

**Department of Health and Human Services**

**OFFICE OF  
INSPECTOR GENERAL**

**MEDICARE'S NATIONAL  
CORRECT CODING INITIATIVE**



**INSPECTOR GENERAL**

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# ***Office of Inspector General***

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## OBJECTIVE

To determine the extent to which Medicare paid for services that should have been denied in 2001 based on the National Correct Coding Initiative.

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## BACKGROUND

The Centers for Medicare & Medicaid Services (CMS) administers the Medicare program which provides coverage of reasonable and necessary health care services for the elderly and disabled. CMS contracts with carriers nationwide to process most Medicare Part B claims, which include those for physician, radiology, and laboratory services. Medicare paid \$69 billion for Part B services in 2001.

In January 1996, CMS implemented the National Correct Coding Initiative (CCI). This initiative was developed to promote correct coding of health care services by providers and to prevent Medicare payment for improperly coded services. CCI consists of automated edits provided to the carriers to evaluate claim submissions when a provider bills more than one service for the same beneficiary on the same date of service.

CMS provides the carriers with two CCI edit files each quarter along with instructions on when to apply them to their claims processing systems. CCI edit files contain pairs of Healthcare Common Procedure Coding System codes (*i.e.*, code pairs) which generally should not be billed together by a provider for the same beneficiary on the same date of service. One CCI file contains code pairs called comprehensive/component edits which prevent payment for services which are components of a more comprehensive procedure. When comprehensive and component codes are billed together, Medicare pays for the comprehensive code but not the component code. The second CCI file contains code pairs called mutually exclusive edits which prevent payment for services which cannot reasonably be performed together. When mutually exclusive codes are billed together, Medicare generally pays for the least costly code. Under certain circumstances, a provider may include a modifier which would allow both services in a comprehensive/component code pair or a mutually exclusive code pair to be paid.

We matched CCI edits for the fourth quarter of 2001 against 100 percent of 2001 Part B data from CMS's National Claims History file to determine if services targeted by CCI edits were paid by Medicare. We also determined if any modifiers used were among those modifiers that could be used to bypass CCI edits. We calculated the number and percent of services that should have been denied based on CCI edits and the total Medicare payments associated with those services. As a case study, we requested information from one Medicare carrier on a sample of 100 services that should have been denied based on CCI edits to determine why the services were paid.

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## FINDINGS

We found that, overall, the Medicare carriers applied CCI edits. These edits prevented payment for 98 percent of services that should have been denied when a provider billed more than one service for the same beneficiary on the same date of service. Of the 2 percent of services that met the criteria for denial based on CCI edits, our analysis indicated that 70 percent of these services may have been paid appropriately if they involved adjusted payments. In these cases, the two services involving the CCI code pair were billed to the Medicare program on different days. Therefore, payments for both services may have been correct if payment for the second service was adjusted to account for the payment of the earlier service. Of a sample of 100 services sent to one carrier, we found that nearly two-thirds were paid appropriately due to such adjustments.

**Nearly all of the services targeted by the National Correct Coding Initiative edits were paid appropriately in 2001.** In 2001, Medicare paid for 17.3 million services involving CCI code pairs billed by a provider for the same beneficiary on the same date of service. Of these services, 278,701 (1.6 percent) met the criteria for denial based on CCI edits but were paid by Medicare. These services represented \$15.1 million in Medicare payments, or 1 percent of the \$1.3 billion paid for services involving CCI code pairs billed by a provider for the same beneficiary on the same date of service.

However, 70 percent of the paid services that met the criteria for denial based on CCI edits may have been paid correctly due to adjustments. In these cases, the two services involving the CCI

code pairs were billed to the Medicare program on different days. Therefore, payments for both services may have been correct if payment for the second service was adjusted to account for the payment of the earlier service. Only a manual review of claims history data could determine if the services were paid appropriately due to adjustments. Results from a sample of 100 questionable services sent to one carrier for review showed that this was the reason nearly two-thirds of the services were paid. The remaining one-third of the sample services were paid primarily due to a system error.

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## CONCLUSION

The automated National Correct Coding Initiative appears to effectively prevent Medicare payments for nearly all services that meet the criteria for denial based on the CCI edits. Medicare carriers are processing their claims with CCI edits and the edits prevented payment for at least 98 percent of the targeted services.

We provided CMS with our data on the small percentage of services that met the criteria for denial based on CCI edits. In the future, CMS may want to replicate our analysis to determine whether services continue to be paid in accordance with CCI edits.



T A B L E O F C O N T E N T S

**EXECUTIVE SUMMARY** .....i

**INTRODUCTION** ..... 1

**FINDINGS**

    Services targeted by CCI paid appropriately.....6

**CONCLUSION**..... 9

**ACKNOWLEDGMENTS**..... 10

# I N T R O D U C T I O N

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## OBJECTIVE

To determine the extent to which Medicare paid for services that should have been denied in 2001 based on the National Correct Coding Initiative.

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## BACKGROUND

The Medicare program provides coverage of reasonable and necessary health care services for the elderly and disabled. The program is administered by the Centers for Medicare & Medicaid Services (CMS). CMS contracts with carriers nationwide to process most Medicare Part B claims, which include physician, radiology, and laboratory services. Medicare paid \$69 billion for Part B services in 2001.

Medicare providers use the Healthcare Common Procedure Coding System (HCPCS) to bill for services provided to Medicare beneficiaries. The HCPCS consists of three levels of codes. Level I codes are those from the American Medical Association's *Current Procedural Terminology (CPT) Manual* used for reporting services performed by health care providers. Level II codes are alpha-numeric codes for medical services and supplies not included in the *CPT Manual*. Level III codes are local carrier codes used to describe new procedures that do not yet have a Level I or II code.

### **National Correct Coding Initiative**

In January 1996, CMS implemented the National Correct Coding Initiative (CCI). This initiative was developed to promote correct coding by providers and to prevent Medicare payment for improperly coded services. CCI consists of automated edits provided to the carriers to evaluate claim submissions when a provider bills more than one service for the same beneficiary on the same date of service. CCI edits include Level I and Level II HCPCS codes. The edits are updated quarterly based on changes in the *CPT Manual*, current standards of medical and surgical practice, input from specialty societies, and analysis of current coding practice. CMS works with Reliance Safeguard Systems and AdminaStar Federal to propose and maintain CCI edits with input from national medical societies, carriers, and providers. CMS contracts with

the National Technical Information Service, within the Department of Commerce, to produce the *National Correct Coding Policy Manual for Part B Carriers* for purchase by providers. This manual is also distributed to carriers through CMS's regional offices.

#### **National Correct Coding Initiative Edits**

CCI edit files contain pairs of HCPCS codes (i.e., code pairs) which generally should not be billed together by a provider for the same beneficiary on the same date of service. CMS provides the carriers with two CCI edit files each quarter along with instructions on when to apply them to their claims processing systems. In the fourth quarter of 2001, CCI edit files contained 199,942 code pairs.

One CCI file contains code pairs called comprehensive/component edits which prevent payment for services that are components of a more comprehensive procedure. In the fourth quarter of 2001, this file contained 186,353 comprehensive/component code pairs. When comprehensive and component codes are billed together, Medicare pays for the comprehensive code but not the component code. For example, if an infusion procedure is performed, the placement of the catheter should not be billed separately. In this example, the placement of the catheter is considered a component of the infusion procedure. According to the CCI edit, if a provider bills for both of these services for the same beneficiary and date of service, only the comprehensive code for the infusion procedure will be paid.

The second CCI file contains code pairs called mutually exclusive edits which prevent payment for services that cannot reasonably be performed together. In the fourth quarter of 2001, this file contained 13,589 mutually exclusive code pairs. When mutually exclusive codes are billed together, Medicare generally pays for the least costly code. For example, a certain anesthesia procedure can be performed either with a pump oxygenator or without a pump oxygenator, but not both. If a provider bills for both of these services for the same beneficiary and date of service, only the procedure performed without the pump oxygenator will be paid.

**Modifiers**

Under certain circumstances, a provider may include a modifier which would allow both services in a comprehensive/component code pair or a mutually exclusive code pair to be paid. A modifier is a two-digit code that further describes the service performed. For example, if two procedures in a code pair were performed at different times on the same day, a modifier could be appended to one of the codes to indicate that it was a separate service. Each of the CCI code pairs has a modifier indicator that determines whether a modifier can be used. A modifier indicator of “1” specifies that a modifier may be used to bypass the CCI edit for that code pair. A modifier indicator of “0” specifies that a modifier may not be used with that code pair to bypass the CCI edit. A modifier indicator of “9” specifies that the edit was retroactively deleted and is no longer in use. Only 35 modifiers may be used to bypass CCI edits.

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**METHODOLOGY****National Correct Coding Initiative Edits**

We obtained CMS’s mainframe data files containing CCI edits for the fourth quarter of 2001. The fourth quarter CCI edit update includes all prior additions and deletions of code pairs through the end of 2001. Since we were reviewing 2001 data, we removed all CCI edits with deletion dates prior to 2001 as well as CCI edits that were retroactively deleted during 2001. This left 123,316 CCI code pairs for our review. CCI edits are arranged so that the second code in a code pair is the code that should be denied.

**Medicare Part B Claims Data**

We matched CCI edits against 100 percent of 2001 Part B claims data from CMS’s National Claims History file, which included over 1 billion claim lines. We will refer to claim lines as services throughout this report. From this file, we identified services that involved active CCI code pairs billed by a provider for the same beneficiary on the same date of service. To determine if any of these services should have been denied based on CCI edits, we compared the date of the service with an edit’s effective and deleted dates. This enabled us to determine whether the edit was in place on the date the services were

performed. We identified 17.3 million services that involved active CCI code pairs billed by a provider for the same beneficiary on the same date of service. Medicare paid \$1.3 billion for these services in 2001.

#### **Modifiers and Modifier Indicators**

Since we used the CCI edit update from the fourth quarter of 2001, we also obtained the modifier indicator change lists for each quarter of 2001 and the first 2 quarters of 2002. This was necessary because when a change is made to a modifier indicator only, the effective date of the edit remains the same. Since a modifier indicator for a code pair could have changed over the year, we used these lists to determine if a modifier was permitted or not permitted when the claims were processed.

For code pairs that may be billed with a modifier, we evaluated whether any modifiers included with those code pairs were among the 35 modifiers that may be used to bypass CCI edits. If an appropriate modifier was included with these code pairs, payment for both services would be permitted. We did not request documentation to verify whether the two separate services, indicated by the modifier, were actually performed.

#### **Payments that Met the Criteria for Denial Based on CCI Edits**

Payment for the second code in a CCI code pair met the criteria for denial, based on the automated CCI edits, in the following circumstances:

- The code pair did not permit a modifier, regardless of whether a modifier was included.
- The code pair permitted a modifier, but the modifier used was not one of the 35 modifiers that may be used to bypass CCI edits.
- The code pair permitted a modifier, but a modifier was not included.

We calculated the number and percent of services that should have been denied based on CCI edits and the total Medicare payments associated with those services. We also reviewed this data to determine whether payments were made by particular carriers or for particular code pairs.

# I N T R O D U C T I O N

## **Carrier Case Study**

We requested information from one Medicare carrier to determine if there were reasons why some services were paid when they should have been denied based on the automated CCI edits. For this carrier, we randomly selected 100 services that we had determined should not have been paid based on CCI edits. We asked the carrier to explain why the services were paid and to submit documentation to support payment of each of the services.

## ► FINDINGS

We matched the National Correct Coding Initiative (CCI) edits for 2001 against 100 percent of 2001 Part B claims. Medicare carriers are required to apply these edits to the Part B services they process for payment. CCI edits promote correct coding by providers and prevent Medicare payments for improperly coded services. We found that, overall, the carriers applied these edits. The edits prevented payment for 98 percent of services that should have been denied when billed by a provider for the same beneficiary on the same date of service. Less than 2 percent of services targeted by CCI edits were paid by Medicare in 2001. These services represented \$15.1 million in Medicare payments. Our analysis indicated that 70 percent of these services may have been paid correctly due to adjustments made to the payment for one of the services. We submitted a sample of 100 services that met the criteria for denial to one carrier for review. The carrier reported that adjustments were made to the payments for nearly two-thirds of the services in our sample so that these services were paid correctly.

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### FINDINGS

**Nearly all of the services targeted by the National Correct Coding Initiative edits were paid appropriately in 2001.**

In 2001, Medicare paid for 17.3 million services involving CCI code pairs billed by a provider for the same beneficiary on the same

date of service. Of these services, nearly 17 million were processed and paid appropriately. We found 278,701 services (1.6 percent) that met the criteria for denial based on CCI edits but were still paid by Medicare. These services represented \$15.1 million in Medicare payments, or 1 percent of the \$1.3 billion paid for services involving CCI code pairs billed by a provider for the same beneficiary on the same date of service.

However, our data indicated that 70 percent of the 278,701 paid services targeted by CCI edits may have been paid correctly. Both services in these CCI code pairs were billed to the Medicare program on different days. In these instances, both payments may have been correct if the second payment was adjusted to account for the first. For example, if the component code in a code pair was billed and paid and then the comprehensive code was billed later, the comprehensive code

may have been paid appropriately if the payment was adjusted to take into account the payment already made for the component code. To further illustrate, if the component code was billed and \$20 was paid for it, and later the comprehensive code was billed, both payments would be appropriate if the payment for the comprehensive code was reduced by the \$20 paid for the component code. Our analysis identified the second code in these code pairs as services that should have been denied when we matched CCI edits against Part B claims data because both services were paid. Only a manual review of claims history data could confirm that they were paid appropriately due to adjustments.

We analyzed the services that met the criteria for denial based on CCI edits to identify any common characteristics among these services. Of the services that met the criteria for denial based on CCI edits, 33 percent were paid with a modifier that may not be used to bypass CCI edits. Also, while some CCI code pairs were paid more frequently than others, no individual code pair represented a considerable portion of the questionable services. The code pair that bypassed CCI edits most frequently, which was made up of two radiology codes, represented 3 percent of services and less than 1 percent of payments that should have been denied. All the Medicare carriers made some payments for services that should have been denied based on CCI edits. Of these services, none of the carriers paid a percentage that was substantially higher than the percentage of services involving CCI edit pairs that they processed overall.

#### **Results of a Case Study of One Carrier**

To determine why some questionable services were paid, we sent a random sample of 100 services that we determined should have been denied based on the automated CCI edits to one carrier. We asked the carrier to explain the reason the services were paid. We found that, of the 100 services that we sent to the carrier, 69 were paid or denied correctly. Sixty-four services were paid correctly since the second code in the CCI code pair was billed and paid before the first code. In these cases, the carrier reported that they either requested a refund of the payment for the second code or reduced the amount paid for the first code.

## F I N D I N G S

The carrier's data showed that an additional five services that we determined were paid incorrectly, were in fact denied. These services may have been adjusted after CMS's data for 2001 was finalized, as all but one of these services were initially processed late in 2001 or early 2002. Since our data only included adjustments made through June 2002, a later adjustment which denied the claim may not have appeared in our data.

Approximately one-third of the sample services were paid by the carrier, but should have been denied. Twenty-seven services were paid due to a system error. For these 27 services, the carrier paid for both services in a CCI code pair when a modifier was used even though a modifier was not permitted with the code pair according to the CCI. The carrier reported that they plan to contact CMS and take any corrective actions necessary. Another four services were paid incorrectly due to human error. The carrier had manually reviewed these services and made erroneous payments based on these manual reviews.

## ► C O N C L U S I O N

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### CONCLUSION

The automated National Correct Coding Initiative appears to effectively prevent Medicare payments for nearly all services that meet the criteria for denial based on the CCI edits.

Medicare carriers are processing their claims with CCI edits and the edits prevented payment for at least 98 percent of the targeted services.

We provided CMS with our data on the small percentage of services that met the criteria for denial based on CCI edits. In the future, CMS may want to replicate our analysis to determine whether services continue to be paid in accordance with CCI edits.



## A C K N O W L E D G M E N T S

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