The mission of the Office of Inspector General (OIG), as mandated by Public Law 95-452, as amended, is to protect the integrity of the Department of Health and Human Services (HHS) programs, as well as the health and welfare of beneficiaries served by those programs. This statutory mission is carried out through a nationwide network of audits, investigations, and inspections conducted by the following operating components:

**Office of Audit Services**

The OIG's Office of Audit Services (OAS) provides all auditing services for HHS, either by conducting audits with its own audit resources or by overseeing audit work done by others. Audits examine the performance of HHS programs and/or its grantees and contractors in carrying out their respective responsibilities and are intended to provide independent assessments of HHS programs and operations in order to reduce waste, abuse, and mismanagement and to promote economy and efficiency throughout the department.

**Office of Evaluation and Inspections**

The OIG's Office of Evaluation and Inspections (OEI) conducts short-term management and program evaluations (called inspections) that focus on issues of concern to the department, the Congress, and the public. The findings and recommendations contained in the inspections reports generate rapid, accurate, and up-to-date information on the efficiency, vulnerability, and effectiveness of departmental programs.

**Office of Investigations**

The OIG's Office of Investigations (OI) conducts criminal, civil, and administrative investigations of allegations of wrongdoing in HHS programs or to HHS beneficiaries and of unjust enrichment by providers. The investigative efforts of OI lead to criminal convictions, administrative sanctions, or civil monetary penalties. The OI also oversees state Medicaid fraud control units, which investigate and prosecute fraud and patient abuse in the Medicaid program.

**Office of Counsel to the Inspector General**

The Office of Counsel to the Inspector General (OCIG) provides general legal services to OIG, rendering advice and opinions on HHS programs and operations and providing all legal support in OIG's internal operations. The OCIG imposes program exclusions and civil monetary penalties on health care providers and litigates those actions within the department. The OCIG also represents OIG in the global settlement of cases arising under the Civil False Claims Act, develops and monitors corporate integrity agreements, develops model compliance plans, renders advisory opinions on OIG sanctions to the health care community, and issues fraud alerts and other industry guidance.
EXECUTIVE SUMMARY

OBJECTIVE

To determine if Medicare Part A providers expect to comply with the electronic data transaction standards and code sets mandated by the Health Insurance Portability and Accountability Act (HIPAA) by October 2003.

BACKGROUND

The purpose of Title II of HIPAA is to improve the efficiency of the health care system by establishing standards to facilitate the electronic transmission of data between providers and payers. Electronic data interchange can eliminate the inefficiencies associated with handling paper documents. It reduces administrative costs and improves overall data quality for transactions, such as health care payments and coordination of benefits.\(^1\)

In accordance with the provisions of Title II of HIPAA, the Secretary of Health and Human Services has promulgated regulations mandating the use of specific standards for eight different types of electronic transactions and medical code sets. Covered entities that filed an extension must implement the standards by October 16, 2003.

This report is based on the results of a mail survey of a stratified random sample of Medicare Part A providers that submitted claims to Medicare fiscal intermediaries between July 1, 2001 and June 30, 2002.

FINDINGS

Ninety-six percent of Medicare Part A providers have moderate to high expectations that they will be compliant with HIPAA standards by October 2003

Medicare Part A providers are making significant progress in meeting the HIPAA deadline. Ninety-two percent of Medicare Part A providers are developing an implementation schedule to meet the deadline, while approximately one-half are developing sequencing strategies and contingency plans in the event their system is not

\(^1\) 65 FR 50312 (August 17, 2000).
fully in compliance by the deadline. Approximately 84 percent are using systems vendors as part of their compliance strategy. Only 18 percent have conducted a cost/benefit analysis for implementing the electronic standards and code sets.

External barriers may affect compliance

Approximately one-third of the providers who listed potential barriers to compliance were concerned that their trading partners could affect their ability to meet the compliance deadline.

CONCLUSION

Overall, the Medicare Part A providers are making steady progress toward meeting the compliance target of October 16, 2003, for implementing the HIPAA electronic transaction standards and code sets. Providers are, however, concerned that their trading partners may not be fully compliant, and this would affect their own ability to implement the electronic standards.
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OBJECTIVE

To determine if Medicare Part A providers expect to comply with the electronic data transaction standards and code sets mandated by the Health Insurance Portability and Accountability Act (HIPAA) by October 2003.

BACKGROUND

Congress instituted significant reforms to the health care industry with the passage of HIPAA. Title I of HIPAA assures the availability and portability of health care insurance coverage, while Title II creates a regulatory framework to improve the efficiency of the health care system by establishing standards that will facilitate the electronic transmission of data between providers and payers. (See Appendix A for a glossary of HIPAA-related terms and acronyms.) The goal is to create a seamless transfer of data with limited manual intervention.

Administrative Simplification

Under Title II, Subtitle F (Administrative Simplification), the Secretary of Health and Human Services has the authority to: (1) mandate the use of standards for the electronic exchange of health care data; (2) specify what medical and administrative code sets should be used; (3) require the use of national identification systems; and (4) specify the types of measures required to protect the security and privacy of personally identified health care information.

Electronic Transactions and Code Sets

Electronic data interchange (EDI) is the electronic transfer of information in a standard format between trading partners. Compared to paper transactions, EDI substantially reduces handling and processing time by reducing the administrative burden, lowering operating costs, and improving overall data quality.²

²65 FR 50312 (August 17, 2000).
Transactions are the exchange of information between two parties to carry out financial or administrative activities related to health care. The standards for electronic transmission of each of the transactions are codified in the **Code of Federal Regulations** (45 CFR Parts 160 and 162). The rule provides standards for eight types of electronic transactions:

- 1. Health care claims or equivalent encounter information,
- 2. Health care payments and remittance advice,
- 3. Coordination of benefits,
- 4. Health care claim status,
- 5. Enrollment and disenrollment in a health plan,
- 6. Eligibility for a health plan,
- 7. Health plan premium payments, and
- 8. Referral certification and authorization.

The rule also contains requirements concerning the use of standardized code sets, such as tables of terms, medical concepts, medical diagnostic codes, or medical procedure codes used to encode data elements in the transaction. The code set includes the codes and their descriptors. The following code sets have been adopted:

- International Classification of Diseases-9-Clinical Modifications (ICD-9-CM), volumes 1, 2, and 3;
- Combination of Health Care Financing Administration Common Procedure Coding System (HCPCS) and Current Procedural Terminology-4 (CPT-4) for physicians and other health services;
- HCPCS for all other items;
- National Drug Codes (NDC) or HCPCS for prescription drugs; and
- Common Treatment for Dentists-2 (CTD-2) for dental services.

Covered entities, defined as providers, clearinghouses, and health plans that use the electronic exchange of health information as part of their business, will be required to adopt these standards. The compliance date for this rule (45 CFR Parts 160 and 162) was originally October 16, 2002. The Administrative Simplification Compliance Act, signed into law on December 27, 2001, extends the compliance date by 1 year to October 16, 2003. The extension applies only to those covered entities that filed an extension with the Centers for Medicare & Medicaid Services (CMS) by October 16, 2002. For these entities, October 2003 is the compliance date. Since the implementation date is several months away, CMS has not yet developed standards to measure compliance.

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3 45 CFR § 160.1002
METHODOLOGY

This is one of a series of HIPAA readiness surveys. We used a mail survey as the primary tool to conduct this evaluation. We mailed surveys during the week of November 4, 2002, and received responses between November 26, 2002, and March 24, 2003.

We surveyed a stratified random sample of Medicare Part A providers who submitted claims to Medicare fiscal intermediaries between July 1, 2001, and June 30, 2002. Stratification allowed us to test for differences in compliance strategies, contingencies, and barriers among providers, based on the number of claims they submitted to Medicare. We divided the providers into three strata:

<table>
<thead>
<tr>
<th>Stratum</th>
<th>Number of Claims</th>
<th>Size of Population</th>
<th>Sample Size</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 to 1,500 claims</td>
<td>36,746</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>1,501 to 17,500 claims</td>
<td>7,048</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>more than 17,500 claims</td>
<td>2,315</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>46,109</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

We randomly ordered the population of providers within each stratum. We then selected the first 50 providers in each stratum that were covered by HIPAA, were still in business, and were not under investigation by the Office of Inspector General’s Office of Investigations. Our response rate was 100 percent. Of the 150 providers, approximately 57 percent are hospitals, 16 percent are skilled nursing facilities, 15 percent are home health agencies and hospices, and 12 percent are outpatient facilities, including rural and community health clinics. Surveys were completed by administrators, financial officers, compliance officers, and clinic managers. We weighted the responses according to each stratum’s representation in the population.

We surveyed the providers about their level of readiness in four broad areas:

1. Assessment and awareness activities;
2. Impediments or current obstacles to achieving compliance;
3. Compliance strategies, such as sequencing and testing plans; and
4. Contingency planning.
We did not independently verify the accuracy of the responses.

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

We conducted a mail survey of a stratified random sample of Medicare Part A providers. Overall, the Medicare Part A providers are making progress toward meeting the compliance target of October 16, 2003, for implementing the HIPAA electronic transaction standards and code sets, and 96 percent expect to be in compliance by the deadline.

Ninety-six percent of Medicare Part A providers have moderate to high expectations that they will be compliant with HIPAA standards by October 2003

Almost all Medicare Part A providers submitted a compliance extension form. As a result, they have until October 16, 2003, to implement the electronic standards and code sets. As of the time of our survey, 74 percent of the providers were ready to implement the HIPAA electronic standards, and 96 percent indicated that they had a moderate to high level of satisfaction that they expected to meet the October deadline.

Providers who did not believe they would meet the compliance deadline (approximately 4 percent of all providers), indicated they were in the process of identifying the steps necessary to implement the standards. At the time of the survey, they were receiving information from their professional associations to assist them in developing implementation strategies.

Providers have developed internal and external testing strategies

While fewer than 30 percent of the providers had begun any testing, 90 percent will have a testing strategy. Most of their testing strategies include internal and external data interfaces. Approximately one-fourth had begun to test transactions, as of November 2002. However, slightly more than 44 percent had received any notices from fiscal intermediaries or carriers regarding coordination of electronic transaction testing.

Providers are developing implementation strategies to achieve compliance

When asked which strategy the provider was using to implement the HIPAA standards, providers most frequently selected the following four:

1. We will have internal staff plan, develop, and implement the standards.
2. We will have technical systems consultants work with staff and assist us in the process.
3. We will have a technical systems consultant or vendor take full responsibility for planning, developing, and implementing the new standards.
4. We will purchase components of a new system or additions to our current system from a selected vendor to meet the standards.

Ninety-two percent of the providers are developing an implementation schedule to meet the deadline. Sixty-four percent indicated they have purchased or will be purchasing new software, hardware, systems components, or a combination thereof. Approximately 56 percent of providers are developing a sequencing strategy which will prioritize transactions by order and date.

Providers are using expert resources outside their organization to help implement the HIPAA standards and code sets. Eighty-one percent stated that they had turned to their professional associations for information to assist them in developing implementation strategies. Approximately 84 percent of all providers are using systems vendors as part of their compliance strategy.

Although more than 60 percent of the providers are purchasing new software or system components to meet the HIPAA standards, fewer than 20 percent have conducted any type of cost benefit analysis for implementing the electronic standards and code sets.

As part of our assessment, we reviewed the responses from seven questions regarding implementation strategies among the survey strata. We found no statistical differences in the strategies with the exception of the use of clearinghouses to process some or all of the provider claims. Use of a clearinghouse varies by strata, with 49 percent of stratum 1 providers using a clearinghouse, 63 percent of stratum 2 providers using a clearinghouse, and 96 percent of stratum 3 providers using a clearinghouse.

Although 96 percent of the providers expect to meet the compliance deadline, 56 percent are developing contingency plans in the event their system is not fully compliant by October 2003. We found no statistical difference between the strata regarding their development of contingency plans.

External barriers may affect compliance

When asked to list as many as three barriers to compliance, 60 percent of the providers listed one or more. The most common were:

- Trading partners will not be ready.
- Vendors will not be ready.
- We have inadequate staffing, training, and technical resources.
> We need more time to implement and may experience testing delays.

Approximately one-third of those who listed any barriers identified their trading partners (specifically third party payers, fiscal intermediaries, carriers, and/or CMS) as potential barriers to compliance.

Providers who did not believe they would meet the compliance deadline expressed similar concerns. They cited their trading partners as a potential barrier, as well as inadequate resources.
CONCLUSION

Overall, the Medicare Part A providers are making progress toward meeting the compliance target of October 16, 2003, for implementing the HIPAA electronic transaction standards and code sets. Providers are, however, concerned that their trading partners may not be fully compliant, and this would affect their own ability to implement the electronic standards.
Glossary of Selected HIPAA-related Terms and Acronyms

**Administrative Simplification:** the use of mandated standards for the electronic exchange of health care data and specific measures to protect the security and privacy of personally identifiable health care information.

**Clearinghouse:** an entity that processes information received from one entity in a nonstandard format into a standard transaction, or receives a standard transaction and converts it to a nonstandard format for a receiving entity.

**Code Set:** the tables of terms, medical concepts, diagnostic codes, or procedure codes and descriptions used to encode information in a transaction.

**Contingency Plan:** a plan developed by covered entities to provide an alternative for submitting or receiving HIPAA electronic transactions after October 2003, in the event that the covered entity’s system conversion fails or is incomplete.

**Covered Entity:** any health plan, health care clearinghouse, or a health care provider who transmits any health information in electronic form in connection with a transaction covered by the HIPAA standards.

**Electronic Data Interchange (EDI):** any electronic exchange of formatted data.

**EDI Translator:** a software tool for accepting an EDI transmission and converting the data into another format, or for converting a non-EDI file into an EDI format for transmission.

**Medicare Part A Provider:** hospital, critical access hospital, skilled nursing facility, comprehensive outpatient rehabilitation facility, home health agency, or hospice.

**Sequencing:** a process plan developed by a covered entity to implement each of the transaction standards in a logical sequence.

**Standard Transactions:** the exchange of information between two parties that complies with the requirements established under HIPAA.

**Trading Partner:** an external entity, such as a customer, with whom the covered entity does business. A trading partner can be so designated for some purposes and considered a business associate for other purposes.

**Translator:** See EDI translator.

**Vendor:** software and/or hardware entities that provide HIPAA compliant services, consulting, and/or products to covered entities. Vendors may be business associates or trading partners.
Confidence Intervals for Key Survey Questions

The following tables show the point estimates and 95 percent confidence intervals for selected statistics.

### Compliance/ Testing

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Response</th>
<th>Point Estimate</th>
<th>95 Percent Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has your organization submitted a compliance extension form under the Administrative Simplification Compliance Act?</td>
<td>All respondents who answered “yes”</td>
<td>96.5%</td>
<td>92.1% - 100.0%</td>
</tr>
<tr>
<td>How ready do you believe your organization is, at this point, to implement the HIPAA electronic transaction standards?</td>
<td>All respondents who answered &quot;5,&quot; &quot;4,&quot; or “3” on a 1 to 5 (for levels of satisfaction)</td>
<td>73.8%</td>
<td>63.8% - 83.7%</td>
</tr>
<tr>
<td>How confident are you that your organization will meet the October 2003, target for implementing the electronic transactions?</td>
<td>All respondents who answered “5,” “4,” or “3” on a 1 to 5 (for levels of satisfaction)</td>
<td>96.1%</td>
<td>91.7% - 100.0%</td>
</tr>
<tr>
<td>Has the organization begun any testing of its applications of the HIPAA electronic transactions?</td>
<td>All respondents who answered &quot;yes&quot;</td>
<td>27.5%</td>
<td>17.3% - 37.7%</td>
</tr>
<tr>
<td>Does your organization have an overall strategy for testing its HIPAA compliant data systems?</td>
<td>All respondents who answered “completed,” “underway,” or “plan to”</td>
<td>89.5%</td>
<td>82.2% - 96.8%</td>
</tr>
<tr>
<td>Does the testing strategy include internal and external data interfaces?</td>
<td>All respondents who answered “completed,” “underway,” or “plan to”</td>
<td>84.3%</td>
<td>75.6% - 92.9%</td>
</tr>
<tr>
<td>Has your organization received any notices from the fiscal intermediaries or carriers regarding coordination of testing of HIPAA electronic transactions?</td>
<td>All respondents who answered &quot;yes&quot;</td>
<td>44.2%</td>
<td>32.7% - 55.7%</td>
</tr>
</tbody>
</table>
## Strategies/Contingency Planning

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Response</th>
<th>Point Estimate</th>
<th>95 Percent Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is your organization currently using clearinghouse(s) or other organizations to process any part of its HIPAA electronic transactions?</td>
<td>All respondents who answered &quot;yes&quot;</td>
<td>53.6%</td>
<td>42.1% - 65.0%</td>
</tr>
<tr>
<td>Is your organization currently working with a systems vendor(s) to implement the HIPAA electronic standards?</td>
<td>All respondents who answered &quot;completed,&quot; &quot;underway,&quot; or &quot;plan to&quot;</td>
<td>84.0%</td>
<td>75.4% - 92.7%</td>
</tr>
<tr>
<td>Has your organization used its professional association(s) for information to assist you in developing a transaction compliance strategy?</td>
<td>All respondents who answered &quot;completed,&quot; &quot;underway,&quot; or &quot;plan to&quot;</td>
<td>81.2%</td>
<td>72.0% - 90.4%</td>
</tr>
<tr>
<td>Has your organization created a schedule to implement the changes in its data system to comply with the HIPAA electronic transaction standards deadline?</td>
<td>All respondents who answered &quot;completed,&quot; &quot;underway,&quot; or &quot;plan to&quot;</td>
<td>92.4%</td>
<td>86.2% - 98.5%</td>
</tr>
<tr>
<td>Has your organization purchased new software, hardware, or system component(s) to meet transaction compliance requirements</td>
<td>All respondents who answered &quot;completed,&quot; &quot;underway,&quot; or &quot;plan to&quot;</td>
<td>64.0%</td>
<td>53.0% - 75.1%</td>
</tr>
<tr>
<td>Have you, your contracted vendor(s), or any consultants conducted a cost/benefit analysis for implementing the HIPAA electronic transaction standards?</td>
<td>All respondents who answered &quot;yes&quot;</td>
<td>18.0%</td>
<td>7.8% - 28.2%</td>
</tr>
<tr>
<td>Has your organization developed a contingency plan in the event its system is not compliant by October 2003?</td>
<td>All respondents who answered &quot;completed,&quot; &quot;underway,&quot; or &quot;plan to&quot;</td>
<td>55.9%</td>
<td>44.4% - 67.3%</td>
</tr>
</tbody>
</table>

## Barriers

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Response</th>
<th>Point Estimate</th>
<th>95 Percent Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>How satisfied are you with the resources your organization is committing to meet the HIPAA electronic transaction standards?</td>
<td>All respondents who answered &quot;5,&quot; &quot;4,&quot; or &quot;3&quot; on a 1 to 5 (for levels of satisfaction)</td>
<td>96.8%</td>
<td>93.4% - 100.0%</td>
</tr>
</tbody>
</table>
We compared responses among the three strata of providers, stratum 1 (less than 1,500 claims), stratum 2 (1,501 to 17,500 claims) and stratum 3 (more than 17,500 claims) for the 7 following questions, which we thought might show significant differences among strata. Only the first question is statistically significant at the 95 percent confidence level. Using the Bonferroni method for multiple comparisons, a comparison was statistically significant if the p-value was less than 0.05 divided by 7 or approximately 0.007.

### Compliance/Testing

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Measurement</th>
<th>Point Estimate</th>
<th>Chi-Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>How confident are you that your organization will meet the October 2003, target for implementing the electronic transactions?</td>
<td>All respondents who answered “5,” “4,” or “3” on a 1 to 5 (for levels of satisfaction)</td>
<td>96.0 stratum 1 96.0 stratum 2 98.0 stratum 3</td>
<td>2</td>
</tr>
<tr>
<td>Has your organization begun any testing of its applications of HIPAA electronic transactions?</td>
<td>All respondents who answered “completed,” “underway,” or “plan to”</td>
<td>28.0 stratum 1 26.0 stratum 2 24.0 stratum 3</td>
<td>2</td>
</tr>
</tbody>
</table>

### Strategies/Contingency planning

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Measurement</th>
<th>Point Estimate</th>
<th>Chi-Square Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is your organization currently using clearinghouse(s) or other organizations to process any part of its HIPAA electronic transactions?</td>
<td>All respondents who answered &quot;yes&quot;</td>
<td>49.0 stratum 1 63.5 stratum 2 96.0 stratum 3</td>
<td>2</td>
</tr>
<tr>
<td>Has your organization identified the steps necessary to implement the HIPAA electronic standards?</td>
<td>All respondents who answered &quot;yes&quot;</td>
<td>94.0 stratum 1 98.0 stratum 2 100.0 stratum 3</td>
<td>2</td>
</tr>
<tr>
<td>Does your organization have an ongoing analysis process to identify potential gaps in its existing system?</td>
<td>All respondents who answered “completed,” “underway,” or “plan to”</td>
<td>84.0 stratum 1 90.0 stratum 2 98.0 stratum 3</td>
<td>2</td>
</tr>
<tr>
<td>Does your organization have a sequencing (prioritization) strategy for implementing the HIPAA electronic transactions?</td>
<td>All respondents who answered &quot;yes&quot;</td>
<td>55.3 stratum 1 51.1 stratum 2 75.0 stratum 3</td>
<td>2</td>
</tr>
<tr>
<td>Has your organization developed a contingency plan in the event the system is not compliant by October 2003?</td>
<td>All respondents who answered “completed,” “underway,” or “plan to”</td>
<td>53.1 stratum 1 62.5 stratum 2 80.0 stratum 3</td>
<td>2</td>
</tr>
</tbody>
</table>
ACKNOWLEDGMENTS

This report was prepared under the direction of Paul A. Gottlober, Regional Inspector General for Evaluation and Inspections, and Deborah W. Harvey, Assistant Regional Inspector General for Evaluation and Inspections, in San Francisco. Other principal Office of Evaluation and Inspections staff who contributed include:

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