OFFICE OF
THE INSPECTOR GENERAL

SOCIAL SECURITY ADMINISTRATION

ACCURACY OF DIAGNOSIS CODES
IN THE SOCIAL SECURITY ADMINISTRATION’S DATABASES

December 2010   A-06-09-19128

AUDIT REPORT
Mission

By conducting independent and objective audits, evaluations and investigations, we inspire public confidence in the integrity and security of SSA's programs and operations and protect them against fraud, waste and abuse. We provide timely, useful and reliable information and advice to Administration officials, Congress and the public.

Authority

The Inspector General Act created independent audit and investigative units, called the Office of Inspector General (OIG). The mission of the OIG, as spelled out in the Act, is to:

- Conduct and supervise independent and objective audits and investigations relating to agency programs and operations.
- Promote economy, effectiveness, and efficiency within the agency.
- Prevent and detect fraud, waste, and abuse in agency programs and operations.
- Review and make recommendations regarding existing and proposed legislation and regulations relating to agency programs and operations.
- Keep the agency head and the Congress fully and currently informed of problems in agency programs and operations.

To ensure objectivity, the IG Act empowers the IG with:

- Independence to determine what reviews to perform.
- Access to all information necessary for the reviews.
- Authority to publish findings and recommendations based on the reviews.

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MEMORANDUM

Date: December 8, 2010

To: The Commissioner

From: Inspector General

Subject: Accuracy of Diagnosis Codes in the Social Security Administration’s Databases (A-06-09-19128)

OBJECTIVE

Our objective was to determine the validity of disability diagnosis codes that appeared on the Social Security Administration’s (SSA) payment records.

BACKGROUND

The Disability Insurance program was established in 1956 under Title II of the Social Security Act. It was designed to provide benefits to disabled wage earners and their families. In 1972, Congress enacted the Supplemental Security Income (SSI) program under Title XVI of the Social Security Act. The SSI program provides a minimal level of income to financially needy individuals who are aged, blind, or disabled.

The disability diagnosis code is an integral part of each disabled individual’s permanent record. The four-digit numeric code is used to identify the basic medical condition that rendered the individual disabled. Once established, the diagnosis code appears on the Master Beneficiary Record (MBR), Supplemental Security Record (SSR), and Disability Control File (DCF). The diagnosis code is a vital part of the disability process, not only for the substantive decision, but also for disability data collection and future processing. Therefore, it is necessary that, before coding, the reviewing physician/examiner team accurately determine the correct nature of the principal impairment(s) upon which the favorable decision is based.¹

SSA uses the diagnosis code along with other fields for a variety of purposes, such as determining the timing and nature of continuing disability reviews (CDR). For example, section 221(i) of the Social Security Act² requires continuing eligibility reviews for


² The Social Security Act § 221(i), 42 U.S.C. § 421(i).
disabled beneficiaries at least every 3 years, except where a finding has been made that the claimant’s disability is permanent (reviews of permanent disability cases are made at such times as the Commissioner determines appropriate). SSA considers the beneficiaries’ probability of medical improvement in determining whether to perform CDRs either by a mailed questionnaire or through a more extensive full medical review. SSA managers can also use the diagnosis code to identify specific populations that may have to be medically redetermined as a result of new legislation.

Our March 2000 report, *Reliability of Diagnosis Codes Contained in the Social Security Administration’s Data Bases* (A-01-99-61001), stated that payment records for 1.49 million\(^3\) disabled individuals contained missing, invalid, or unestablished diagnosis codes. In response, SSA sent letters to the disability determination services\(^4\) (DDS) emphasizing the importance of entering valid and specific codes.

**RESULTS OF REVIEW**

While we found that diagnosis codes for approximately 5.5 percent\(^5\) of disabled beneficiaries or recipients were missing, invalid, or unestablished, the number of records with these errors had declined significantly over the past 10 years. We determined that, as of February 2009, 814,425 disabled beneficiaries in current payment status had records that contained missing, invalid, or unestablished diagnosis codes. The total number of records with these errors declined by about 45 percent, while the percentage of disabled individuals whose records contained these errors fell by about 57 percent compared with errors identified in our March 2000 review.

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\(^3\) This represented approximately 12.8 percent of the 11.7 million disabled individuals eligible for payments as of September 1998.

\(^4\) The primary mission of DDSs is to provide disability applicants with accurate and timely disability determinations. Most disability claims are decided by the DDSs in the State or other responsible jurisdiction where the worker resides.

\(^5\) Based on 814,425 payment records with missing, invalid, or unestablished diagnosis codes divided by 14.9 million disability beneficiaries or recipients as of February 2009.
### Summary of Missing, Invalid, or Unestablished Diagnosis Codes

<table>
<thead>
<tr>
<th>Diagnosis Code Category</th>
<th>Number of Records-Prior Review</th>
<th>Number of Records-Current Review</th>
<th>Percentage Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing</td>
<td>779,862</td>
<td>236,168</td>
<td>70</td>
</tr>
<tr>
<td>Invalid</td>
<td>518,707</td>
<td>393,909</td>
<td>24</td>
</tr>
<tr>
<td>Unestablished</td>
<td>193,906</td>
<td>184,348</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>1,492,475</td>
<td>814,425</td>
<td>45</td>
</tr>
</tbody>
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Our review also indicated that disability entitlement for more than 70 percent of the records that currently contain missing, invalid, or unestablished diagnosis codes was established before we issued our March 2000 report. Further, in 12 percent of cases reviewed, we found that diagnosis code errors that appeared on payment records when we obtained our data file in February 2009 had a valid code in the DCF in early 2010.

- In 6 of 150 cases reviewed, SSA corrected the diagnosis code error during the audit.
- In 12 of 150 cases reviewed, erroneous diagnosis codes appeared on the individual’s payment record at the same time valid diagnosis codes appeared on the individual’s DCF record. An electronic interface should ensure that diagnosis codes on the DCF are reflected on SSA’s payment records. While our review indicated the MBR interface generally functioned correctly, an SSA official acknowledged the SSR interface was not working properly so diagnosis code information in the DCF was not always accurately reflected on the SSR.

Based on a recent review of internal processes, an SSA official observed that the overall accuracy of diagnosis code inputs appeared to be excellent. The official stated that for the first half of Fiscal Year 2010, the diagnosis code input accuracy rate for DDSs was about 99.8 percent. Based on his analysis, the SSA official determined that a relatively high number of diagnosis code input errors appeared to have been made by DDS staff in a few States. One contributing factor is that DCF system controls do not prevent use of invalid diagnosis codes. Instead, the system accepts any four-digit code input by DDS staff. We believe SSA could further reduce the number of missing, invalid, or unestablished diagnosis codes by addressing this control weakness.

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6 Includes 9,590 records (4 percent of this group) for individuals receiving presumptive disability payments when we obtained our data file. After we issued our preliminary draft report, SSA officials requested examples of missing diagnosis codes associated with recently approved SSI disability claims. In responding to their request, we identified these presumptive disability records in our data file. The presumptive payment program helps needy claimants meet their basic living expenses while their applications for SSI payments are processed. Under the program, SSA can grant up to 6 months of payments before obtaining the disability determination. Therefore, it was appropriate in these instances that no diagnosis code appeared in SSA’s records.

7 Refers to diagnosis codes 2480 (Diagnosis Established–No Predetermined List Code of Medical Nature Applicable) and 6490 (None Established–Medical Evidence in File but Insufficient to Establish Diagnosis).
The SSA official further stated that diagnosis codes are among a limited number of available data elements that provide the body of information available for every disability case adjudicated by SSA. These limited data are used to help uniformly manage and administer a national disability program to support essential research for changes in the process (such as disability listing updates) and provide data to various monitoring authorities, including the Congress. Since the body of available data is so limited, the accuracy of the data is critical.

**CONCLUSION AND RECOMMENDATIONS**

We commend SSA for its progress in reducing instances of missing, invalid, or unestablished diagnosis codes and encourage the Agency to continue making strides in reducing the frequency of these errors. Payment records should accurately reflect the establishment of a condition that entitles an individual to disability payments. In addition, input of valid diagnosis codes helps to better ensure the accuracy of national disability statistics. As a result, we recommend SSA consider implementing controls during future systems updates that:

1. Enhance communication between the SSR and the DCF to ensure accurate diagnosis codes are reflected on both systems.

2. Allow use of only valid four-digit diagnosis codes.

**AGENCY COMMENTS AND OIG RESPONSE**

SSA agreed with Recommendation 2 but disagreed with Recommendation 1. SSA stated that today’s health information technology (HIT) business rules do not coincide with SSA’s current four-digit coding conventions. Instead, HIT utilizes international classification of diseases (ICD-10) coding standards with diagnosis codes up to 10 characters long. SSA is in the planning stage for the conversion to ICD-10 standards to comply with Department of Health and Human Services’ mandates. SSA plans to incorporate similar requirements into its Disability Case Processing System. SSA acknowledged that enhancing communication between the SSR and DCF might be beneficial but stated it did not plan to re-direct resources from the ICD-10 conversion for this purpose. However, SSA also stated it would work to ensure the SSR and the MBR interface properly with the DCF. We believe timely completion of the ICD-10 conversion with an appropriate SSR, MBR, and DCF interface would address our recommendations. We will monitor SSA’s progress to ensure these actions are completed timely and effectively. The full text of SSA’s comments is included in Appendix C.

Patrick P. O’Carroll, Jr.
## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>CDR</td>
<td>Continuing Disability Review</td>
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<td>DCF</td>
<td>Disability Control File</td>
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<td>DDS</td>
<td>Disability Determination Services</td>
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<td>ICD-10</td>
<td>International Classification of Diseases</td>
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<td>HIT</td>
<td>Health Information Technology</td>
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<td>MBR</td>
<td>Master Beneficiary Record</td>
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<tr>
<td>SSA</td>
<td>Social Security Administration</td>
</tr>
<tr>
<td>SSI</td>
<td>Supplemental Security Income</td>
</tr>
<tr>
<td>SSR</td>
<td>Supplemental Security Record</td>
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Scope and Methodology

To accomplish our objectives, we:

- Reviewed the Social Security Administration’s (SSA) policies and procedures governing the use of diagnoses codes.

- Interviewed SSA Headquarters staff regarding the use of diagnoses codes.

- Reviewed prior Office of the Inspector General reports related to diagnoses codes in SSA’s databases.

- Obtained data from SSA’s payment records as of February 2009. We identified 814,425 records in current payment status that contained invalid or unestablished diagnosis codes. We separated these records into 3 groups and statistically selected 50 records from each group:
  - 420,516 records where the disabled individual’s primary diagnosis code was either missing (0000 or blank) or unestablished (2480 or 6490);
  - 390,490 payment records where the disabled individual’s primary diagnosis code was either 0010 or 0001; and
  - 3,419 payment records where the disabled individual’s primary diagnosis code was 1 of 304 invalid codes other than 0010 or 0001.

- For each sampled record, we compared diagnosis codes that appeared on the disabled individuals’ payment records with codes that appeared on the Disability Control File.

- Interviewed SSA disability specialists to obtain an understanding of the appropriateness of various diagnosis codes and determine how diagnosis codes would impact the profiling of medical redeterminations.

We conducted our audit between November 2009 and April 2010 in Dallas, Texas. We tested the data obtained for our audit and determined them to be sufficiently reliable to meet our objective. The entity audited was the Office of Disability Programs under the Office of Retirement and Disability Policy. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
Agency Comments
MEMORANDUM

Date: November 23, 2010

To: Patrick P. O'Carroll, Jr.
    Inspector General

From: James A. Winn /s/
      Executive Counselor
to the Commissioner


Thank you for the opportunity to review the draft report. Please see the attached response to your findings and recommendations.

Please let me know if we can be of further assistance. Please direct staff inquiries to Rebecca Tothero, Acting Director, Audit Management and Liaison Staff, at (410) 966-6975.

Attachment
COMMENTS ON THE OFFICE OF THE INSPECTOR GENERAL DRAFT REPORT, “ACCURACY OF DIAGNOSIS CODES IN THE SOCIAL SECURITY ADMINISTRATION’S DATABASES” (A-06-09-19128)

Thank you for acknowledging and commending us for our progress in reducing instances of missing and invalid diagnosis codes. Our overall accuracy is now excellent, and as you state, more than 70 percent of diagnosis code errors relate to cases you identified originally in your March 2000 report, Reliability of Diagnosis Codes Contained in the Social Security Administration’s Data Bases (A-01-99-61001).

INFORMATIONAL COMMENT

Today’s health information technology (HIT) business rules do not coincide with our current four-digit coding conventions. Instead, HIT utilizes international classification of diseases, ICD-10, coding standards -- and the codes themselves may be up to ten characters long. We are in the planning stage for the conversion to ICD-10 standards to comply with Department of Health and Human Services’ mandates. We will incorporate similar requirements into our Disability Case Processing System.

RESPONSES TO RECOMMENDATIONS

Recommendation 1

Enhance communication between the SSR and the DCF to ensure accurate diagnosis codes are reflected on both systems.

Response

We disagree. As noted above, we are transitioning to ICD-10 standards, and ICD-10 will eventually supplant our current diagnosis code standards. As we proceed with ICD-10, we will work to make sure that the Supplemental Security Record (SSR) and Master Beneficiary Record interface properly with the Disability Control File (DCF).

We recognize that legacy data in the DCF will continue to exist as it does today and that it might be beneficial to enhance communication between the SSR and DCF. However, if we focus on making those enhancements, we may have to redirect resources assigned to ICD-10 efforts. It may not be desirable for us to redirect those resources, especially considering that our current accuracy rate is very high.
Recommendation 2

Allow use of only valid four-digit diagnosis codes.

Response

We agree. In December 2009, we began implementation of our electronic case analysis tool (eCAT), a web-based application that State disability determination services (DDS) use in the disability adjudication process. DDSs use eCAT to document detailed analysis and rationale for either allowing or denying claims. As of September 30, 2010, we had implemented eCAT in 37 sites; we expect full rollout by May 2011. The eCAT application links to a global reference table that effectively limits users to entering only valid four position diagnosis codes. In fact, eCAT has already contributed to our increased accuracy in this area.
Appendix D

OIG Contacts and Staff Acknowledgments

OIG Contacts

Ronald Gunia, Director, Dallas Audit Division
Jason Arrington, Audit Manager

Acknowledgments

In addition to those named above:

David McGhee, Senior Auditor

For additional copies of this report, please visit our Website at www.ssa.gov/oig or contact the Office of the Inspector General’s Public Affairs Staff Assistant at (410) 965-4518. Refer to Common Identification NumberA-06-09-19128.
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OA conducts financial and performance audits of the Social Security Administration’s (SSA) programs and operations and makes recommendations to ensure program objectives are achieved effectively and efficiently. Financial audits assess whether SSA’s financial statements fairly present SSA’s financial position, results of operations, and cash flow. Performance audits review the economy, efficiency, and effectiveness of SSA’s programs and operations. OA also conducts short-term management reviews and program evaluations on issues of concern to SSA, Congress, and the general public.

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