Department of Health and Human Services

OFFICE OF INSPECTOR GENERAL

Accuracy of Unique Physician/Practitioner Identification Number Registry Data

INSPECTOR GENERAL

July 2003

OEI-03-01-00380

OFFICE OF INSPECTOR GENERAL

http://www.oig.hhs.gov/

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EXECUTIVE SUMMARY

OBJECTIVE

To determine whether information contained in the Unique Physician/Practitioner Identification Number database is complete and accurate.

BACKGROUND

The Consolidated Omnibus Budget Reconciliation Act of 1985 required the Centers for Medicare & Medicaid Services (CMS) to establish unique identifiers for all physicians who provide services to Medicare beneficiaries. As part of the Medicare enrollment process, CMS began assigning Unique Physician/Practitioner Identification Numbers (UPINs) to all physicians who bill or perform services for Medicare payment. The use of UPINs was later expanded to include non-physician practitioners and medical group practices. Information on all UPINs is stored in a national database called the Unique Physician/Practitioner Identification Number System, also known as the UPIN Registry. The Medicare enrollment process should ensure that services are performed only by qualified providers and enable CMS to reduce the potential for inappropriate payments.

In order to receive a UPIN, a health care provider must enroll with the Medicare Part B carrier serving his or her geographic area. The carrier assigns a separate Provider Identification Number (PIN) to each of the provider's practice locations and submits the provider's information to the UPIN Registry. The Registry then assigns a UPIN to the provider. Health care providers must inform the appropriate Part B carrier when changes occur in their enrollment information. Carriers are required to maintain and update enrollment data and deactivate practice settings that are no longer active.

For this inspection, we selected a stratified random sample of 500 UPINs from CMS's active UPIN database. We contacted providers and asked them to verify information contained in the UPIN database for each of their active practice settings. Each practice setting record contains a provider's biographical data and data specific to the practice location, including the Medicare billing number. We also reviewed the universe of active UPIN database records to identify inconsistent, missing, and questionable information.

FINDINGS

Fifty-two percent of providers in the active UPIN database had inaccurate information in at least one of their practice setting records

Forty-four percent of PINs have never been used or are no longer used to bill Medicare

Nine percent of providers could not be contacted by mail

The UPIN record layout and data entry instructions may adversely affect the accuracy of data

By performing an automated review of the entire UPIN database, CMS could identify inconsistent, missing, and questionable information

CONCLUSION AND RECOMMENDATIONS

We recognize that CMS has made an effort to improve the completeness and accuracy of the UPIN Registry. However, the findings of our report demonstrate that the information housed in the UPIN Registry continues to be inaccurate. The UPIN Registry is the most comprehensive source of information on all health care practitioners who provide services for which payment is made under Medicare. When information housed in this Registry is unreliable, CMS's oversight functions may become less effective. For instance, inaccurate UPIN data may jeopardize CMS's ability to identify unusual billing activity, both in the performance of services and the ordering of services. It may also inhibit CMS from verifying that sanctions are correctly imposed. Given that information in the UPIN database is used to update Medicare's Participating Provider Directory, unreliable UPIN Registry data could also adversely affect beneficiaries' ability to make informed choices about health care providers. Furthermore, CMS intends to use UPIN Registry data to enumerate the National Provider System (NPS), which will issue and house new National Provider Identifiers (NPIs). The creation of these standard identifiers was mandated by the Health Insurance Portability and Accountability Act of 1996. NPIs will replace UPINs in the Medicare program, and are expected to enhance CMS's ability to safeguard Medicare and its beneficiaries against fraud, abuse, and inappropriate payments. However, if inaccurate data are used to populate NPS, the new identifiers will not meet their full potential as a protection for the Medicare program and the people it serves.

We recommend that CMS:

- **Correct inaccurate and incomplete information in the UPIN Registry and deactivate practice settings that have never been or are no longer used by Medicare providers. In addition, CMS and its contractors should periodically review data contained in the UPIN Registry to ensure that it is complete, accurate, and consistent.** Automated reviews can be used to target potentially inaccurate data in the UPIN database. We will provide CMS with information regarding the specific inaccuracies we identified in the UPIN Registry. Complete and accurate UPIN data are essential given that CMS intends to transfer provider data from the UPIN Registry to the NPS.

- **Conduct a review of providers who billed Medicare for Part B services in the year 2000 but could not be contacted by mail.**

- **Review and revise existing UPIN Registry data entry guidelines**, including format requirements and response categories, to ensure that data are accurately recorded. For instance, CMS may want to provide a uniform format for state license numbers; expand the length of certain variables, such as street address; and revise the categories that carriers use to classify schools, credentials, and specialties. CMS should also ensure that changes specified in program memoranda be reflected in the Medicare Carriers Manual and that carriers implement those changes. When developing the structure of the new NPS, CMS should consider how formatting, space allotment, and response categories will affect the accuracy of data.

AGENCY COMMENTS

CMS concurred with our recommendations and indicated that they are taking steps to correct inaccurate and incomplete information in the UPIN Registry, deactivate inactive Medicare billing numbers, review providers who billed Medicare in the year 2000 but could not be contacted by mail, and review and revise existing UPIN Registry data entry guidelines. CMS recently developed a UPIN Registry quality assurance plan to improve the accuracy of data in the UPIN Registry. In an effort to enhance existing UPIN data and obtain information needed for the NPS, CMS intends to purchase, validate, and replace UPIN information currently identified as inaccurate, missing, and incomplete. In addition, CMS will instruct Medicare contractors to improve UPIN reporting through education and training; update the UPIN instructions contained in the Medicare Carriers Manual; develop consistency edits; and increase monitoring of contractors' UPIN activities. The full text of CMS's comments is presented in Appendix C.

TABLE OF CONTENTS

INTRODUCTION

OBJECTIVE

To determine whether information contained in the Unique Physician/Practitioner Identification Number database is complete and accurate.

BACKGROUND

Overview of UPIN Registry Data

The Consolidated Omnibus Budget Reconciliation Act of 1985 required the Centers for Medicare & Medicaid Services (CMS) to establish unique identifiers for all physicians who provide services to Medicare beneficiaries. As part of the Medicare enrollment process, CMS began assigning Unique Physician/Practitioner Identification Numbers (UPINs) to all physicians who bill or perform services for Medicare payment, or who order services that result in Medicare payment. The use of UPINs was later expanded to include non-physician practitioners and medical group practices.

Information on all UPINs is stored in a national database called the Unique Physician/Practitioner Identification Number System, or UPIN Registry. CMS contracts with a single Medicare Part B carrier to maintain the UPIN Registry. The Medicare enrollment process is designed to ensure that Medicare beneficiaries are receiving services performed only by qualified providers. It may also enable CMS to reduce the potential for inappropriate payments. By summarizing data by UPINs, CMS can identify aberrant ordering and billing patterns. In addition, information in the UPIN Registry, such as providers' names, credentials, addresses, and specialties, is used to update the "Participating Physician Directory," an internet tool designed to assist Medicare beneficiaries in locating appropriate providers. This information is directly available to the public via the Medicare website.

Provider Enrollment

In order to receive a UPIN, a health care provider must complete and submit an enrollment application to the Medicare Part B carrier serving his or her geographic area. If the provider intends to bill for services in multiple carrier jurisdictions, a separate enrollment form must be sent to each carrier. Enrollment forms require applicants to provide carriers with biographical information such as full name, Social Security number, education, medical specialties, and state licensing information. Applicants must also provide information for each of their practice settings (i.e., physical locations where they provide medical services), including business and billing addresses.

Carriers are responsible for verifying the information provided in an enrollment application, particularly the provider's credentials, state license, certifications, and sanctions. Upon completion of the verification process, the carrier assigns a separate Provider Identification Number (PIN) to each of the applicant's practice locations and electronically submits the applicant's information to the UPIN Registry. PINs are Medicare billing numbers. One record is submitted per PIN, and each record contains a provider's biographical data as well as data specific to the practice location.

The UPIN Registry contractor then performs additional validation checks on providers' records. These checks include comparisons against the American Medical Association's database of physicians. If the Registry contractor identifies discrepancies in or across records, a notice is sent to the responsible carrier who investigates the issue, makes the appropriate changes, and resubmits the record to the Registry. If no discrepancies are identified, the Registry assigns a UPIN to the provider. Each provider is assigned only one UPIN; however, providers may have multiple listings in the UPIN Registry depending upon the number of PINs assigned to them.

Maintenance of UPIN Registry Data

The enrollment application instructs health care providers to alert the appropriate Part B carrier to any changes in enrollment information within 90 days of the effective date of the change. According to the Medicare Carriers Manual, carriers should maintain provider enrollment data and notify the Registry within 5 days of any additions, changes, or deletions reported by providers. The Registry contractor also periodically reviews the UPIN database and notifies carriers about the suspected death or sanction of a provider. Carriers then have 30 days to update the file accordingly. Ultimately, Medicare requires that provider information in the UPIN Registry be identical to information in the carriers' administrative files.

Carriers are also responsible for deactivating practice setting records that have had no Medicare claims activity for 12 consecutive months. A UPIN remains active as long as there is claims activity from at least one associated practice setting. If there is no claims activity from *any* of the practice settings for 12 consecutive months, the UPIN becomes inactive as well. CMS divides the UPIN Registry into two files, one containing active records and the other containing inactive records. Both of these files are updated on a monthly basis.

Previous OIG Work Involving UPINs

The Office of Inspector General (OIG) has issued several reports relating to UPINs. These reports address the accuracy of UPIN data as well as the use of inactive and invalid UPINs on Part B claims. In 1999, the OIG issued a report entitled "Accuracy of Unique Physician Identification Number Data" (OEI-07-98-00410). This report found that, despite CMS's efforts to enhance the accuracy of information contained in the UPIN Registry, problems with the data persisted. For instance, 88 percent of state license numbers in the UPIN Registry did not exactly match license numbers provided by state

licensing boards; 28 percent of records did not contain a Social Security number; and almost one-fourth of the active UPINs had no claims activity for 12 months. This report also found inconsistencies in providers' biographical information across different practice setting records. Additional problems were identified by a 2001 report, "Inaccuracies in the Unique Physician Identification Number Registry: Incorrect Addresses for Mental Health Service Providers" (OEI-03-99-00131). According to this report, addresses listed in the UPIN Registry database were inaccurate for 28 percent of providers, and carriers did not always have correct addresses for the providers. Another 2001 report, "Medical Equipment and Supply Claims with Invalid or Inactive Physician Numbers" (OEI-03-01-00110), found that Medicare paid $32 million for medical equipment and supply claims with invalid UPINs in 1999. It also found that Medicare paid $59 million in 1999 for medical equipment and supply claims with UPINs that were inactive on the date of service.

National Provider Identifier Initiative

For the purposes of administrative simplification, the Health Insurance Portability and Accountability Act of 1996 mandated the adoption of a "standard, unique health identifier for each individual, employer, health plan, and health care provider for use in the health care system." These identifiers, known as National Provider Identifiers (NPIs), will be issued by the National Provider System (NPS). The new identifiers are designed to facilitate the exchange of provider data across health plans and assist in the prevention of fraud, abuse, and inappropriate payments in health care programs. NPIs will eventually replace UPINs in the Medicare program. At this time, CMS intends to use UPIN Registry data to initially populate the NPS. To ensure an effective transition to the new provider identifier system, CMS and its contractors have taken steps to improve the accuracy of the UPIN file. Program memoranda issued in 1998 and 2000 instruct Part B carriers to deactivate inactive practice settings and update UPIN Registry records with correct addresses, states of licensure, school codes, dates of birth, and specialties.

METHODOLOGY

Sample Design

We obtained an August 2001 copy of CMS's active UPIN database containing information about UPINs and their associated PINs. Each PIN represents a unique practice setting. We divided the universe of active UPINs for individual health care providers into two strata based on the number of active practice settings associated with each provider. The first stratum consisted of providers with 10 or more active practice settings, and the second stratum consisted of providers with less than 10 active practice settings. We selected a random sample of 100 UPINs from the first stratum and 400 UPINs from the second stratum for a total sample of 500 UPINs. We then selected all of the active practice setting records associated with each of the sample providers. A description of the sample is provided in Table 1 on the next page.

Table 1. Sample of Health Care Providers and their Associated Practice Settings

Strata	Description	UPINs in Universe	UPINs in Sample	PINs in Universe	PINs in Sample
1	Providers with 10 or More Practice Settings	8,207	100	108,499	1,314
2	Providers with Fewer Than 10 Practice Settings	868,319	400	1,876,491	882
Total		**876,526**	**500**	**1,984,990**	**2,196**

Data Collection

We obtained sample providers' current mailing addresses from Part B carriers, or when carrier addresses were incorrect or unavailable, from the UPIN file. We contacted sample providers by overnight mail and asked them to verify information contained in the UPIN database for each of their active practice settings. We made up to three written attempts to contact providers. Providers were asked to verify the following information: UPIN, name, Social Security number, credentials, date of birth, professional school, year of graduation, specialties, certifications, state licensing information, group practice participation, Medicare participation, practice setting addresses, whether PINs were ever used to bill Medicare, and whether PINs are currently used to bill Medicare. If providers identified any inaccurate information, we asked them to provide us with the correct information.

We received responses from 387 of the 500 providers in our sample. However, responses from 22 of these providers were not included in our analysis. Of these 22 providers, responses from 13 did not contain information sufficient for analysis, and responses from 9 were received after the data collection cutoff. Responses from the remaining 365 providers were used as the basis for the analysis of sample data. The 365 providers in our sample represent 652,342 providers and 1,400,476 practice settings in the universe.

We did not receive responses from 65 providers after 3 written requests. We were unable to contact the remaining 48 providers because the mailing addresses provided by carriers or the UPIN database were incorrect or insufficient, and our mailings were returned as undeliverable.

Data Analysis

Analysis of sample data. We analyzed sample providers' responses to determine whether providers could verify their UPINs, whether providers have ever used their PINs to bill Medicare, and whether providers currently use their PINs to bill Medicare. We did not determine whether providers notified carriers about PINs that they never or no longer use. We identified inaccurate information only for those PINs that providers reported using at the time of our review. There were 21 data elements used in our analysis of inaccurate information included in the UPIN Registry database. According to the UPIN

record layout outlined in the Carriers Manual, 18 of the 21 data elements are required. The remaining three data elements (primary specialty certification, secondary speciality, and secondary specialty certification) should be included in the UPIN Registry "if available."

When providers identified inaccurate information, we asked them to provide us with correct information. When reviewing this corrected information, we identified cases where data contained in the UPIN Registry was inaccurate due only to certain restrictions imposed by either the UPIN file record layout or the data entry guidelines specified in the Medicare Carriers Manual or CMS's UPIN data dictionary. For instance, the UPIN Registry record layout allows only six characters for a provider's middle name. If the provider's middle name exceeded six characters, the name was truncated and the provider indicated that the truncated name was incorrect. We recoded these types of responses to capture issues relating to record layout and data entry guidelines. We did not consider these cases to be inaccurate.

We estimated the proportion of practice setting records with inaccurate information, as well as the proportion of sample UPINs with at least one inaccurate practice setting record. In addition, we determined whether providers with a large number of practice locations are more likely to have inaccurate information in their records.

The results of our analysis of sample data are projectable to the responding universe. Point estimates and confidence intervals for all statistics presented in the findings of this report are provided in Appendix A.

Analysis of all active UPIN records. We reviewed the universe of active UPIN Registry records to identify instances where the content and format of a provider's biographical information was inconsistent from one practice setting to the next. We also analyzed the entire active UPIN Registry database to determine whether the universe of UPIN Registry records contained any missing or questionable entries. We reviewed records to determine if entries for the following information were either missing or questionable: name, address, date of birth, header Social Security number (the Social Security number submitted with the provider's initial practice setting), credentials, state license, professional school code, graduation year, primary specialty code, secondary specialty code, resident/intern status, and practitioner type.

This inspection was conducted in accordance with the *Quality Standards for Inspections* issued by the President's Council on Integrity and Efficiency.

FINDINGS

Our review of the entire active UPIN Registry (1,984,990 records) revealed that the UPIN database contained inconsistent, incomplete, and questionable data. Furthermore, a review of responses from a stratified random sample of 500 Medicare providers, who were asked to verify information contained in the UPIN Registry for each of their active practice settings, found that the UPIN Registry also contains inaccurate information. The combination of these findings provides strong evidence that the UPIN Registry contains unreliable information. Unreliable UPIN Registry data undermines the effectiveness of the Medicare claims review process. It may also lead to the provision of erroneous information to Medicare beneficiaries. Moreover, unreliable UPIN Registry information may be transferred into the new National Provider System (NPS). The National Provider Identifiers (NPIs) housed in this new system are expected to prevent fraud, abuse, and inappropriate payments. However, if inaccurate data are used to populate the system, the new national identifiers will not meet their full potential as a program safeguard.

Fifty-two percent of providers in the active UPIN database had inaccurate information in at least one of their practice setting records

Based on our sample, we estimate that over half of providers listed in the active UPIN database had at least one practice setting record with inaccurate information. Providers can have one or more practice settings in the UPIN database. In our sample, the number of active practice settings per provider ranged from 1 to 30. Providers with a higher number of practice settings (10 or more) were more likely to have active UPIN Registry records with inaccurate information.

We estimate that 35 percent of all practice setting records in the active UPIN database contained at least one inaccurate item; and the number of incorrect items on individual inaccurate practice setting records ranged from 1 to 9. We identified inaccurate information only for those practice settings that providers reported using at the time of our review. Information that was most often inaccurate included: whether the provider is certified in his/her primary specialty, the provider's secondary specialty, whether the provider is certified in his/her secondary specialty, professional school, state license number, and Social Security number. Addresses for practice locations (street, city, zip code) were often inaccurate as well. Table 2 on the next page shows the items that were most frequently inaccurate, and Appendix B provides a complete listing of inaccurate items.

Table 2. UPIN Registry Information That Was Most Often Inaccurate

Inaccurate Information	Percent of Active Practice Settings with Inaccurate Information
Primary Specialty Certification	32.61%
Secondary Specialty	23.16%
Secondary Specialty Certification	18.15%
Street Address of Practice Location	17.48%
Zip Code of Practice Location	13.40%
Professional School	10.98%
State License Number	9.69%
Group Practice Participation	8.91%
Medicare Participation Status	6.60%
Primary Specialty	5.31%
Social Security Number	5.11%

Source: Analysis of sample providers' responses from 2001 OIG survey

When information in the UPIN Registry is inaccurate, CMS cannot effectively identify aberrant ordering and billing activity. For example, CMS's contractors have used specialty information to identify cases where psychiatrists were listed as ordering physicians on Medicare claims for wheelchairs. Psychiatrists would not typically order wheelchairs for beneficiaries. If specialty information in the UPIN Registry is inaccurate, CMS may not be able to correctly identify this kind of aberrant ordering activity. CMS could also use practice location address information in the UPIN file to identify cases where physicians bill or order services for beneficiaries who live a significant distance from any of the physician offices. However, CMS may not be able to detect these unusual cases if address information in the UPIN Registry is inaccurate. In addition, inaccurate provider names, credentials, addresses, and specialties in the UPIN database may prevent beneficiaries who use Medicare's Participating Provider Directory from making informed choices about health care providers. Finally, inaccurate UPIN Registry data may be used to populate the NPS. This would compromise CMS's ability to use the new identifiers contained in the NPS to safeguard Medicare against fraud and abuse.

Forty-four percent of PINs have never been used or are no longer used to bill Medicare

An estimated 619,105 of 1,400,476 practice settings (44 percent) should no longer be in the active UPIN database. According to providers' responses, 16 percent of PINs listed in the active UPIN database have never been used to bill for Medicare services. Providers also reported that an additional 28 percent of "active" PINs are no longer being used to

bill Medicare and should therefore be deactivated. Forty-nine percent of providers had at least one inactive practice setting in the active UPIN Registry.

Seventeen percent of providers no longer bill Medicare using any of the PINs listed in the active UPIN file. Of these providers, over 14 percent are deceased, and 26 percent indicated they had retired. A provider's UPIN should be deactivated if all of the practice settings associated with that UPIN are no longer active.

Nine percent of providers could not be contacted by mail

We were unable to contact 9 percent of providers due to incorrect or insufficient address information either provided by Medicare Part B carriers or listed in the UPIN database. More than half (52 percent) of these providers billed Medicare for Part B services in the year 2000. Actual Medicare payments to sample providers who could not be contacted by mail ranged from $34 to $513,255 in the year 2000, with one-quarter of providers receiving more than $40,000 in payments.

For most of the providers who could not be reached, we used every practice location address listed in the active UPIN Registry in our attempt to make contact. Although we did not include the practice setting records for these providers in our analysis of inaccurate UPIN data, we believe the mail returns indicate that address information in the UPIN Registry may not have been complete and accurate for these providers.

The UPIN record layout and data entry instructions may adversely affect the accuracy of data

Information contained in the UPIN Registry could be construed as inaccurate due to data entry guidelines specified in the Medicare Carriers Manual. In some cases, formatting instructions or space allotment affected the accuracy of data. In other cases, the accuracy of information was affected by the categories that carriers use to classify data. Because carriers appear to have been following the data entry guidelines when inputting this information, we did not include these items in our error rate for inaccurate records.

Formatting. Some of the state license numbers contained in the active UPIN Registry were adversely affected by formatting requirements. The Medicare Carriers Manual stipulates that entries for state license number should be 12 characters in length, right justified, and preceded by zeros. For example, we found that the license number "35-07-8566-Y" was input as "00035078566Y," a change that could make the number difficult to verify with state licensing agencies. A January 1998 program memorandum (B-98-3) issued by CMS confirms this conclusion, stating that the convention is "creating a problem in identifying the correct license number." Although this memorandum instructs carriers to left justify license numbers and to eliminate leading zeros, there has been no change to the data entry guidelines outlined in the Carriers Manual.

Restrictions regarding the length of certain variables could also produce errors in UPIN Registry records. Three percent of practice settings that were currently used by providers contained middle names that were truncated either because the UPIN record layout allows only six characters for that field or because carriers entered the first initial only. The UPIN record layout allows only 25 characters for street address, a restriction that caused 1 percent of active practice setting records to lose important information, such as suite numbers.

Categorization. The accuracy of some information may be affected by the categories that carriers use to classify data. Six percent of practice settings currently used by providers contained school codes that may not accurately reflect the specific schools attended by Medicare providers. Although carriers use specific codes to identify schools for medical doctors, osteopaths, chiropractors, podiatrists, and optometrists, they use only general codes to categorize foreign schools, nursing schools, dental schools, and schools attended by other types of health care providers. Carriers also use a limited list of codes to record providers' professional credentials. For 6 percent of active practice settings, the codes used to classify credentials may not accurately capture providers' qualifications. For instance, two providers listed their credentials as "CRNA" (certified registered nurse anesthetist). However, this credential was not a code that carriers could use. The contractor for one of these providers recorded the credential as "CNA," which the UPIN data dictionary defines as "certified nurse anesthetist." The contractor for the other provider recorded the credential as "RNA," which the UPIN data dictionary defines as "certified registered nurse." Similar categorization problems can occur with primary and secondary specialty codes.

By performing an automated review of the entire UPIN Regsitry, CMS could identify inconsistent, missing, and questionable information

According to our own automated review of the universe of active UPIN Registry records, 19 percent of providers in the UPIN Registry had one or more of the following problems: at least one active practice setting record with missing data, at least one active practice setting record with questionable data, or biographical information that was inconsistent from one practice setting to the next. Although an automated review would not detect all of the inaccurate UPIN information that could be found by verifying information with providers, computer programs could easily identify missing, questionable, and inconsistent data.

Missing data. According to our analysis of the entire UPIN database, required information was not always recorded in practice setting records. Sixteen percent of providers had at least one active practice setting record with missing information. Missing information included Social Security numbers, street addresses of practice locations, and cities of practice locations.

Questionable data. One percent of providers in the active UPIN Registry had at least one record that contained either questionable data or data that did not comply with data entry guidelines. Examples of questionable entries include school codes that are not specified in the Medicare Carriers Manual, implausible dates of birth, and implausible graduation years.

Inconsistent data. An analysis of the entire active UPIN database revealed that a provider's biographical information, such as credentials, resident/intern status, and practitioner type, was not always consistent from one practice setting to the next. Two percent of providers had UPIN data that was not consistent across all of their practice settings.

CONCLUSION

We recognize that CMS has made an effort to improve the completeness and accuracy of the UPIN Registry. However, the findings of our report demonstrate that the information housed in the UPIN Registry continues to be inaccurate. The UPIN Registry is the most comprehensive source of information on all health care practitioners who provide services for which payment is made under Medicare. When information housed in this Registry is unreliable, CMS's oversight functions may become less effective. For instance, inaccurate UPIN data may jeopardize CMS's ability to identify unusual billing activity, both in the performance of services and the ordering of services. It may also inhibit CMS from verifying that sanctions are correctly imposed. Given that information in the UPIN database is used to update Medicare's Participating Provider Directory, unreliable UPIN Registry data could also adversely affect beneficiaries' ability to make informed choices about health care providers. Furthermore, CMS intends to use UPIN Registry data to enumerate the National Provider System (NPS), which will issue and house new National Provider Identifiers (NPIs). The creation of these standard identifiers was mandated by the Health Insurance Portability and Accountability Act of 1996. NPIs will replace UPINs in the Medicare program, and are expected to enhance CMS's ability to safeguard Medicare and its beneficiaries against fraud, abuse, and inappropriate payments. However, if inaccurate data are used to populate NPS, the new identifiers will not meet their full potential as a protection for the Medicare program and the people it serves.

RECOMMENDATIONS

We recommend that CMS:

- **Correct inaccurate and incomplete information in the UPIN Registry and deactivate practice settings that have never been or are no longer used by Medicare providers. In addition, CMS and its contractors should periodically review data contained in the UPIN Registry to ensure that it is complete, accurate, and consistent.** Automated reviews can be used to target potentially inaccurate data in the UPIN database. We will provide CMS with information regarding the specific inaccuracies we identified in the UPIN Registry. Complete and accurate UPIN data are essential given that CMS intends to transfer provider data from the UPIN Registry to the NPS.

- **Conduct a review of providers who billed Medicare for Part B services in the year 2000 but could not be contacted by mail.**

- **Review and revise existing UPIN Registry data entry guidelines**, including format requirements and response categories, to ensure that data are accurately recorded. For instance, CMS may want to provide a uniform format for state license numbers; expand the length of certain variables, such as street address; and revise the categories that carriers use to classify schools, credentials, and specialties. CMS should also ensure that changes specified in program memoranda be reflected in the Medicare Carriers Manual and that carriers implement those changes. When developing the structure of the new NPS, CMS should consider how formatting, space allotment, and response categories will affect the accuracy of data.

AGENCY COMMENTS

CMS concurred with our recommendations and indicated that they are taking steps to correct inaccurate and incomplete information in the UPIN Registry, deactivate inactive Medicare billing numbers, review providers who billed Medicare in the year 2000 but could not be contacted by mail, and review and revise existing UPIN Registry data entry guidelines. CMS recently developed a UPIN Registry quality assurance plan to improve the accuracy of data in the UPIN Registry. In an effort to enhance existing UPIN data and obtain information needed for the NPS, CMS intends to purchase, validate, and replace UPIN information currently identified as inaccurate, missing, and incomplete. In addition, CMS will instruct Medicare contractors to improve UPIN reporting through education and training; update the UPIN instructions contained in the Medicare Carriers Manual; develop consistency edits; and increase monitoring of contractors' UPIN activities. The full text of CMS's comments is presented in Appendix C.

APPENDIX A

Estimates and Confidence Intervals

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Estimates and Confidence Intervals

The tables below contain statistical estimates presented in the Findings section of this report. These estimates are weighted based on the stratified random sample design and are reported at the 95 percent confidence level.

Table 1.

Providers and Practice Settings with Inaccurate UPIN Data

	Point Estimate	**95% Confidence Interval**
Percent of Providers with at Least One Inaccurate Practice Setting Record	52.49%	46.86% - 58.12%
Percent of Practice Setting Records Containing at Least One Inaccurate Item	34.95%	31.34% - 38.56%

Table 2.

Providers with Inaccurate UPIN Data by Number of Active Practice Settings Per Provider

	Percent of Providers	**95% Confidence Interval**
10 or More Practice Settings	68.66%	57.47% - 79.85%
Less Than 10 Practice Settings	52.35%	46.67% - 58.03%

Difference between percentages is significant at above the 95% confidence level. (Chi-square statistic=6.49, df=1, p=0.011)

APPENDIX A

Table 3.

UPIN Registry Information That Was Most Often Inaccurate

Inaccurate Information	Percent of Active Practice Settings with Inaccurate Information	95% Confidence Interval
Primary Specialty Certification	32.61%	27.42% - 37.80%
Secondary Specialty	23.16%	17.95% - 28.37%
Secondary Specialty Certification	18.15%	13.39% - 22.91%
Street Address of Practice Location	17.48%	13.31% - 21.65%
Zip Code of Practice Location	13.40%	9.64% - 17.16%
Professional School	10.98%	7.53% - 14.43%
State License Number	9.69%	6.44% - 12.94%
Group Practice Participation	8.91%	5.72% - 12.10%
Medicare Participation Status	6.60%	3.86% - 9.34%
Primary Specialty	5.31%	2.86% - 7.76%
Social Security Number	5.11%	2.68% - 7.54%

Table 4.

PINs in Active UPIN Database
That Have Never Been Used or Are No Longer Used

	Point Estimate	95% Confidence Interval
Percent of PINs in Active UPIN Database That Have Never Been Used or Are No Longer Used	44.21%	40.47% - 47.95%
Percent of PINs in Active UPIN Database That Have Never Been Used to Bill Medicare	16.33%	13.61% - 19.05%
Percent of PINs in Active UPIN Database That Are No Longer Used to Bill Medicare	27.88%	24.49% - 31.27%

APPENDIX A

Table 5.

Providers with Inactive Practice Settings in the Active UPIN Database

	Point Estimate	95% Confidence Interval
Percent of Providers with at Least One Inactive Practice Setting in the Active UPIN Database	49.01%	43.37% - 54.66%
Percent of Providers Who No Longer Bill Using Any of the PINs in the Active UPIN Database	16.75%	12.54% - 20.96%
Percent of Providers with No Active PINs Who are Deceased	13.98%	4.42% - 23.54%
Percent of Providers with No Active PINs Who Are Retired	25.83%	13.74% - 37.92%

Table 6.

Providers Who Could Not Be Contacted by Mail

	Point Estimate	95% Confidence Interval
Percent of Providers Who Could Not Be Contacted by Mail	8.79%	6.05% - 11.53%
Percent of Providers Who Could Not Be Contacted Who Billed Medicare in 2000	51.67%	35.32% - 68.02%

Table 7.

Information in Active Practice Settings That May Be Inaccurate Due to UPIN Data Entry Guidelines

	Point Estimate	95% Confidence Interval
Percent of Active Practice Settings Containing Truncated Middle Names	3.43%	1.39% - 5.47%
Percent of Active Practice Settings Containing Truncated Street Addresses	0.64%	0% - 1.52%
Percent of Active Practice Settings Containing School Codes that May Not Be Accurate Due to Categorization	5.58%	3.03% - 8.13%
Percent of Active Practice Settings Containing Credentials that May Not Be Accurate Due to Categorization	5.76%	3.17% - 8.35%

APPENDIX B

Frequency of Inaccurate Information in the UPIN Registry

Inaccurate Information	Percent of Active Practice Settings with Inaccurate Information
Primary Specialty Certification	32.61%
Secondary Specialty	23.16%
Secondary Specialty Certification	18.15%
Street Address of Practice Location	17.48%
Zip Code of Practice Location	13.40%
Professional School	10.98%
State License Number	9.69%
Group Practice Participation	8.91%
Medicare Participation Status	6.60%
Primary Specialty	5.31%
Social Security Number	5.11%
City of Practice Location	4.87%
Date of Birth	4.46%
Year of Graduation	2.26%
Middle Name	1.80%
First Name	1.60%
Last Name	1.28%
Suffix	0.78%
Credentials	0.64%
State of Practice Location	0.64%
State of Licensure	0.32%

Source: Analysis of sample providers' responses from 2001 OIG Survey

APPENDIX C

Comments from the Centers for Medicare and Medicaid Services

DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

Administrator
Washington, DC 20201

DATE: APR 18 2003

TO: Janet Rehnquist
Inspector General

FROM: Thomas A. Scully
Administrator

SUBJECT: Office of Inspector General (OIG) Draft Report: *Accuracy of Unique Physician Identification Number (UPIN) Data* (OEI-03-01-00380)

Thank you for the opportunity to review and comment on the above-referenced draft report. The Centers for Medicare & Medicaid Services (CMS) appreciates the effort that went into this report and the opportunity to review and comment on the issues it raises. We look forward to working with OIG on this and other issues pertinent to the use of UPINs in the Medicare program. Our responses to the recommendations are discussed below.

OIG Recommendation

The CMS should correct inaccurate and incomplete information in the UPIN Registry and deactivate practice settings that have never been or are no longer used by Medicare providers. In addition, CMS and its contractors should periodically review data contained in the UPIN Registry to ensure that they are complete, accurate, and consistent.

CMS Response

We concur with OIG's recommendations that CMS should take steps to correct inaccurate and incomplete information in the UPIN Registry and deactivate inactive Medicare billing numbers. We agree that the carriers should periodically purge their provider/supplier files of inactive providers and practice locations. As a positive step, the UPIN requirements established a means for maintaining accurate provider number information on the providers of health services. Prior to October 1998, the Medicare Carrier Manual required deactivation of numbers after 3 years of no claims activity. In November 1998, these instructions were changed to deactivate Medicare billing numbers (PINs) and UPINs after 1 year of no claims activity. Due to the size of the UPIN file, CMS has always conducted automated periodic review of the UPIN Registry data to ensure that they are complete, accurate, and consistent.

OIG Recommendation

The CMS should conduct a review of providers who billed Medicare for Part B services in the year 2000 but could not be contacted by mail.

Page 2 – Janet Rehnquist

CMS Response

We agree with this recommendation that we review providers who billed Medicare during the year 2000 but could not be reached by mail. The CMS released a program memorandum B 00 36 in August 2000 instructing contractors and the UPIN Registry to research, update, correct, and where necessary, deactivate addresses on the UPIN Registry. In September 2001, CMS selected a quality assurance contractor, Health Market Science (HMS), to review UPIN Registry addresses. The HMS provided workload reports, electronic exception lists, and management reports to assist our carriers and us in maintaining, updating, and verifying accurate address information. The results have greatly reduced the number of providers' PINs and inactive addresses.

OIG Recommendation

The CMS should review and revise existing UPIN Registry data entry guidelines, including format requirements and response categories, to ensure that data are accurately recorded.

CMS Response

We agree that some of the data entry instructions for the UPIN process can be improved. The CMS released program memorandum B-98-03 in January 1998, which instructed contractors to correct the state license number format, school code, and other fields in order to improve the quality, consistency, and accuracy of the UPIN Registry in preparation for the National Provider Identifier initiative. The CMS expects to release additional instructions to contractors in October 2003 to address format requirements, update the Medicare Carrier Manual, update response categories, and improve data quality of the UPIN Registry. The National Provider System (NPS) is being designed, to the extent possible, to ensure adequate space allotment, format requirements, response categories, and their effect on the accuracy of the data.

In the last few months, CMS implemented several initiatives to improve the accuracy of the UPIN Registry. Those initiatives include developing a UPIN Registry quality assurance plan and selecting a UPIN quality assurance contractor. The quality assurance plan includes expanding the UPIN Registry's scope of work to purchase, validate, and replace UPIN information currently identified as inaccurate, missing, or inconsistent.

The information will be obtained from existing databases (e.g., Choice Point, Lexus-Nexus, Health Market Science). The UPIN quality assurance contractor will coordinate quality assurance activities, which will augment and enhance existing data as well as obtain (when missing) and validate information needed for the NPS.

The quality assurance plan activities include, but are not limited to, instructing Medicare contractors to improve UPIN reporting through education and training, updating the Medicare

Page 3 – Janet Rehnquist

Carrier Manual UPIN instructions, developing consistency edits, and increasing the monitoring of contractors' UPIN activities. Each of these initiatives will improve the overall accuracy of the UPIN data.

ACKNOWLEDGMENTS

This report was prepared under the direction of Robert A. Vito, Regional Inspector General for Evaluation and Inspections in Philadelphia, and Linda M. Ragone, Deputy Regional Inspector General. Other principal Office of Evaluation and Inspections staff who contributed include:

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