
Online Provider Directory Review Report

1.0 Executive Summary

The Centers for Medicare & Medicaid Services (CMS) completed its third round of Medicare Advantage (MA) online provider directory reviews between November 2017 and July 2018. The review examined the accuracy of 108 providers and their listed locations selected from the online directories of 52 Medicare Advantage Organizations (MAOs), approximately one-third of MAOs, for a total of 5,602 providers reviewed at 10,504 locations. The review found that 48.74% of the provider directory locations listed had at least one inaccuracy. Types of inaccuracies included:

- The provider was not at the location listed,
- The phone number was incorrect, or
- The provider was not accepting new patients when the directory indicated they were.

CMS calculated the percentage of locations with inaccuracies for each MAO directory, which ranged from 4.63% to 93.02%. The average MAO inaccuracy rate by location was 44.97%.¹ The majority of the MAOs (28 out of 52) had between 30% and 60% inaccurate locations. Because MAO members rely on provider directories to locate an in-network provider, these inaccuracies could pose a significant access-to-care barrier. Inaccuracies with the highest likelihood of preventing access to care were found in 41.75% of all locations. In response to these findings, CMS-issued compliance actions intended to drive industry improvement in the accuracy of provider directories for MA beneficiaries.

2.0 Background and Methods

Provider directories are an important tool MA enrollees use to select and contact their physicians and other contracted providers who deliver medical care. In accordance with 42 CFR §422.111, the 2019 Medicare Communications and Marketing Guidelines,² the CMS Model Provider Directory, and the 2019 Final Call Letter, MA plans must maintain accurate online provider directories that include only active, contracted providers with specific notations for providers who are not accepting new patients. Beneficiaries and their caregivers rely on provider directories to make informed decisions regarding their health care choices. Inaccurate provider directories can create a barrier to care and raise questions regarding the adequacy and validity of the MAO's network as a whole.

¹This is the average inaccuracy rate by location across all 52 MAOs. This differs from the overall inaccuracy rate of 48.74% because some MAOs had multiple locations listed for individual providers, resulting in many more locations for these MAOs.

² <https://www.cms.gov/Medicare/Health-Plans/ManagedCareMarketing/FinalPartCMarketingGuidelines.html>

CMS became concerned about provider directories following a beneficiary complaint. Based on the complaint, a sample review of an MAO directory indicated that there may be significant issues with accuracy. Soon after CMS began this process, a study examining MA provider directories was published in *JAMA Dermatology* (October 2014). The study found that, among 4,754 total dermatologists listed in the largest MA plans in 12 metropolitan areas in the United States, 45.5% represented duplicates in the same plan directory. Among the remaining unique listings, only 48.9% of dermatologists were reachable, accepted the listed plan, and offered an appointment for a fictitious patient.³ In response to concerns over these findings, CMS conducted a follow-up review of the provider directories for those organizations named in the *JAMA Dermatology* article. The CMS review focused on primary care providers (PCPs), and while the results were slightly more favorable, they echoed many of the same issues identified in the *JAMA Dermatology* article.

To address issues with online provider directories, CMS strengthened existing sub-regulatory guidance and communicated concerns about and expectations for provider directories via a Health Plan Management System (HPMS) memo, as well as in the Contract Year (CY) 2016, CY 2017, and CY2018 Call Letters. As a part of the message conveyed in the 2016 Call Letter, CMS announced it would verify the accuracy of online provider directories for plans offered by MAOs (also referred to as “Parent Organizations” or “POs”).

Beginning in February 2016, CMS undertook a study that examined the accuracy of the information in MAOs’ online directories over the course of three years, or review rounds. CMS is reviewing approximately one-third of MAOs each year. The goal is to gain a better understanding of provider directory accuracy, identify best practices, and, through appropriate compliance actions, drive industry improvement in providing more accurate provider directories. CMS reviewed 108 providers for each MAO,⁴ selected from four of the most commonly used provider types – Cardiologist, Oncologist, Ophthalmologist, and Primary Care Physicians (PCPs). Due to minor updates to the review methodology, the data from the three rounds are not directly comparable, but together they give an overview of provider directory accuracy.

Table 1 displays summary results from each of the three review rounds.

Table 1: Review Results from Each Round

	Round 1	Round 2	Round 3
Review Period	February - August 2016	September 2016 - August 2017	November 2017 – July 2018
Number of MAOs	54	64	52

³Resneck JS, Quiggle A, Liu M, Brewster DW. The Accuracy of Dermatology Network Physician Directories. Posted by Medicare Advantage Health Plans in an Era of Narrow Networks. *JAMA Dermatology*. 2014; 150(12):1290-1297. doi:10.1001/jamadermatol.2014.3902.

⁴ During Round 3, one MAO had fewer than 108 eligible providers. The MAO had 28 PCPs, 27 cardiologists, 13 ophthalmologists, and 26 oncologists, for a total of 94 providers. All eligible providers were reviewed for this MAO.

	Round 1	Round 2	Round 3
Number of Locations	11,646	14,869	10,504
Number of Providers	5,832	6,841	5,602
% Deficient Locations	45.10%	55.07%	48.74%
Range of Deficiency Scores for MAOs	1.77% to 86.53%	11.20% to 97.82%	4.63% to 93.02%
Average Deficiency Rate	41.37%	48.39%	44.97%
Number of MAOs with between 30% and 60% deficient locations	37	37	28

Table 2 gives an overview of the number of providers and associated locations reviewed during the round three.

Table 2: Provider Types and Locations Reviewed During Round 3

Provider Type	Providers Reviewed	Locations Reviewed
Cardiology	1,386	3,148
Oncology	1,350	2,599
Ophthalmology	1,353	2,716
PCP	1,513	2,041
Total	5,602	10,504

Note: This report is accompanied by a spreadsheet that provides a detailed look at the review results, both at the individual MAO level as well as the aggregate level. To facilitate the ease of use and understanding of the spreadsheet's content, the first tab contains sample data with a key explaining the various fields. The second tab contains the results for all newly-reviewed MAOs. The third tab presents the aggregated second round data, and the fourth tab presents the overall compliance score as well as the compliance action taken.

Survey process: Reviewers in the study placed calls to provider's office(s), verifying the accuracy of the information for each location listed in the provider directory. During the calls, reviewers asked the following questions to determine directory accuracy:

- Does the provider see patients at this location?
- Does the provider accept the MA-PD plan at this location?
- Does the provider accept (or not accept) new patients who have this MA-PD plan?
(The provider directory is considered accurate if it correctly indicates if the provider is or is not accepting new patients)
- Is the provider a (PCP, cardiologist, oncologist, or ophthalmologist)?
- Is the address correct?
- Is the telephone number correct? *(Usually confirmed by dialing the phone number)*
- Is the provider's name correct?

- Is the practice name correct?

Additional details on the study design and methods are in Appendix 1.

Deficiency scoring methodology: CMS designed a scoring methodology to: (1) differentiate between the severity of final deficiencies; and (2) control for MAOs that had a greater number of locations listed for individual providers, which would increase their likelihood of having a greater number of final deficiencies. This allows for a consistent comparison between MAOs with varying numbers of provider locations and does not penalize MAOs that list many provider locations. To assess the severity of the inaccuracies, CMS assigned each type of final deficiency a weight between 0 and 3 points (Table 3). Deficiencies where the provider should not have been listed at the location, or with an incorrect phone number, or where the provider was found to not be accepting new patients when the directory stated they were accepting new patients were assigned the highest weight (3). In contrast, an incorrectly spelled name was assigned the lowest weight (0) because it was not perceived to be a barrier to accessing care.

CMS then assigned a deficiency score to each location with at least one final deficiency. A location with multiple deficiencies was assigned a score that equaled the weight of the most significant final deficiency. For example, a provider location listing that stated they are not accepting new patients when they are (weight of 1), an incorrect address (weight of 2), and an incorrect phone number (weight of 3) received a score of 3.

Table 3: Deficiency Types and Weight

Final Deficiency	Deficiency Weight
Provider should not be listed at any of the directory-indicated locations	3
Provider should not be listed in the directory at this location	3
Phone number needs to be updated	3
Provider is NOT accepting new patients	3
Address needs to be updated	2
Address (suite number) needs to be updated	1
Provider IS accepting new patients	1
Specialty needs to be updated	1
Provider name needs to be updated	0

After assigning a score to each of the MAO’s deficient location(s), CMS summed the deficiency scores. CMS then determined the maximum possible score for each MAO by taking the number of MAO locations reviewed and multiplying it by three, the maximum score for a single location. To control for the fact that the number of locations reviewed for each MAO varied considerably, the sum of the MAO’s location deficiency score was divided by the MAO’s maximum possible score. This number became the final weighted deficiency score for each MAO.

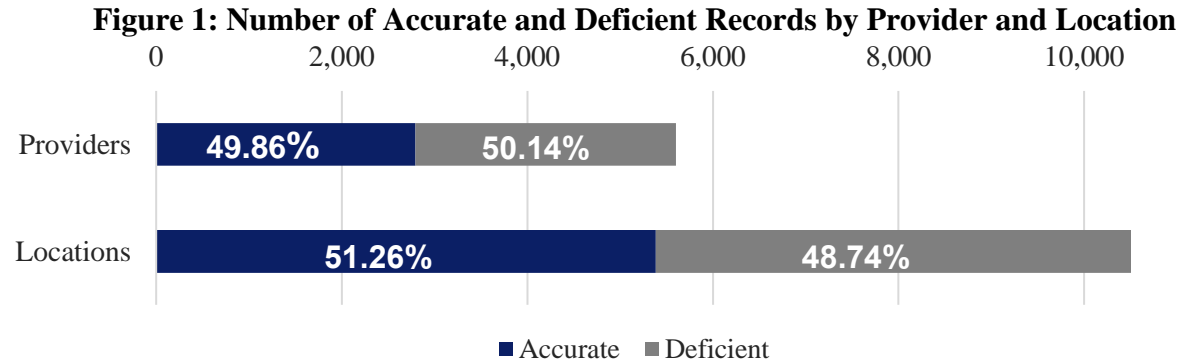
Table 4 provides three examples of how CMS calculated the scoring for each MAO. MAO A had 154 provider locations reviewed with 33 having an associated deficiency. The sum of deficiency scores for MAO A was 88 out of a maximum possible 462 deficiency score, for a final score of 19.1%. Similar findings were found for MAO B, which had about 15% more provider locations than MAO A, but had a similar final deficiency score (20.7%). In contrast, MAO C had a much higher final deficiency score (43.9%), with about half of its locations found to have a deficiency (213 of 419 locations).

Table 4: Examples of Final Deficiency Scoring

MAO	Provider Locations Reviewed	Deficient Locations	Sum of Location Deficiency Scores	Maximum Possible Deficiency Score (3 x Locations Reviewed)	Weighted Final Deficiency Score (Sum of Location Deficiency Scores / Maximum Possible Score)
“A”	154	33	88	462	19.1%
“B”	177	43	110	531	20.7%
“C”	419	213	552	1,257	43.9%

3.0 Findings

Overall, of the 5,602 providers in the third review round, 50.14% (2,809) of providers had at least one deficiency. Of the 10,504 locations reviewed, 48.74% (5,120) of the locations had at least one deficiency (Figure 1).



Of the 10,504 locations reviewed, providers should not have been listed at 33.14% (3,481) of the locations (2,088 + 1,393, as shown in Table 5) either because the provider did not work at the location or because the provider did not accept the plan at the location. In 1,393 of these instances, the provider should not have been listed at any of the locations in the directory. There were 690 phone numbers that were wrong or disconnected and 364 incorrect addresses. Finally, there were 221 instances in which the provider was found not to be accepting new patients, although the directory indicated that the provider was accepting new patients. Table 5 provides a breakdown of deficiencies identified by CMS during the review process.

Table 5: Deficiency Types by Occurrence

Deficiency Type	Number of Deficiencies Identified	Percentage of Total Deficiencies (<i>Number of Deficiencies Identified Divided by the Total of 5,271 Deficiencies Found</i>)
Provider should not be listed in the directory at this location	2,088	39.61%
Provider should not be listed at any of the directory-indicated locations	1,393	26.43%
Phone number needs to be updated	690	13.09%
Address needs to be updated	364	6.91%
Address (suite number) needs to be updated	239	4.53%
Provider IS accepting new patients	235	4.46%
Provider is NOT accepting new patients	221	4.19%
Specialty needs to be updated	24	0.46%
Provider name needs to be updated	17	0.32%
Total	5,271	100%

Note: Some locations had more than one deficiency; therefore, the total number of deficiencies (5,271) is greater than total number of locations with deficiencies (5,120).

Combining the three deficiencies which carried the heaviest weight of “3” results in a total of 4,392 deficiencies (out of a total of 5,271 total deficiencies). The 4,392 deficiencies were found in 4,385 locations (as some locations had multiple deficiencies). When viewing the results as a percentage of the total for all locations reviewed, these deficiencies, which are those that present the highest likelihood of representing a barrier to care, were found in 41.75% of all locations.

4.0 Implications

The third review round identified significant errors within online provider directories. At a minimum, many of the findings suggest the discrepancies will increase the member’s frustration with the MAO. Frequent inaccuracies may also prevent sufficient access to care. Because MAO members rely on provider directories to locate in-network providers, accurate information is critical. Further, directories that include locations where a provider does not practice or state that providers are accepting new patients when they are not call into question the adequacy and validity of the MAO’s network as a whole. These inaccuracies can create barriers for members to receive services critical for their health and well-being.

CMS found that providers were not located at about 33%, of the reviewed locations listed in the provider directories. This finding means that if a member were to look up a provider/location in an MAO directory, he/she would be unable to make an appointment with that provider because

the provider did not work at that location or because the provider did not accept the plan at that location. In 1,393 of these cases, the provider associated with these locations did not work at or did not accept the plan at any of the locations identified in the online directory. For example, if a provider was listed at three locations in the directory, CMS' review found that the provider was not at any of the three locations identified. Given that the provider was not at any location listed in the directory, this finding raises concerns about whether these providers are even part of the network.

CMS's review uncovered 690 instances where the phone number was incorrect or disconnected. Online provider directories listed phone numbers of other businesses, providers' personal phone numbers, and home numbers of unrelated individuals. Wrong or disconnected phone numbers prevent plan members from contacting the provider; therefore, the member cannot make an appointment even if the provider is at that location, in the network, and accepting new patients. Not being able to connect with a provider's office prevents a member from making an appointment, which again may limit the enrollee's access to care.

The category "Provider is not accepting new patients" was identified as a deficiency 221 times. While the online directory stated that the provider was accepting new patients, the review found the provider's panel was closed to new patients. Members rely on the information in the directory to make informed health care choices. When an enrollee relies on a directory's statement that a provider is accepting new patients and finds that the provider is not, it calls into question the adequacy of the plan's network and suggests that the MAO may be unable to meet the beneficiary's health care needs.

In considering the deficiencies that are most likely to impact access to care, 85.64% of locations with deficiencies (4,385 out of 5,120)⁵ had deficiencies of the highest weighted, most egregious errors. These findings suggest that MAOs are not adequately maintaining the accuracy of their provider directories. CMS found that these findings were not skewed by a few organizations, but rather they were widespread in the sample reviewed. Very few organizations performed well. **Table 6** below provides a breakdown of organizations and the percentage of total locations that were found to have deficiencies. The average deficiency rate by location was 44.97%, with the majority (28) of MAOs having deficiencies between 30% and 60%.

⁵ There are 5,120 locations with at least one deficiency. Of these, 3,481 are deficient because the provider should not be listed at the location. Another 904 locations either listed an incorrect phone number, incorrectly listed the provider as accepting new patients, or had both of these deficiencies. In total, 4,385 (3,481 + 904) locations had the highest weighted errors.

Table 6: Deficiency Range by MAOs

Deficiency Rates by Location	Number of MAOs
0.0% - 9.9%	2
10.0%-19.9%	6
20.0% - 29.9%	5
30.0% - 39.9%	7
40.0% - 49.9%	13
50.0% - 59.9%	8
60.0% - 69.9%	4
70.0% - 79.9%	2
80.0% - 89.9%	3
90.0% - 100%	2

5.0 Common Drivers of Deficiencies

We identified several common drivers that may be contributing to provider directory inaccuracies. First, it appears that group practices continue to provide data at the group level rather than at the provider level. A group practice often lists a provider at a location because the group has an office there, even if that specific provider rarely or never sees patients at that location. Sometimes this occurs at the direction of the provider group. To ensure that beneficiaries can connect with the contracted providers at the location listed, it is critical that the provider directory does not convey an inflated number of locations where the provider practices. Additionally, when provider groups request that all providers in a provider group be listed at all of the group’s locations, we suggest reminding the provider groups of the CMS requirement to maintain accurate provider directories and that listing all providers at all locations causes plans to be out of compliance with this requirement.

Second, we saw a general lack of internal audit and testing of directory accuracy among many MAOs. Instead, MAOs placed full faith in credentialing services and vendor support, and even in provider responses. Based on plans’ responses, these practices, while typical, have not been found to be a reliable means of ensuring directory accuracy. Moreover, if MAOs had implemented routine oversight of their processes for data validation, errors in the provider directory would have become apparent.

Finally, CMS encountered several instances in which a call to a provider’s office found the provider directory had been out of date for a long period of time, including cases where providers had been retired or deceased for years. In some cases, MAOs contacted providers or provider groups and the providers themselves had validated information that was subsequently found to be incorrect when CMS directly called the office. Both MAOs and their contracted providers are responsible for ensuring that provider directory data is accurate. MAOs cannot

assume that they will be informed when a change in provider location occurs; instead, MAOs need to implement routine processes that drive more accurate information in their directories. MAOs that take a reactionary approach by relying solely on provider-based notification will not have accurate provider directories. MAOs must proactively reach out to providers for updated information on a routine basis. They should actively use the data available to them, such as claims, to identify any provider inactivity that could prompt further investigation.

6.0 Next Steps

CMS will conduct an additional review round which will examine online provider directories of approximately 32 MAOs. Newly eligible MAOs and MAOs offering C-SNP or D-SNP plans will be included in this round. CMS will continue to review the same four types of providers and employ the same review methodology to allow for comparison across review rounds.

CMS continues to feel MAOs are in the best position to ensure the accuracy of their provider directories. The active participation and engagement of plan contracted providers is key to improving directory accuracy. Through the insight gained from our reviews, it has become clear that a centralized repository for provider data is a key component missing from the accurate provider directory equation. CMS is currently looking at the provider data the agency collects to determine how it may be used to foster a collaborative industry approach to achieving a centralized location for provider data.

This approach would make data collection and verification more efficient and less burdensome for MAOs and providers, and result in more accurate and timely data sharing. Moreover, a centralized database could allow the current inward facing MAO efforts to have a broader impact. For example, when an MAO identifies a directory error, it is fixed only for their own directory, whereas a corrected error in a centralized database would improve directory accuracy for all MAOs using that system. A centralized database, however, will take time and does not obviate the short-term, immediate need of MAOs to improve directories.

CMS issued compliance actions based on the results of provider directory reviews. Eighteen Notices of Non-Compliance, 15 Warning Letters, and 7 Warning Letters with a Request for a Business Plan were sent.⁶ We encourage MAOs to look for more near-term solutions to improving directory accuracy, such as performing self-audits of directory data, working with

⁶During the three review rounds, CMS reviewed the top ten MAOs by enrollment each round, resulting in many of the same MAOs being reviewed every round. From 2016 to 2018 the top ten by enrollment changed, but ten of the MAOs reviewed during round three were also reviewed during rounds one and/or two. CMS did not take compliance actions on these ten parent organizations that were reviewed in rounds one and/or two, as they were subject to compliance actions for round one. The top ten are reviewed every year for monitoring purposes, therefore compliance for the repeat organizations was not appropriate. In addition, given the complexity of ensuring accurate provider directories are available to beneficiaries, CMS did not feel that sufficient time was provided to make substantive improvements between rounds one, two and three.



group practices to ensure that providers are only listed at locations where they accept appointments, and developing better internal processes for members to report directory errors.

Appendix 1 - Review Methodology

MAO Plan Selection

For the third round, CMS selected MAOs for review based on three criteria, listed below by selection priority:

1. Top ten MAOs by total enrollment size
2. MAOs who are new to the program for 2018
3. Eligible MAOs not previously reviewed during the first or second rounds

After identifying the MAOs to be included for review, CMS randomly sampled one MA Prescription Drug (MA-PD) contract offered by each MAO, then randomly sampled a Plan Benefit Package (PBP), or “MA-PD plan,” from each contract. CMS then selected every fifth contract as rural and the rest of the contracts as urban to ensure a mix of urban and rural service areas. If the selected contract did not have the assigned designation (only urban when contract was selected to be rural) then the contract was re-designated urban, with another contract being selected for a rural review. Because many online provider directories require users to enter a zip code to search for providers, CMS selected a county within each MA-PD plan’s service area, and then selected a zip code within the search county to use as the ‘search zip code.’

Provider Selection

CMS reviewed four types of providers from each MA-PD plan: PCPs, cardiologists, ophthalmologists, and oncologists. CMS reviewed these provider types because they are among the most frequently utilized by both MA and fee-for-service (FFS) Medicare beneficiaries. CMS reviewed 108 providers from each MA-PD plan, randomly sampling 27 of each of the four provider types from the MA-PD plan’s online provider directory.⁷

Review Calls to Provider Offices

Reviewers captured the provider directory information for each of the sampled providers (108 providers for each MAO), including all locations listed for each provider. Reviewers then placed calls to each provider’s office(s), verifying the accuracy of the information listed in the provider directory. During the calls, reviewers asked the following questions, in this order, to determine directory accuracy:

- Does the provider see patients at this location?
- Does the provider accept the MA-PD plan at this location?

⁷ In some cases, an MA-PD plan’s network did not contain enough of one provider type to meet the sample size of 27. If the MAO had another eligible contract, a MA-PD plan from this contract was used as a back-up MA-PD plan and CMS completed the sample size by selecting providers from the back-up MA-PD plan. If another contract and back-up MA-PD plan was not available, or if it did not contain additional unique providers, CMS sampled additional PCPs from the primary MA-PD plan to meet the sample size.

- Does the provider accept (or not accept) new patients who have this MA-PD plan? *(The provider directory is considered accurate if it correctly indicates if the provider is or is not accepting new patients)*
- Is the provider a (PCP, cardiologist, oncologist, or ophthalmologist)?
- Is the address correct?
- Is the telephone number correct? *(Usually confirmed by dialing the phone number)*
- Is the provider's name correct?
- Is the practice name correct?

When calls were made for a provider with multiple locations, the reviewer attempted to verify information about all the provider's locations during the first call. If the person at the provider's office was unable to verify information for the other locations, the reviewer called the next location, and continued until all information was verified. When a location was not reached on the first call attempt, reviewers made at least two more attempts to reach a provider's office, placing calls on different days and at different times. Reviewers recorded results for each provider location in a spreadsheet, noting any inaccuracies identified during the review call. Locations that could not be verified because calls were not answered after three attempts were marked as a deficiency. Locations that could not be verified because the respondent did not want to participate were replaced with another location. As a note, less than 1% of locations refused to participate.

Sharing Results with MAOs

CMS shared the initial findings with each MAO, including any inaccuracies the reviewer identified in the provider directory. The MAO was given two weeks to review the findings and to 'concur' or 'non-concur' with the inaccuracies identified. CMS asked MAOs to provide supporting documentation to support 'non-concur' responses.

CMS then reviewed the MAO's responses and made final determinations, identifying if the provider directory's listing of a provider's location contained a "final deficiency," an error which must be corrected in order for the provider directory to be accurate. During the determination process, CMS made additional calls to providers' offices to confirm information. CMS shared the final results with the MAO, providing the MAO 30 days to make all necessary corrections in the MA-PD plan's provider directory.