



## CMS's Encounter Data Lack Essential Information That Medicare Advantage Organizations Have the Ability to Collect

This issue brief provides results from our evaluation of Medicare Advantage organizations' (MAOs') collection and submission of National Provider Identifiers (NPIs) for physicians and nonphysician practitioners who order and/or refer durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS); clinical laboratory services; imaging services; and home health services for Medicare Advantage (MA) enrollees. (In this issue brief, we refer to these providers as ordering providers.)

### Why OIG Did This Review

NPIs for ordering providers are essential for safeguarding the program integrity of DMEPOS, clinical laboratory services, imaging services, and home health services in Medicare. (In this issue brief, we refer to clinical laboratory services as laboratory services.) For these items and services, NPIs are critical for identifying inappropriate billing and ordering patterns among providers and investigating fraud and abuse. Both the Centers for Medicare & Medicaid Services (CMS) and the Office of Inspector General (OIG) rely on NPIs for ordering providers to conduct oversight and pursue fraud investigations. Prior OIG work found that ordering provider NPIs were absent from 63 percent of MA encounter records for DMEPOS and for laboratory, imaging, and home health services, and recommended that CMS establish and enforce requirements for MAOs to submit ordering provider NPIs for these types of items and services. Findings from our survey of MAOs may be useful as CMS weighs the program integrity benefits of requiring NPIs for ordering providers against the potential burden that MAOs would experience from establishing and enforcing these requirements.

### How OIG Did This Review

To determine the extent to which MAOs submitted ordering provider NPIs on encounter records for DMEPOS and for laboratory, imaging, and home health services, we extracted and analyzed 2018 MA encounter data from CMS's Integrated Data Repository in February 2020. We also sent an online survey to a stratified random sample of 200 MAOs. We received responses from 179 MAOs.

### What OIG Found

CMS's MA encounter data continue to lack ordering provider NPIs on records for DMEPOS and for laboratory, imaging, and home health services. However, we found that almost all MAOs have data systems that are able to receive and store these NPIs when providers submit them to MAOs on claims or encounter records. In addition, a substantial portion of MAOs reported that providers are already submitting the ordering provider NPIs on claims or encounter records for DMEPOS, laboratory services, and imaging services. Further, a majority of MAOs require NPIs to be submitted for their other lines of business (such as commercial and private health insurance, Medicaid, and the Children's Health Insurance Program). Finally, almost half of MAOs believe that NPIs for ordering providers are critical for combating fraud.

### Key Results

Identifiers for ordering providers are an essential tool for safeguarding program integrity but are largely missing from the encounter data despite evidence that many Medicare Advantage organizations can, and do, already collect this information.

## What OIG Recommends

OIG recommends that CMS require MAOs to submit the ordering provider NPI on encounter records for DMEPOS and for laboratory, imaging, and home health services; and establish and implement “reject edits” that (1) reject encounter records in which the ordering provider NPI is not present when required and (2) reject encounter records that contain an ordering provider NPI that is not a valid and active NPI in the National Plan and Provider Enumeration System (NPPES) registry. CMS concurred with the first recommendation, but did not concur with the second recommendation.

# BACKGROUND

## DMEPOS and laboratory, imaging, and home health services are vulnerable to fraud

DMEPOS and laboratory, imaging, and home health services have a history of being vulnerable to fraud. For these items and services that are at high risk for fraud, ordering providers should act as gatekeepers against inappropriate payments, as they determine whether these items and services are medically necessary and appropriate for the patients they treat. Having access to identifiers for these ordering providers is essential for effective oversight of these items and services; analysis of ordering provider NPIs is critical for identifying inappropriate billing and ordering patterns among providers. Both CMS and OIG rely on these identifiers to conduct oversight and enforcement work. For example, NPIs for ordering providers were integral in identifying DMEPOS suppliers that allegedly paid kickbacks to providers who ordered medically unnecessary DMEPOS for Medicare beneficiaries, potentially defrauding taxpayers out of \$900 million.<sup>1</sup> In addition, a separate scheme involved a laboratory that allegedly paid kickbacks to ordering providers and fraudulently billed Medicare \$1.7 billion for genetic tests that were not medically necessary.<sup>2</sup>

## CMS requires NPIs for ordering providers in the Medicare fee-for-service program, but not in MA

In the Medicare fee-for-service program, CMS requires NPIs for ordering providers on claims for DMEPOS and for laboratory, imaging, and home health services. Since 2014, CMS does not pay such claims unless the claim has a valid NPI for an ordering provider.<sup>3</sup> In addition, CMS uses NPIs for ordering providers as part of its analyses to identify actual or potential payment errors or fraud. Examples of these analyses may include identifying telemedicine providers who order unlikely combinations of items or services that are at high risk for fraud (e.g., orthotics, genetic testing, and compound medicines) or identifying providers who have ordered unusually high volumes of items or services.

For MA, MAOs submit encounter records to CMS that contain information regarding services provided for MA beneficiaries. CMS has not designated the ordering provider's NPI as a required data element for encounter data.<sup>4</sup> CMS does perform an "informational" edit during the submission process for DMEPOS encounter records. (An edit is an automated system process.) This informational edit notifies MAOs when an ordering provider NPI is missing from DMEPOS encounter records, but it does not reject these records.

## Prior OIG work found that NPIs for ordering providers were frequently absent from 2014 encounter data

Prior OIG work found that NPIs for ordering providers were absent from 63 percent of MA encounter records for DMEPOS and for laboratory, imaging, and home health services from the first quarter of 2014.<sup>5</sup> As a result, OIG recommended that CMS establish and implement what are known as “reject edits” for certain types of encounter records, such as those related to DMEPOS and laboratory, imaging, and home health services. Such edits would (1) reject records in which the NPI and/or name for the ordering provider is not present; and (2) reject records that contain an ordering provider NPI that is not a valid and active NPI in the NPPES registry.<sup>6</sup>

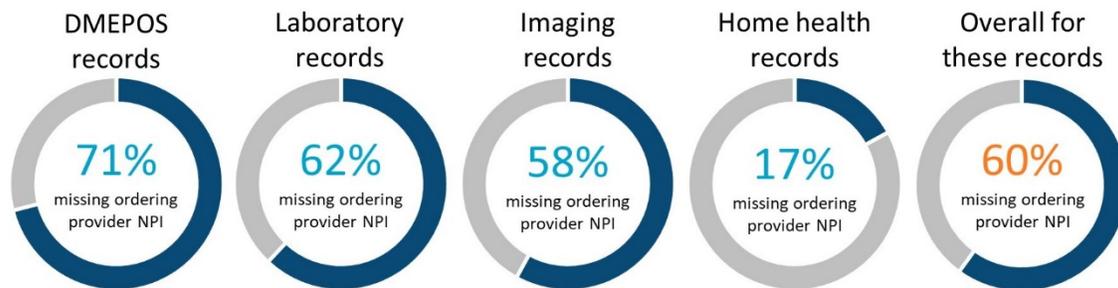
CMS did not concur with this recommendation, noting that because MAOs do not always require ordering provider NPIs on the claims that providers submit to them, MAOs often do not have these NPIs available to submit to CMS. CMS stated that it would explore whether identifiers for ordering providers are necessary for program integrity purposes and would consider requiring them in the future. In January 2020, CMS stated that ordering provider NPIs are essential for the program integrity of DMEPOS encounters in the MA program.<sup>7</sup> CMS also stated that the lack of ordering provider information provided in MAOs’ encounter records for laboratory services, imaging services, and home health services hinders program integrity efforts. Despite recognizing the importance of NPIs for ordering providers, CMS has yet to implement OIG’s recommendation.

# RESULTS

## Ordering provider NPIs continue to be frequently absent from the MA encounter data

Overall, 60 percent of the 2018 encounter records for DMEPOS and for laboratory, imaging, and home health services were missing an NPI for an ordering provider, which—although not currently required—is recognized by CMS and OIG as essential to effective program oversight. Ordering provider NPIs were absent from records for DMEPOS at a greater rate than from records for the three types of services, as shown in Exhibit 1. In total, of the 25.4 million records for DMEPOS in 2018, 18.1 million (71 percent) were missing an NPI for an ordering provider.

Exhibit 1: Ordering provider NPIs were often missing from the 2018 encounter data



Source: OIG analysis of 2018 MA encounter data.

## Almost all MAOs can receive and store ordering provider NPIs when providers submit them

Exhibit 2: Almost all MAOs can collect ordering provider NPIs



Source: OIG analysis of MAO responses to 2020 OIG survey.

Overall, 98 percent of MAOs in our sample (176 of 179) reported that their data systems can receive and store ordering provider NPIs when providers submit them to MAOs on their claims or encounter records, as shown in Exhibit 2, either always (123 MAOs) or sometimes (53 MAOs).<sup>8</sup> (We use the term “claims/encounters” in this report to refer to these claims or encounter records.) Only 2 percent of MAOs stated that their systems are not capable of receiving and storing this information. Among the 24 MAOs that did not submit any ordering provider NPIs to the 2018 MA encounter data for all 4 areas, 17 stated that their data systems are always able to receive and store ordering provider NPIs on MA claims/encounters and another 4 could receive and store these NPIs sometimes.

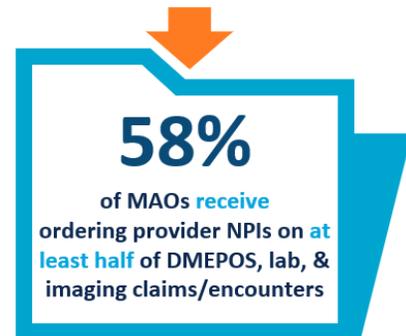
## The majority of MAOs reported that providers submit ordering provider NPIs on at least half of the claims/encounters for DMEPOS, laboratory services, and imaging services

Fifty-eight percent of MAOs in our sample (103 of 179) reported that suppliers or providers of DMEPOS, laboratory services, and imaging services submit an ordering provider NPI on at least half of MA claims/encounters, as shown in Exhibit 3.

However, most of these MAOs did not submit all these ordering provider NPIs to the MA encounter data, as CMS does not require them to do so. Among these 103 MAOs, only 25 included ordering provider NPIs on at least half of their records for DMEPOS, laboratory services, and imaging services in the 2018 MA encounter data.

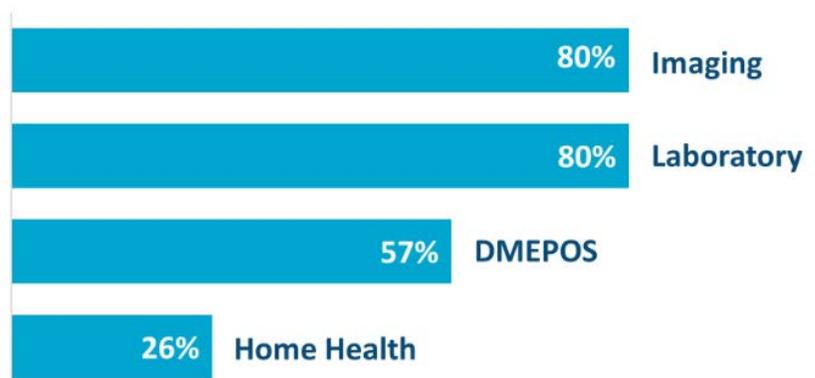
Many of the MAOs that lacked ordering provider NPIs in their encounter data reported having these NPIs on their MA claims/encounters. There were 57 MAOs that did not submit any ordering provider NPIs for on records for DMEPOS, laboratory services, and imaging services in the 2018 encounter data. Of these, 27 MAOs (47 percent) reported that providers submit ordering provider NPIs on at least half of their MA claims/encounters for each of these 3 areas.

Compared to suppliers or providers of DMEPOS, laboratory services, and imaging services, providers of home health services submitted ordering provider NPIs to MAOs less frequently. Across all 179 MAOs in our sample, the median percentage of MA claims/encounters for which providers submitted ordering provider NPIs to MAOs ranged from 26 to 80 percent, as shown in Exhibit 4.



Source: OIG analysis of MAO responses to 2020 OIG survey.

**Exhibit 4: Median percentage of claims/encounters for which providers submitted ordering provider NPIs**



Source: OIG analysis of MAO responses to 2020 OIG survey.

## Many MAOs believe that ordering provider NPIs are critical for combating fraud and require these NPIs in their other lines of business

Forty-four percent of MAOs (78 of 179) reported that the ordering provider NPI is a critical piece of data for preventing and detecting fraud and abuse related to DMEPOS, laboratory services, imaging services, and/or home health services. Furthermore, among the 163 MAOs that had other lines of business (such as commercial and private health insurance, Medicaid, and the Children's Health Insurance Program), 83 MAOs (51 percent) require providers to submit ordering provider NPIs on claims/encounters for another line of business. Specifically, these MAOs most often required ordering provider NPIs for DMEPOS and for laboratory, imaging, and home health services in their Medicaid lines of business.

# CONCLUSION AND RECOMMENDATIONS

In a January 2020 memo, CMS acknowledged that a lack of ordering provider information in encounter records for DMEPOS and laboratory, imaging, and home health services hinders potential program integrity efforts.<sup>9</sup> In Medicare fee-for-service, CMS does not pay claims for these items or services unless the claim has a valid NPI for an ordering provider. In addition, ordering provider NPIs are critical for identifying patterns of questionable billing and pursuing fraud investigations in service areas that have a history of being vulnerable to fraud.

However, in the MA program—which covers a third of Medicare beneficiaries—CMS has not designated the ordering provider NPI as a required data element for encounter data. As a result, CMS continues to lack information on ordering provider NPIs in the MA encounter data for these items and services that are at high risk for fraud. This hinders CMS's and others' use of the ordering provider NPIs as a program integrity tool, which leaves the MA program vulnerable to losses from fraudulent providers and suppliers.

OIG previously recommended that CMS establish and enforce requirements for MAOs to submit ordering provider NPIs for certain types of encounter records, such as those for DMEPOS and for laboratory, imaging, and home health services. Findings from our recent survey of MAOs may be useful as CMS weighs the program integrity benefits of requiring ordering provider NPIs against the potential burden that MAOs would experience from establishing and enforcing these requirements. We found that almost all MAOs reported that their data systems are able to receive and store ordering provider NPIs when providers submit them on MA claims/encounter. In addition, almost half of MAOs reported that providers submit NPIs for ordering providers on at least half of the MA claims/encounters for DMEPOS, laboratory services, and imaging services.

Finally, many MAOs believe that ordering provider NPIs are a critical piece of data for preventing and detecting fraud and abuse. In fact, among MAOs that have other lines of business (such as commercial and private health insurance, Medicaid, and the Children's Health Insurance Program), half require providers to submit ordering provider NPIs on claims/encounters for another line of business.

Taken together, our findings indicate that (1) MAOs have data systems that are able to collect ordering provider NPIs; (2) a majority of MAOs already collect ordering provider NPIs on a portion of their claims/encounters; and (3) many MAOs agree that collecting ordering NPIs is important and often collect them for their other lines of business.

## We continue to recommend that CMS:

Require MAOs to submit the ordering provider NPI on encounter records for DMEPOS and for laboratory, imaging, and home health services.

Establish and implement “reject edits” that (1) reject encounter records in which the ordering provider NPI is not present when required and (2) reject encounter records that contain an ordering provider NPI that is not a valid and active NPI in the NPPES registry.

# AGENCY COMMENTS AND OIG RESPONSE

CMS concurred with our first recommendation and is exploring implementation of a requirement for MAOs to submit the ordering, referring, or certifying provider NPI on encounter data records for DMEPOS and for laboratory, imaging, and home health services. CMS did not concur with our second recommendation and stated that it would be premature to establish and implement reject edits prior to the exploration of a requirement discussed in the first recommendation.

OIG understands that CMS must implement a requirement for MAOs to submit the ordering provider NPIs on applicable encounter records prior to its implementation of edits that reject encounter records lacking these required NPIs. However, in order to utilize ordering provider NPIs for preventing and detecting fraud and abuse, it is important for CMS to implement reject edits that ensure these NPIs are present and valid when required. Therefore, OIG continues to recommend that CMS establish and implement reject edits once it requires MAOs to submit the ordering provider NPI on encounter records for DMEPOS and for laboratory, imaging, and home health services.

Appendix A provides the full text of CMS's comments.

# APPENDIX A

## Agency Comments



DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

*Administrator*  
Washington, DC 20201

**DATE:** August 6, 2020

**TO:** Suzanne Murrin  
Deputy Inspector General for Evaluation and Inspections

**FROM:** Secma Verma   
Administrator

**SUBJECT:** Office of Inspector General (OIG) Draft Report: CMS's Encounter Data Lack Essential Information That Medicare Advantage Organizations Have the Ability to Collect (OEI-03-19-00430)

The Centers for Medicare & Medicaid Services (CMS) appreciates the opportunity to review and comment on the Office of Inspector General's (OIG) draft report on Medicare Advantage Organizations' (MAOs') collection and submission of National Provider Identifiers (NPIs) for ordering and referring providers. CMS is committed to safeguarding program integrity in Medicare Advantage, and recognizes that information collected through encounter data can be an important part of that effort.

Since the agency began collecting encounter data, CMS has greatly increased efforts to improve the accuracy of the data that it accepts, including by enhancing monitoring, communications and technical assistance outreach activities, and working directly with plans in a variety of ways. While undertaking this complex data collection effort, CMS has been mindful of balancing immediate needs with long-term goals for use of the data, as well as provider and plan burden. For that reason, CMS initially focused on development of data necessary for payment purposes. As referring provider NPI is not necessary for payment, it was not included.

However, CMS has continued to study the role that ordering and referring provider NPIs can play in Medicare Advantage program integrity. For example, review of encounter data has established that the referring provider NPI is commonly missing or invalid for laboratory, imaging, and home health agency encounters. While not currently a required submission, CMS has published guidance alerting MAOs to the importance of this information for program integrity purposes and encouraging the MAOs to include the referring provider NPIs for these types of encounters as well.

In addition, CMS implemented a series of edits in December 2019 to ensure that, when populated, the rendering, referring, and ordering provider NPIs on encounter data are valid and active on the National Plan and Provider Enumeration System (NPPES). If an NPI is not found or is inactive on the NPPES, the encounter data are rejected. In March 2020, CMS reinforced this data integrity effort and implemented a series of edits to ensure that, when populated, the billing, rendering, referring, and ordering NPIs on encounter data are not on the CMS Provider Preclusion List.

OIG's recommendations and CMS' responses are below.

**OIG Recommendation**

CMS should require MAOs to submit the ordering provider NPI on encounter data records for DMEPOS and for laboratory, imaging, and home health services.

**CMS Response**

CMS concurs with OIG's recommendation. CMS is exploring implementation of a requirement for MAOs to submit the ordering, referring, or certifying provider NPI on encounter data records for DMEPOS and for laboratory, imaging, and home health services.

**OIG Recommendation**

CMS should establish and implement "reject edits" that (1) reject encounter data records in which the ordering provider NPI is not present when required and (2) reject encounter data records that contain an ordering provider NPI that is not a valid and active NPI in the NPPES registry.

**CMS Response**

CMS non-concurs with OIG's recommendation as it would be premature to establish and implement such changes prior to the exploration of a requirement discussed in the aforementioned OIG recommendation.

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

# METHODOLOGY

## Analysis of the 2018 MA Encounter Data

We extracted MA encounter records from CMS's Integrated Data Repository in February 2020 for all records with dates of service in 2018 to determine the extent to which MAOs submitted the ordering provider NPI on encounter records for DMEPOS and for laboratory, imaging, and home health services.<sup>10</sup> Data elements for ordering provider NPIs are located in both the header and service line portion of a service record. For DMEPOS, laboratory, and imaging records, we considered an encounter record to be missing an ordering provider NPI if it was missing from the header as well as from all the service lines. For home health records, we considered an encounter record to be missing an ordering provider NPI if it was missing all of the three following data elements from the header and all service lines: (1) ordering provider NPI, (2) attending provider NPI, and (3) "other provider" NPI.<sup>11</sup>

## MAO Survey

From February to March 2020, we administered an online survey to a stratified random sample of 200 MAOs. We selected MAOs that were (1) active as of January 1, 2017, and continued to be active in 2020;<sup>12</sup> (2) offered coordinated care plans, medical savings accounts, or private fee-for-service plans;<sup>13</sup> and (3) submitted 2017 encounter records for DMEPOS, laboratory services, imaging services, and/or home health services.<sup>14</sup> The first stratum included all 33 of the MAOs that did not have an ordering provider NPI on any of their 2017 encounter records. The second stratum included 167 MAOs randomly selected from the 361 MAOs that had at least 1 ordering provider NPI on their 2017 encounter records. Analysis of the survey data was based on the responses of 179 MAOs, 29 from the first stratum and 150 from the second stratum.

## Limitations

Our sample of MAOs included all of the MAOs that did not submit a single ordering provider NPI to the 2017 encounter data, which makes our survey results over-representative of MAOs that do not submit ordering provider NPIs to CMS.<sup>15</sup> In addition, when MAOs reported the percentage of MA claims/encounter records on which suppliers or providers submit ordering provider NPIs for each service type, most of these percentages were estimates. Finally, our methods for identifying ordering provider NPIs for home health services in the 2018 encounter data counted all attending provider NPIs as ordering provider NPIs, which may have resulted in overestimates of the prevalence of ordering provider NPIs on home health records because not all attending providers are necessarily the provider who certified/recertified the patient's eligibility for a home health service.

## Standards

We conducted this study in accordance with the *Quality Standards for Inspection and Evaluation* issued by the Council of the Inspectors General on Integrity and Efficiency.

# ACKNOWLEDGMENTS AND CONTACT

## Acknowledgments

Maria Johnson served as the team leader for this study. Others in the Office of Evaluation and Inspections who conducted the study include Robert Kirkner. Office of Evaluation and Inspections staff who provided support include Joe Chiarenzelli, Althea Hosein, and Christine Moritz.

This report was prepared under the direction of Linda Ragone, Regional Inspector General for Evaluation and Inspections in the Philadelphia regional office, and Joanna Bisgaier, Deputy Regional Inspector General.

## Contact

To obtain additional information concerning this report, contact the Office of Public Affairs at [Public.Affairs@oig.hhs.gov](mailto:Public.Affairs@oig.hhs.gov). OIG reports and other information can be found on the OIG website at [oig.hhs.gov](http://oig.hhs.gov).

Office of Inspector General  
U.S. Department of Health and Human Services  
330 Independence Avenue, SW  
Washington, DC 20201

# ENDNOTES

<sup>1</sup> OIG, *Media Materials: Nationwide Brace Scam*, April 2019. Accessed at <https://www.oig.hhs.gov/newsroom/media-materials/2019/bracescam/> on December 18, 2019.

<sup>2</sup> CMS, *Operation Double Helix Takes Action in One of the Largest Health Care Fraud Schemes Ever Charged*, September 2019. Accessed at <https://www.cms.gov/About-CMS/Components/CPI/CPI-Spotlight.html> on December 18, 2019.

<sup>3</sup> CMS, *MLN Matters Number SE1305 Revised, Full Implementation of Edits on the Ordering/Referring Providers in Medicare Part B, DME, and Part A Home Health Agency (HHA) Claims (Change Requests 6417, 6421, 6696, and 6856)*, October 2015. Accessed at <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/Downloads/SE1305.pdf> on April 13, 2020.

<sup>4</sup> CMS, *Encounter Data Submission and Processing Guide*, March 2019. Accessed at [https://www.csscooperations.com/internet/csscw3\\_files.nsf/F/CSSCED\\_Submission\\_Processing\\_Guide\\_20190321.pdf/\\$FILE/ED\\_Submission\\_Processing\\_Guide\\_20190321.pdf](https://www.csscooperations.com/internet/csscw3_files.nsf/F/CSSCED_Submission_Processing_Guide_20190321.pdf/$FILE/ED_Submission_Processing_Guide_20190321.pdf) on June 25, 2020.

<sup>5</sup> OIG, *Medicare Advantage Encounter Data Show Promise for Program Oversight, But Improvements Are Needed*, OEI-03-15-00060, January 2018.

<sup>6</sup> NPPES assigns NPIs; maintains and updates information about health care providers with NPIs; and disseminates the NPI Registry and NPPES downloadable files. See CMS, *Medicare Learning Network, NPI: What You Need to Know*, December 2016. Accessed at <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/NPI-What-You-Need-To-Know.pdf> on June 1, 2020.

<sup>7</sup> CMS, *Referring Provider Identifiers for Medicare Part C Durable Medical Equipment (DME) Encounters*, January 2020.

<sup>8</sup> We use the term MAO to refer to a unique MA contract.

<sup>9</sup> Ibid.

<sup>10</sup> For encounter records with dates of service in 2018, we identified DMEPOS records as records with claim type code 4800 and at least one service line with a Berenson-Eggers Type of Service (BETOS) codes D1A through D1G; laboratory records as records with claim type code 4700 and at least one service line with BETOS codes T1A through T1H; imaging records as records with claim type code 4700 and at least one service line with BETOS codes I1A through I4B; and home health records as records with claim type codes 4032, 4033, or 4034.

<sup>11</sup> For Medicare fee-for-service home health claims, CMS requires both the attending physician NPI and “other provider” NPI fields unless the patient’s designated attending physician is the same as the physician who certified/recertified the patient’s eligibility, in which case only the attending physician is required to be reported. The health care industry often uses the terms “ordered,” “referred,” and “certified” interchangeably. See CMS, *Medicare Claims Processing Manual*, Pub. No. 100-04, ch. 10, § 40.2. Accessed at <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/clm104c10.pdf> on October 1, 2019.

<sup>12</sup> We used the 2017 Contract Information Extract from CMS’s Health Plan Management System to determine MAOs with contract dates effective as of January 1, 2017, and we used the 2020 Contract Information Extract to confirm which MAOs continued to be active in 2020. We then used the 2017 encounter data to stratify MAOs based on their submission of ordering provider NPIs on 2017 encounter records.

<sup>13</sup> We did not include MAOs that offer cost plans, demonstration plans, or program of all-inclusive care for the elderly (PACE) organizations, as these may have different compliance program requirements.

---

<sup>14</sup> For encounter records with dates of service in 2017, we identified DMEPOS records as records with claim type code 4800; laboratory records as records with claim type code 4700 and at least one service line with BETOS codes T1A through T1H; imaging records as records with claim type code 4700 and at least one service line with BETOS codes I1A through I4B; and home health records as records with claim type codes 4032, 4033, or 4034.

<sup>15</sup> Of the 33 MAOs that did not submit any ordering provider NPIs on 2017 encounter records, 26 did not submit any ordering provider NPIs on 2018 encounter records for the 4 items and services. .