter data file—an electronic record that contains detailed information for each medical service and item provided to an enrollee—includes approximately 200 data elements. These elements include information on the patients, providers, and payers of services and items, as well as the dates of service and procedure codes. They also include information on the primary and supplemental diagnoses associated with the service or item. Whereas RAPS data are limited to 10 diagnosis groupings, encounter data can include up to 12 diagnoses for professional services and 25 diagnoses for institutional services. Table 1 summarizes the types and number of encounter data elements.

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[21]The "from" and "through" dates of service define when an enrollee received medical treatment. For outpatient and physician services, these dates of service may be identical. For inpatient services, these dates are usually different from each other and reflect the dates of admission to and discharge from a facility. The diagnosis code is used to identify the clinical reason for an enrollee's treatment.

[22]Diagnosis groupings may also include data obtained from enrollee risk assessments— visits to all MA enrollees' homes to obtain diagnostic information. Effective January 1, 2014, diagnoses obtained from such visits are to be flagged in RAPS data. To perform these assessments, MAOs generally contract with health care professionals who are not the enrollees' primary care providers. According to CMS, there appears to be little evidence that enrollees' primary care providers use the information collected in these assessments. CMS has expressed concern that these assessments primarily serve as a vehicle for reporting additional diagnoses and, as a result, increasing payments to MAOs.

Table 1: Type and Number of Medicare Advantage (MA) Encounter Data Elements

Type of information	Number of data elements	Examples of data elements
Claim	44	Date and time period, diagnosis codes, related causes, and monetary amount
MA enrollee	44	Name, address, date of birth, and gender
Data processing and submission	39	Creation dates and times and security information
Service	28	Service date, procedure code, and monetary amount
MA organization or other payer	22	Name and address
Provider	14	Name, address, and tax identification number
Ambulance	12	Ambulance pick-up and drop-off addresses
MA organization or third-party submitter	9	Name and identifier
Centers for Medicare & Medicaid Services	5	Name and identifier

Source: GAO analysis of CMS information. | GAO-14-571

Note: Some examples above are a summary of various data elements. For example, an address includes four separate data elements: the street, city, state, and zip code.

In addition, MA encounter data are more comprehensive than RAPS data because they include information that originates from a wider range of provider types. Specifically, only physicians and hospital inpatient and outpatient facilities report enrollee diagnoses for RAPS data collection. Of these provider types, physicians provide approximately 80 percent of the diagnostic information used for risk adjustment, according to one estimate.[23] As a result, CMS's current risk adjustment model relies primarily on diagnoses that physicians report. In contrast, more provider types report encounter data, significantly expanding the scope of sources for diagnosis and other information. In addition to physicians and hospital inpatient and outpatient facilities, many other provider types—including ambulance providers, clinical laboratories, durable medical equipment suppliers, home health providers, mental health providers, rehabilitation facilities, and skilled nursing facilities—report encounter data.[24]

[23]The Coding Network, *HCC Coding Audits*, accessed May 7, 2014, http://www.codingnetwork.com/coding-audits-compliance/hcc-audits.

[24]CMS officials and industry representatives noted that encounter data collection has been challenging for certain types of providers, including home health providers and skilled nursing facilities. CMS has taken steps to address specific challenges, such as allowing home health providers and skilled nursing facilities to temporarily submit encounter data with certain missing information for 7 months more than originally planned.

The fact that CMS has taken a comprehensive approach in collecting encounter data has raised concerns for some MAOs. Because MAOs generally gather such data from certain providers for payment and plan management purposes, the CMS encounter data reporting requirements may not have significantly added to their ongoing data gathering activities. However, industry representatives noted that submitting encounter data from a broad array of provider types may not add to information on diagnoses CMS uses for risk adjustment. Agency officials acknowledged that many encounter data elements MAOs report will not be used for risk adjustment but will allow CMS to more completely identify the services furnished to enrollees.

Finally, CMS requires MAOs to submit encounter data more frequently than RAPS data. MAOs submit RAPS data at least quarterly to CMS, with each submission representing approximately one-fourth of the RAPS data an MAO submits during the year. In contrast, CMS requires MAOs to submit encounter data weekly, biweekly, or monthly depending on their number of enrollees. MAOs with more than 100,000 enrollees must submit encounter data on a weekly basis, those with between 50,000 and 100,000 enrollees on a biweekly basis, and those with fewer than 50,000 enrollees on a monthly basis. CMS also requires MAOs to submit encounter data within 13 months from the date of service.[25] Representatives of MAOs noted that they are able to meet CMS's encounter data frequency requirements, and one MAO told us that it sometimes chooses to submit encounter data more frequently—three times a week rather than once a week—to reduce the size of each submission.

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[25]CMS officials stated that this requirement is based on the 12-month timely filing requirement for Medicare FFS claims and allows an additional month for MAOs to review and submit encounter data. CMS has a reconciliation process to account for late data submissions, whereby it recalculates the risk factors for affected MA enrollees to determine whether adjustments to payments are necessary.

With MA Encounter Data at Expected Volume, CMS Will Begin Using Some Data for Risk Adjustment in 2015, but Its Plans for Other Uses Remain Undeveloped

CMS is receiving MA encounter data from nearly all MAOs on all types of services at the monthly volume that CMS officials told us they expected. After increasing significantly from August 2012—the first month that MAOs submitted encounter data on services from all provider types— through May 2013, the volume of MA encounter data has had some fluctuations from month to month. (See fig. 1.) Specifically, the volume of encounter data files—electronic records containing detailed information for each medical service and item provided to an enrollee—rose sharply from 2.0 million data files in August 2012 to 49.6 million data files in May 2013. From June 2013 through April 2014, the volume has fluctuated between 34.2 and 54.2 million data files each month.[26] CMS officials told us that they expect to continue receiving encounter data files at a rate of approximately 40 to 50 million files per month throughout 2014.[27] In total, MAOs submitted about 497.9 million encounter data files in 2013 comprising approximately 416.5 million professional encounter data files, 64.9 million institutional files, and 16.5 million durable medical equipment files.

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[26]Accounting for the increase in the number of MA enrollees during this time, the volume of MA encounter data had a similar pattern of growth. Encounter data files per enrollee grew from 0.1 in August 2012 to 3.4 in May 2013 and has remained between 2.3 and 3.5 from June 2013 through April 2014.

[27]Since reporting began, CMS has observed a reduction in the amount of time between the date of service and the date by which MAOs submit encounter data.

Figure 1: Number of Medicare Advantage Encounter Data Files Submitted, August 2012 through April 2014

Encounter data files (in millions)

Month and year
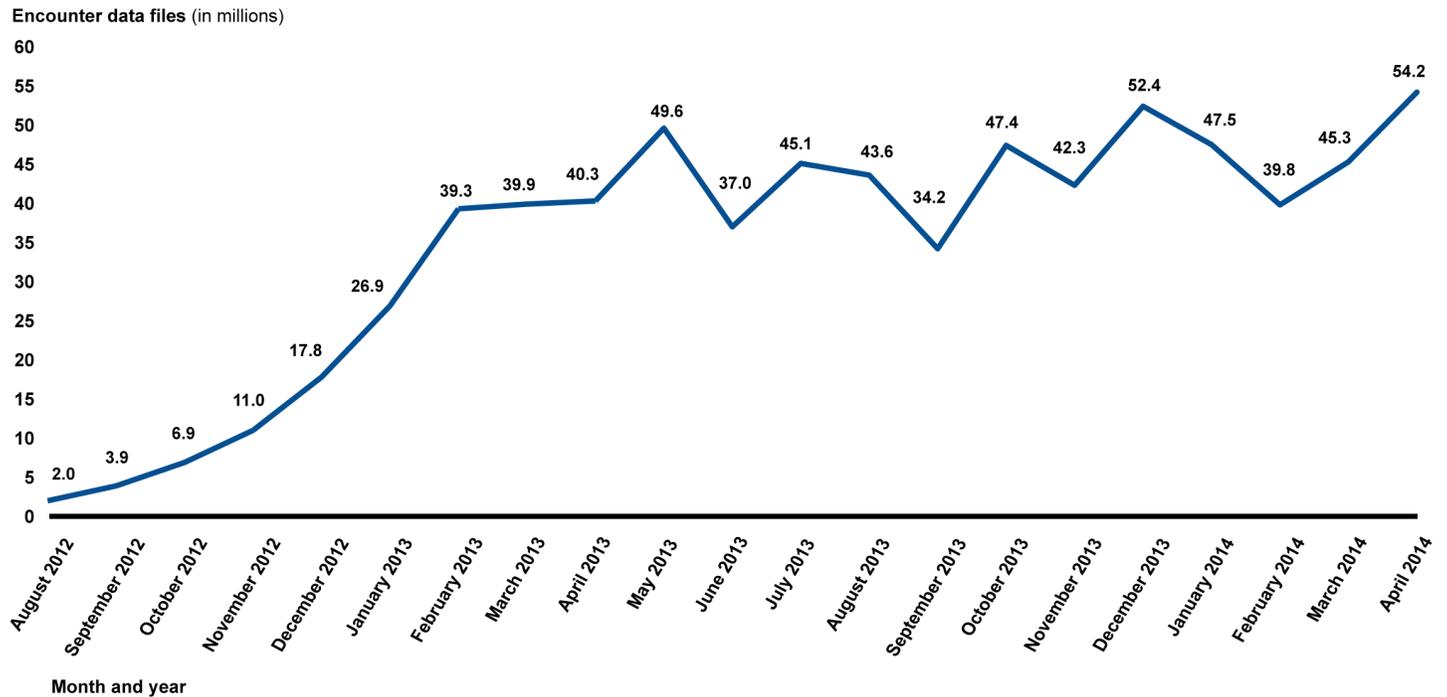
Source: Centers for Medicare & Medicaid Services. | GAO-14-571

Note: Encounter data files are electronic records that contain detailed information for each medical service and item provided to a Medicare Advantage enrollee. Testing Medicare Advantage encounter data transmissions on all types of services was completed in August 2012 following a 7-month period of phased implementation. In 2012, the Centers for Medicare & Medicaid Services tested encounter data file transmissions for professional services from January 4 through May 31, for institutional services from April 30 through August 31, and for durable medical equipment from June 15 through August 31.

In April 2014, CMS announced that it will use MA encounter data as part of risk adjustment and no longer rely solely on RAPS data. The agency will start using the diagnosis information from MA encounter data as well as the diagnoses in RAPS data from 2014 dates of service when calculating 2015 enrollee risk scores.[28] Specifically, CMS intends to use both data sources to obtain diagnoses reported from hospital inpatient and outpatient facilities and physicians. Further, the agency announced

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[28]Under CMS's data submission requirements, plans have up to 13 months from the original date of service to amend their encounter data. Therefore, MAOs would have until 2016 to correct diagnosis codes from certain encounters with 2014 dates of service even if encounter data were used to risk adjust payments in 2015.

that it will use all diagnoses equally, whether they came from RAPS data or MA encounter data, when calculating risk scores. CMS officials said that RAPS data generally have all MA enrollees' diagnoses, so they do not anticipate receiving a significant amount of additional diagnoses from MA encounter data. CMS officials described these efforts to begin using diagnoses from MA encounter data as a key step in making full use of the data in risk adjusting payments. Furthermore, officials stated that 2015—and perhaps subsequent years—will serve as a time to transition from using RAPS data to using MA encounter data to calculate risk scores. Once MA encounter data are deemed sufficiently complete and accurate for use in risk adjusting payments, CMS plans to discontinue RAPS data collection and transition entirely to using MA encounter data.[29]

Although CMS identified a number of other potential uses for MA encounter data in the 2008 final rule,[30] the agency has yet to determine how it would use the data for any of these additional purposes. Adequately developing plans for encounter data, and communicating them to MAOs, may improve CMS's efforts to manage aspects of the Medicare program.[31] Agency officials told us that they have deferred planning efforts to use MA encounter data for any purposes besides using it as a different way to collect diagnosis information for the current risk adjustment model. Accordingly, CMS's plans remain undeveloped and it has not established specific time frames for any of the following potential uses outlined in 2008:

- **Revise CMS's risk adjustment model for MA payments**. CMS intends to improve its model for risk adjustment using MA enrollee cost, diagnoses, and utilization information. However, agency officials noted that developing such a model is an involved process and would take a number of years to complete.

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[29]MAOs we spoke with indicated their desire that CMS clarify which data are considered usable for risk adjustment purposes. Agency officials stated that its proposal responds to MAOs' concerns about how and when the data will be used for risk adjustment.

[30]In the 2008 final rule, CMS listed the following potential data uses without further explanation: (i) updating risk adjustment models, (ii) calculating Medicare disproportionate share percentages, (iii) conducting quality review and improvement activities, and (iv) Medicare coverage purposes. 73 Fed. Reg. 48434 (Aug. 19, 2008).

[31]GAO, *Standards for Internal Control in the Federal Government*, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999).

- **Conduct quality review and improvement activities**. Such activities refer to assessing the performance of providers and MAOs in delivering care. For example, CMS could use encounter data to develop new MA quality measures.

- **Calculate Medicare disproportionate share hospital percentages**. CMS increases payments to hospitals serving a disproportionate number of low-income patients through the disproportionate share hospital adjustment. The agency currently incorporates the number of hospital days for MA enrollees in its calculation of disproportionate share hospital percentages. CMS officials have not specified how the agency could use MA encounter data to modify how it calculates the disproportionate share hospital percentages.

- **Monitor Medicare coverage**. Such monitoring may refer to using encounter data to determine whether an MA enrollee has reached the maximum out-of-pocket limit for an enrollee's cost sharing each year.

Without developing plans for these additional uses of encounter data, CMS cannot determine whether it is gathering the proper amount and types of information required for these purposes. Additionally, the agency would not be able to establish management priorities, and therefore cannot ensure that it is using the data to their full potential.

In a May 2014 proposed rule, CMS identified a number of additional uses of encounter data designed to strengthen program management and increase transparency in the MA program.[32] These were the following:

- **Conduct program evaluations**. CMS noted that it may use encounter data to assess the MA program and demonstration designs. The data could also be used for government-sponsored public health initiatives and academic health care research.

- **Support program integrity efforts**. CMS indicated that encounter data could be used to conduct audits, investigations, and other efforts to combat waste, fraud, and abuse undertaken by the Office of Inspector General or CMS.

- **Aid program administration**. CMS stated that it may use encounter data in reviewing the validity of MAO bid submissions—projected revenue for providing standard Medicare services to an average

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[32]79 Fed. Reg. 27978 (May 15, 2014).

enrollee in an MAOs' service area. It may also use the data to verify MAO information on medical loss-ratios—the percentage of revenue used for patient care, quality improving activities, and reduced premiums—to determine whether MAOs have met minimum requirements.

CMS Has Performed Some Steps to Ensure That MA Encounter Data Are Complete and Accurate but Has Not Yet Fully Validated the Data

As of May 2014, CMS had taken some, but not yet all, appropriate actions—as outlined in its Medicaid encounter data validation protocol—to ensure that MA encounter data are complete and accurate before they are used. (See fig. 2.) CMS's actions to date have focused on communicating with MAOs about data submission requirements, certifying MAOs' capability to transmit the data, and conducting automated checks for completeness and accuracy of the data. However, the agency has not yet conducted statistical analyses, reviewed medical records, and provided MAOs with summary reports on data quality referenced in its Medicaid encounter data validation protocol. Although CMS intends to perform these additional quality assurance activities, CMS officials have not specified a time frame for doing so.

Figure 2: Status of the Centers for Medicare & Medicaid Services' Actions to Validate Medicare Advantage (MA) Encounter Data, May 2014

ACTIVITY	STATUS
Establish requirements for collecting and submitting MA encounter data	◑
Review MA organizations' capability to collect and submit encounter data	●
Perform automated checks on submitted data for completeness and accuracy	●
Conduct statistical analyses on encounter data for completeness and accuracy	○
Review medical records to verify encounter data	○
Summarize findings on encounter data completeness and accuracy to provide recommendations to MA organizations	○

● Addressed   ◑ Partially addressed   ○ Not yet addressed

Source: GAO. | GAO-14-571

CMS Has Established and Publicized MA Encounter Data Submission Requirements but Has Not Developed Benchmarks for Completeness and Accuracy

CMS has established certain requirements for the MAOs' collection and submission of encounter data. The initial step in CMS's Medicaid encounter data validation protocol is to establish such features as the data submission format, the data elements to be reported, the time frames for data submission, and the benchmarks—target rates—for completeness and accuracy of the data. CMS required that MAOs use the reporting format that is standard in the health insurance industry, and MAOs began submitting files in that format in January 2012. CMS also required that MAOs submit encounter data—including any corrections to the data—within specified time frames and at intervals determined by their size.[33]

To enhance compliance with its encounter data requirements and thus promote complete and accurate data submissions, CMS has engaged in regular and open communication with MAOs since 2010. Agency officials have regularly held meetings with MAOs to discuss encounter data system enhancements, changes in data submission requirements, and concerns on specific encounter data topics. Although MAOs noted that they would like to continue receiving detailed information frequently— particularly on the more complex aspects of the encounter data submission process—CMS reduced the frequency of the encounter data user group meetings during the summer of 2013. According to CMS officials, MAOs' increased familiarity with data submission requirements reduced the need for ongoing guidance. Other outreach methods the agency has used include newsletters and bulletins with information such as the most common data errors, a technical assistance support desk to address specific reporting circumstances, and a website for posting summaries and questions from meetings with MAOs. To maintain detailed guidance on data submission requirements, CMS produced and updates an encounter data manual. (See app. I for more information about CMS's outreach efforts with MAOs.)

While it has focused its efforts on educating plans about reporting requirements, CMS has not yet established benchmarks for encounter data completeness and accuracy and does not have a timeline for developing such benchmarks. As stated in the Medicaid encounter data validation protocol, each data field submitted for each encounter type

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[33]CMS has proposed monitoring MAOs for timely submission of MA encounter data. Specifically, CMS intends to contact MAOs that are not submitting encounter data at the required frequency associated with the number of MA enrollees.

should have an acceptable rate of completeness and accuracy.[34] The protocol states that each plan's target error rate should be below 5 percent, composed of the percentage of missing, duplicate, or incorrect records. In 2012, CMS stated it would develop error frequency benchmarks but has yet to do so. In May 2014, agency officials told us that as they gain more experience with the data submissions they will use that information to develop such performance benchmarks. In contrast, state Medicaid agencies have established various benchmarks for Medicaid encounter data, which could help inform the development of similar benchmarks for MA encounter data. For example, New Jersey permits MCOs to have no more than 2 percent of encounter data submissions denied each month. Alternatively, Arizona does not allow the payment information in MCOs' encounter data submissions to vary from the financial reports submitted by MCOs by more than 3 to 5 percent.[35] Without benchmarks, as suggested by the protocol, the agency has no objective standards against which it could hold MAOs accountable for complete and accurate data reporting.

CMS Has Certified MAOs to Ensure Their Capability to Successfully Transmit Encounter Data

CMS has certified nearly all MAOs to verify their capability for collecting and submitting encounter data.[36] Under CMS's protocol for validating Medicaid encounter data, each MCO's information system should be assessed to see whether it is likely to successfully capture and transmit the encounter data. Such a review would determine where the plan's information system may be vulnerable to incomplete or inaccurate data capture, storage, or reporting. To become certified for submitting encounter data, CMS requires an MAOs' information system undergo

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[34]According to the protocol, the threshold of completeness and accuracy may depend on the intended use of the data. For example, using MA encounter data for payment may require a higher threshold of completeness and accuracy than using the data for research.

[35]These states employ financial incentives to encourage MCOs to submit timely, complete, and accurate encounter data. New Jersey requires MCOs to meet specific data completeness benchmarks and imposes fines for missed benchmarks. Arizona charges plans $5 per institutional omission error and $2 per professional omission error over an allowed error rate of 5 percent. See Vivian Byrd, Jessica Nysenbaum, and Debra Lipson, *Encounter Data Toolkit* (Washington, D.C.: Mathematica Policy Research, November 2013).

[36]According to CMS, approximately 99 percent of MA enrollees were enrolled in plans certified by the August 31, 2012 certification deadline.

complete end-to-end testing.[37] MAOs needed to separately demonstrate that they can successfully transmit encounter data collected from institutional, professional, and durable medical equipment providers. During official testing, MAOs had to achieve at least a 95 percent acceptance rate for each type of encounter. Also, MAOs were required to sign an agreement with CMS attesting that they will ensure that data in every submission can be supported by a medical record and that the data are complete and accurate.[38]

CMS Performs Automated Checks for Completeness and Accuracy of MA Encounter Data

CMS performs automated checks to determine encounter data quality and identify submission issues, such as whether certain data elements are missing, and sends automated notifications to MAOs. According to CMS's protocol for validating Medicaid encounter data, performing electronic checks on encounter data is a key step in verifying data quality. Such a data review should include basic checks of the data files by provider type and for each of the data elements in the files. Under the protocol, the standard data review process should be automated to verify that, among other things,

- critical data elements are not missing and are in the correct format,

- data values are consistent across data elements and are within required ranges, and

- the volume of data aligns with enrollment figures.

CMS performs over 1,000 automated checks to verify that data elements are present, the values of data elements are reasonable, and the data are not duplicated. According to CMS, the number of errors returned to MAOs and the number of duplicate data files submitted per MAO can illustrate, at least in part, the completeness and accuracy of the encounter data submitted. For example, CMS performs automated checks to flag missing data elements—such as a contract ID number or a date of service—in encounter data files and returns files with missing elements to MAOs. CMS also determines whether encounter data elements have the correct

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[37]End-to-end testing verifies whether the entire data flow—from collection through storage—functions as intended.

[38]If encounter data are collected and submitted by an MAO's contractor, that entity must similarly attest to the truthfulness of the data.

alphanumeric values (e.g., that zip codes contain only numeric characters) and verifies whether the values are consistent across data elements (e.g., the date of service is before the date of data submission). In addition, CMS ensures that the same data file is not accepted into the Encounter Data System more than once, which would result in duplicate data files.[39]

After performing these automated checks, CMS sends MAOs up to five types of automated reports with details about the encounter data submission, including information on the data received. These reports provide information on whether errors occurred and whether encounter data processing can continue so that MAOs can identify problems with their data. CMS may provide additional reports if MAOs need to resubmit the data to meet CMS's requirements. (See app. II for a summary of CMS's automated reports for MAOs.) Although representatives from MAOs noted that CMS has not always produced the automated reports on a timely basis, CMS officials told us that they now produce the reports within 1 week of encounter data submission. According to the MAO representatives, the reports are generally useful, straightforward, and easy to understand.

CMS plans to develop four other automated reports related to data submission and processing but has not established a time frame for doing so. These reports are expected to

- determine the number of encounter data files accepted and rejected per submission,

- identify encounter data submission errors and summarize the type of errors found,

- provide additional details on rejected encounter data submissions, and

- ascertain diagnoses that CMS accepted and will use to calculate risk scores.

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[39]CMS officials noted that an increase in the number of duplicate encounter data files resulted from MAOs submitting the same encounter data file multiple times because of discrepancies that arose during the process for reconciling previous data submissions.

Although CMS has had plans since at least October 2010 to develop a report that identifies those diagnoses that it will use to calculate risk scores, it still has not produced the report. MAOs we interviewed expressed concern that CMS has not developed this report, which could help them understand how encounter data will be incorporated into CMS's risk score calculation.

CMS Has Not Yet Conducted Statistical Analyses Using MA Encounter Data

Although CMS is aware of the need to perform statistical analyses of MA encounter data, the agency has not yet conducted these analyses. According to CMS's protocol for validating Medicaid encounter data, analyzing values in specific data elements, generating basic statistics on the volume and consistency of data elements, and periodically compiling and reviewing statistics on utilization rates can help detect data validity issues. In March 2014, CMS officials told us that they were able to only summarize the volume of encounter data files by MA plan. The officials stated that they would like to be able to determine the frequency of diagnoses per encounter data file, examine the dates of service on encounter data files, and compare MA encounter data with FFS claims data by the summer of 2014. However, the officials noted that they have not developed a specific time frame for performing statistical analyses and that determining which analyses to perform will be an iterative process over the next year or two. It appears that CMS will use encounter data to calculate 2015 risk scores and pay MAOs before it performs statistical analyses of the data.

As CMS begins to analyze the quality of MA encounter data, several types of statistical analyses outlined in its Medicaid validation protocol may help detect potentially inaccurate or unreliable data. Such analyses include the following:

- **Determining whether the frequency of values within an encounter data element is reasonable**. For example, a frequency distribution for the place of service variable would be expected to include a reasonable distribution between inpatient hospital, outpatient hospital, and physician office visits. This type of analysis can help detect whether a value is missing, underreported, or overreported.

- **Generating basic statistics from the encounter data**. For example, analyzing the rates of outpatient services by provider zip code could help discover that encounter data files are missing certain zip codes, indicating a certain amount of underreporting. To examine the completeness of Medicaid encounter data, a CMS contractor

assessed the average number of encounter data files per enrollee and the percentage of enrollees with data files.[40] As another example, MAOs reporting an unexpectedly large number of a particular service may suggest overreporting.

- **Analyzing encounter data elements by demographic group, provider type, and service type**. For example, analyzing encounter data by enrollees' gender would enable CMS to verify that data files for gender-specific diagnoses and procedures are logical. Analyzing encounter data by provider type helps identify missing or erroneous data for specific provider types or discover fluctuations in enrollee visits. For example, dramatic changes in utilization from one time period to another may indicate erroneous data. Finally, analyzing encounter data by service type also helps to examine the relationship between (1) ancillary services (e.g., laboratory tests and x-rays) and enrollee visits, (2) primary care and specialty care visits, or (3) outpatient services and inpatient admissions.

- **Comparing encounter data with other Medicare data sources, MAOs' financial reports, or other benchmarks**.[41] Comparing MA encounter data with Medicare FFS data may help determine whether differences exist in hospital admission rates between the MA and FFS programs. In addition, comparing the volume of encounter data to financial reports helps reveal gaps in the data.[42] Furthermore, monitoring MAOs' encounter data volumes for various service types against established benchmarks helps identify data submission problems, according to an actuarial firm that assessed Medicaid

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[40]Mathematica Policy Research, *Assessing the Usability of Encounter Data for Enrollees in Comprehensive Managed Care Across MAX 2007-2009* (Princeton, N.J.: December 2012).

[41]For a previous report, we spoke with state officials who reported having information on, and efforts intended to ensure, the quality of the data used to set payment rates. New Jersey officials told us that the state tested the reliability and accuracy of the health plan financial data used to set rates against encounter data and required health plans to have an independent auditor review selected portions of the financial data. See GAO, *Medicaid Managed Care: CMS's Oversight of States' Rate Setting Needs Improvement*, GAO-10-810 (Washington, D.C.: Aug. 4, 2010).

[42]Arizona requires MCOs to submit quarterly reports on the number of claims and paid amounts submitted in the encounter data. Arizona then performs quarterly and annual studies comparing the organizations' encounter data to their financial statements to ensure the completeness of the data.

encounter data for California.[43] Moreover, New Jersey examines the rate of services used per 1,000 MCO enrollees against benchmarks for 28 service categories, such as laboratory services, to assess data completeness.

CMS Has Not Yet Reviewed Medical Records to Verify MA Encounter Data

CMS has not yet performed MA enrollees' medical record reviews, which typically involve comparing a sample of encounter data with the clinical information contained in enrollees' medical records. According to CMS's protocol for validating Medicaid encounter data, medical record reviews can help confirm the findings generated in the encounter data analyses.

Use of Medical Record Reviews in a Medicaid Encounter Data Validation Study

In a 2010 Medicaid encounter data validation study for Georgia, the Health Services Advisory Group examined the extent to which services documented in enrollees' medical records were absent in their encounter data and the extent to which services documented in enrollees' encounter data were absent from their medical records. It also evaluated the accuracy of the diagnosis and procedure codes in encounter data by comparing them with documentation in enrollees' medical records. The findings showed that enrollees' medical records generally supported encounter data files in Georgia. Specifically, 93.9 percent of the dates of service, 86.7 percent of the diagnosis codes, and 78.5 percent of the procedure codes from the encounter data had supporting evidence in the medical records. However, not all services documented in the medical records were found in encounter data files. Specifically, 20.5 percent of the dates of service, 49.3 percent of the diagnosis codes, and 40.1 percent of the procedure codes documented in enrollees' medical records were omitted from encounter data files.

Source: GAO analysis of Health Services Advisory Group documents. I GAO-14-571

Acknowledging the necessity of medical record reviews, CMS officials noted that the agency plans to review medical records as part of its MA risk adjustment data validation auditing process when it begins using encounter data for risk adjustment purposes. However, as of May 2014, the agency has not developed specific plans or time frames to include these data in this auditing process. CMS currently uses this auditing process to validate the accuracy of RAPS data. Specifically, CMS requires MAOs to provide medical records to substantiate the information in a selected sample of MA enrollees' RAPS data. On the basis of the clinical information contained in enrollees' medical records that substantiates the information in their RAPS data, CMS calculates corrected risk scores and calculates payment errors—which can

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[43]Mercer Government Human Services Consulting, *Capitation Rate Development Base Data Review and Assessment: California Department of Health Services* (Phoenix, Ariz.: September 2006).

represent a net overpayment or underpayment. Some MAOs may have been overpaid and may need to refund Medicare payments when enrollees' medical records do not provide evidence for the risk-adjusted payment they had received from CMS.

CMS Has Not Yet Provided MAOs with Summary Reports on the Completeness and Accuracy of Encounter Data

Because CMS has not yet conducted statistical analyses and reviewed medical records, it cannot report information from these activities to each MA plan. CMS's protocol for validating Medicaid encounter data highlights the importance of summarizing information, reporting findings, and providing recommendations to plans for improving the completeness and accuracy of encounter data. Once the data are validated, MAOs could use summary reports from CMS in several ways, such as monitoring quality improvement and service utilization and managing their enrollees and providers. For example, the Health Services Advisory Group's 2010 encounter data validation study for Georgia evaluated the completeness and accuracy of encounter data submitted by three MCOs. The study included plan-specific tables on the number and percentage of encounter files by place of service with statewide comparisons, the number and percentage of valid encounter files for age- and gender-appropriate diagnoses and services, and the number of encounter files by month of service. Without this type of information, CMS and MAOs cannot ensure the completeness and accuracy of MA encounter data.

Conclusions

The collection of MA encounter data provides CMS with the opportunity to improve the accuracy of Medicare payments to MAOs and to monitor specific health care services used by enrollees. For MA encounter data to reach its full potential, it is critical that CMS develop a clearly defined strategy—which includes specific actions, priorities, and milestones—for using the information and validating the completeness and accuracy of the data. Deciding how the data are to be used influences which data elements need to be collected and, in turn, the extent of data reporting. However, CMS has yet to develop specifics on how or when it will use encounter data for a variety of program management purposes.

Although CMS has decided to use MA encounter data to supplement RAPS data in calculating risk scores in 2015, this use may inappropriately increase payments to MAOs. Using diagnoses from both sources can only increase the number of diagnoses reported for MA enrollees. This has the potential to widen the existing discrepancy between FFS and MA in the coding of diagnoses. As we previously recommended, CMS should take steps to improve the accuracy of the adjustment made for

differences in diagnostic coding practices between FFS and MA to help ensure appropriate payments to MAOs. As of March 2014, CMS has not acted on our recommendation. To the extent that CMS continues to pay MAOs under its current risk adjustment system and not adequately account for diagnostic coding differences, excess payments to MAOs could grow.

Furthermore, CMS's decision to use MA encounter data in 2015 may be premature because the agency has not yet fully validated the data. CMS has taken steps to validate the data, such as establishing certain reporting requirements and performing automated data checks. However, the agency has not yet completed other steps in assessing whether the data are suitable for use, such as performing statistical analyses, reviewing medical records, and providing MAOs with summary reports of its findings. Without fully validating the completeness and accuracy of MA encounter data, CMS and MAOs would be unable to confidently use these data for risk adjustment or any other program management or policy purposes. Until CMS determines that encounter data are sufficiently complete and accurate to be used for risk adjustment and other intended purposes, the potential benefits of using these data will be delayed.

Recommendations for Executive Action

To ensure that MA encounter data are of sufficient quality for their intended purposes, the Administrator of CMS should

- establish specific plans and time frames for using the data for all intended purposes in addition to risk adjusting payments to MAOs and

- complete all the steps necessary to validate the data, including performing statistical analyses, reviewing medical records, and providing MAOs with summary reports on CMS's findings, before using the data to risk adjust payments or for other intended purposes.

Agency Comments and Our Evaluation

We provided a draft of this report to HHS for comment. In its written response, HHS agreed that establishing plans for using encounter data and performing steps to validate the data are important activities. However, it did not address the specific recommendations we made. (See app. III.)

Regarding our first recommendation—to establish specific plans and time frames for all uses of MA encounter data—HHS stated that it agreed that the agency should establish plans for using the data. HHS noted that it has developed lists of the purposes for which it intends to use the data. Current regulations authorize four purposes—risk adjustment, quality improvement, Medicare disproportionate share percentages, and Medicare coverage monitoring. HHS recently published a proposed rule that outlines several additional purposes—program evaluation, program integrity, program administration, and others. HHS stated that once the proposed rule is finalized, CMS will be in a position to establish specific plans and time frames for the list of additional permissible uses of MA encounter data. However, CMS has had the authority since 2008 to use MA encounter data for the initial four purposes, thus it remains unclear if and when CMS will develop detailed plans for these earlier authorized uses.

Regarding our second recommendation—to fully validate MA encounter data before use for any purpose—HHS stated that it will continue its data validation activities while it uses the data for risk adjusting payments to MAOs. HHS agreed that performing statistical analyses and providing summary reports are important elements of data validation. HHS stated that it will undertake medical record reviews—which are used to verify encounter data—through its ongoing risk adjustment validation audits of RAPS data. We remain concerned, however, that CMS intends to use 2014 MA encounter data to support its risk score calculations for 2015 before it completes all data validation activities suggested by the Medicaid protocol. Furthermore, CMS's reliance on risk adjustment validation audits of RAPS data may not be adequate to confirm the completeness and accuracy of encounter data given significant differences—in the volume and breadth of data elements—between the two data collection efforts.

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 Administrator of CMS, interested congressional committees, and others. In addition, the report will be available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-7114 or cosgrovej@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 IV.

Sincerely yours,

James Cosgrove
Director, Health Care

Appendix I: Select Centers for Medicare & Medicaid Services (CMS) Outreach Efforts on Medicare Advantage (MA) Encounter Data

Outreach effort	Date	Description
National Encounter Data Meeting	October 2010	CMS organized this meeting with Medicare Advantage organizations (MAO) to disseminate information on the requirements for encounter data submission, the transition to submitting encounter data, and the schedule for encounter data implementation.
Regional Technical Assistance Participant Guide	August 2012	CMS prepared this reference guide to provide MAOs with information about collecting encounter data from health care providers and submitting encounter data to CMS. The reference guide also includes information about encounter data processing that CMS performs.
Encounter Data System Companion Guides	September 2011 to present	CMS prepared these guides, which it regularly updates, to provide technical assistance on conducting Health Insurance Portability and Accountability Act of 1996-compliant electronic transactions.[a]
Encounter data work groups	December 2010 through March 2011	CMS organized these meetings between CMS and MAOs to discuss specific MA encounter data topics and concerns.[b] CMS also published questions and answers from these meetings.
Encounter data system user groups	January 2012 through April 2014	CMS organized these meetings to provide MAOs with continued guidance on submitting encounter data. CMS also published questions and answers from these meetings.
Industry update sessions	2011 and 2012	CMS organized these meetings to provide updates regarding decisions the agency made regarding encounter data implementation.
Bulletins and newsletters	2010 to present	CMS prepares bulletins with updated information on encounter data processing, such as the most common errors in submitting encounter data. CMS also prepares newsletters with information on policy updates.
Customer Service and Support Center (CSSC) help line[c]	2010 to present	The CSSC help line provides encounter data assistance to MAOs by a toll-free telephone number.
CSSC website	2010 to present	MAOs receive updated information about encounter data submission through the CSSC website.

Source: GAO summary of select CMS outreach efforts. | GAO-14-571

[a]Health Insurance Portability and Accountability Act of 1996-compliant refers to using the appropriate format to submit data electronically.

[b]Topics for data work groups included medical record reviews (MAOs examining medical records to add or delete diagnosis codes to supplement data from original encounters), automated checks—routine electronic reviews that certain data elements are completed and have reasonable values—used in processing claims, and issues specific to MAOs using intermediaries to collect encounter data from providers and submit them to CMS.

[c]Palmetto GBA is CMS's contractor that manages the collection of MA encounter data and the CSSC help line.

Appendix II: Summary of Automated Reports for Medicare Advantage (MA) Encounter Data Submissions

Report developer	Report purpose	Example
The Accredited Standards Committee X12	Notify MA plans about problems with the submission of encounter data files.	The Centers for Medicare & Medicaid Services (CMS) rejects an encounter data file that contains an error in a processing-related data element.
	Determine the syntactical accuracy of encounter data elements.	CMS alerts an MA plan that letters appear in a numeric-only data element.
	Acknowledge the acceptance or rejection of encounter data files.	CMS notifies an MA plan about a problem with an encounter data submission.
CMS	Provide information on whether encounter data files and service-related data elements have been accepted or rejected for further processing.	CMS informs an MA plan that an encounter data file was rejected for further processing while another one was accepted.
	Notify MA plans about duplicate encounter data files and service-related data elements.	CMS tells an MA plan that an encounter data file includes duplicate services or is the duplicate of another data file.

Source: GAO summary of CMS information. | GAO-14-571

DEPARTMENT OF HEALTH & HUMAN SERVICES   **OFFICE OF THE SECRETARY**

Assistant Secretary for Legislation
Washington, DC 20201

'JUL 1 1 2014

James C. Cosgrove
Director, Health Care
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

Dear Mr. Cosgrove:

Attached are comments on the U.S. Government Accountability Office's (GAO) report entitled, "Medicare Advantage: CMS Should Fully Develop Plans for Encounter Data and Assess Data Quality before Use" (GAO-14-571).

The Department appreciates the opportunity to review this report prior to publication.

Sincerely,

Jim R. Esquea
Assistant Secretary for Legislation

Attachment

**GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN
SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S DRAFT
REPORT ENTITLED: MEDICARE ADVANTAGE: CMS SHOULD FULLY DEVELOP
PLANS FOR ENCOUNTER DATA AND ASSESS DATA QUALITY BEFORE USE
(GAO-14-571)**

The Department appreciates the opportunity to review and comment on this draft report.

Recommendation:
GAO recommends, to ensure that MA encounter data are of sufficient quality for their intended
purposes, the Administrator of CMS should establish specific plans and time frames for using the
data for all intended purposes in addition to risk adjusting payments to Medicare Advantage
organizations (MAOs).

HHS Response:
HHS concurs that we should establish plans for using the data. The first step in that process is
specifying the categories of permissible uses. HHS has identified a list of categories for which
we intend to use the data. Current regulations, however, limit the use of encounter data to four
specified purposes. In order to expand these categories, on May 15, 2014, HHS published a
proposed rule (79 FR 27977) to broaden the specified uses of encounter data. We believe the
proposed uses will strengthen program management and increase transparency in the MA
program.

HHS is proposing to add (to the existing permissible uses of the data) the following purposes for
which HHS may use risk adjustment data submitted by MA organizations: (1) To conduct
evaluations and other analysis to support the Medicare program (including demonstrations) and
to support public health initiatives and other health care-related research; (2) for activities to
support the administration of the Medicare program; (3) for activities conducted to support
program integrity; and (4) for purposes permitted by other laws. Once the regulation is finalized
and the authorized uses are determined, then we will be able to establish specific plans and time
frames for using the data for purposes beyond those authorized under current law.

Recommendation:
GAO recommends that CMS complete all the steps necessary to validate the data, including
performing statistical analyses, reviewing medical records, and providing Medicare Advantage
organizations with summary reports on CMS's findings, before using the data to risk adjust
payments or for other intended purposes.

CMS Response:
HHS concurs with GAO that performing statistical analysis and providing summary reports are
important elements of data validation, and HHS will continue to engage in these activities as
these data are used for risk adjustment payment. HHS will also continue to review medical
records underlying plan submitted risk adjustment data in the course of performing retrospective
audits in accordance with HHS's ongoing medical record review initiatives. Under our
encounter data collection initiative, HHS has developed a new encounter data processing system
that collects and processes detailed encounter data records from Medicare Advantage
organizations. Our primary focus to date has been to build the capacity to process and edit the
various fields in each encounter data record. This effort has been very successful and, as a result,
we have processed over 700 million individual encounters.

Page 2- James C. Cosgrove

The submission timeframe for the first year of encounter data has recently been completed. Our primary focus now is to analyze the completeness and validity of this first year of data and to provide feedback to plans on these statistical analyses. We will expand upon our process of determining how comprehensive the data are as more data are submitted to HHS. HHS appreciates the GAO's reference to "EQR Protocol 4 Validation of Encounter Data Reported by the Managed Care Organization" ("Report"), which outlines steps used by the Medicaid Program to facilitate the collection of complete and accurate data. We are referencing this report, as we work with the encounter data submitted to HHS by the MAOs.

We appreciate the recommendations in this draft report and will consider them as we move forward with using encounter data to improve the Medicare program.

The CMS thanks GAO for their efforts on this issue and looks forward to working with GAO on this and other issues in the future.

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

James Cosgrove, (202) 512-7114 or cosgrovej@gao.gov

Staff Acknowledgments

In addition to the contact named above, Rosamond Katz, Assistant Director; Manuel Buentello; David Grossman; Elizabeth T. Morrison; and Hemi Tewarson made key contributions to this report.

Related GAO Products

Medicare: Contractors and Private Plans Play a Major Role in Administering Benefits. GAO-14-417T. Washington, D.C.: March 4, 2014.

Medicare Advantage: 2011 Profits Similar to Projections for Most Plans, but Higher for Plans with Specific Eligibility Requirements. GAO-14-148. Washington, D.C.: December 19, 2013.

High-Risk Series: An Update. GAO-13-283. Washington, D.C.: February 2013.

Medicare Advantage: Substantial Excess Payments Underscore Need for CMS to Improve Accuracy of Risk Score Adjustments. GAO-13-206. Washington, D.C.: January 31, 2013.

Medicare Advantage: CMS Should Improve the Accuracy of Risk Score Adjustments for Diagnostic Coding Practices. GAO-12-51. Washington, D.C.: January 12, 2012.

Medicare Advantage: Changes Improved Accuracy of Risk Adjustment for Certain Beneficiaries. GAO-12-52. Washington, D.C.: December 9, 2011.

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