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Testing Subcommittee
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Claim Lifecycle

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1. Introduction

The purpose of this Testing Guide is to provide a methodology for testing HINT/HIPAA transactions and code sets (TCS) used in the claim lifecycle. It provides recommendations related to project management, organizational structure and testing protocol.

The New Jersey Department of Banking and Insurance (DOBI) HINT/HIPAA Implementation Task Force Testing Subcommittee developed the Claim Lifecycle Testing Guide. The subcommittee is made up of representatives from healthcare institutions, payers, third party vendors, clearinghouses and other interested parties. The subcommittee participants acted as early adopters of the Testing Guide to validate the process and to contribute to the lessons learned section.

Stakeholders in the testing process need to cooperate wherever possible. This is a voluntary effort that will require everyone's willingness to exercise due diligence in addressing challenges that arise during testing. Proper execution can only be achieved with full cooperation and understanding of the processes and issues. The Testing Guide is designed to promote this understanding by providing a common and accepted methodology.

The Testing Guide is based on common industry practices and HIPAA specific testing resources developed by WEDI/SNIP and other organizations. It should not be construed as a replacement to those resources. Every organization is encouraged to use ideas and concepts outlined in the WEDI/SNIP transaction workgroup white papers and documentation. (See: http://www.wedi.org/snip).

2. Intended Audience and Business Considerations

The Testing Guide presents a modular, phased approach to test the full claim lifecycle. This lifecycle (presented in the next section) is common to all healthcare industry billing practices. It applies to large and small healthcare institutions, physician practices, home health and third party billing agencies, vendors, payers and other intermediaries.

The DOBI Task Force recognizes that not all parties will be prepared to test the component transactions of the claims lifecycle at the same time. The modular test units act as building blocks to support the full-cycle test. Useful testing can be accomplished for each transaction as trading partners ramp-up to full HINT/HIPAA compliance.

Transaction testing is based on compliance testing by each covered entity, as well as trading partner testing. The former tests the HINT/HIPAA compliance of the transaction, while the latter addresses trading partner specific decisions within the transaction. It should be recognized that covered entities might choose to complete compliance testing and not complete end-to-end transaction testing with all trading partners or only perform end-to-end testing with some trading partners. This is a business decision based on the

constraints of cost, resource availability and time. There are many options and associated risks that need to be assessed within each organization.

Larger institutions may use the Testing Guide in detail to complete the full-cycle test directly with payers or through intermediaries (EDI service and/or clearinghouse). Smaller providers who are dependent on the third party vendor for compliance can use the Testing Guide as a framework to validate the compliance of the vendor, intermediaries and payers used by the provider.

All Covered Entities (CE's) should keep in mind that even though their vendors and intermediaries are testing, it will not be feasible for these vendors/intermediaries to test on a detailed basis for any one CE, unless specifically engaged to do so. CE's should communicate with their vendors and intermediaries regarding whether or not it is important for the CE to complete its own acceptance testing before going live with HIPAA-compliant transactions. At a minimum, CEs should monitor the transactions for erroneous or unexpected results for some period of time after "go live".

New versions of the Transaction Sets will require continued testing to ensure compliance. The Testing Guide will support this effort into the future.

3. Claims Lifecycle

The claims lifecycle begins with the creation and submission of the electronic claim and ends with the claim remittance. During that cycle, various claim acknowledgement, status request and response and information requests can be initiated in different scenarios.

The HINT/HIPAA transactions included in the lifecycle are:
ASC ANSI X12N 837I and 837P – Heath Care Claim For Professional and Institutional
ASC ANSI X12N 276/277 – Health Care Claim Status Request and Response
ASC ANSI X12N 277 – Health Care Claim Acknowledgement
ASC ANSI X12N 835 – Health Care Claim Payment/Advice

The flow of data to process electronic claims can vary from provider to provider. The most common processing models in the healthcare industry include:

- Between provider and payer.
- Indirectly between providers, intermediaries and payers.

The intermediary can be a single clearinghouse, or a combination of third party agents and clearinghouse. Providers may use either model or both for different classes of claims and is dependent on the trading partner relationship. It is important to understand these dependencies and relationships as your organization moves forward with planning and testing.

4. Project Management

A project plan template outlining the tasks necessary to complete the life cycle testing of a transaction is included as Appendix A.

The scope of the project is to take each transaction through pathway, situational, trading partner, volume, and round trip testing, to demonstrate full compliance. The provider and payer must each designate a project leader to represent their respective organizations, as well as oversee and co-chair the project team activities. The project leadership will conduct weekly status meetings either in-person or via conference call to review progress. The TCS project team should also submit weekly status reports internally to project leadership and externally to vendors and business partners. Each TCS Test Project Team should define what information needs to be kept confidential and what information can be shared and thereby included in the submitted status report. Each TCS Project Team should review and all agree that all status report information is accurate.

The project team co-chairs will also be responsible for reporting to their executive sponsor when pre-defined milestones are met, or when significant milestones are encountered. It is also their responsibility to report when milestones are at risk. In the event of a problem or break down within the TCS Test Project Team the affected parties should notify the trading partners and other industry representatives that may be able to assist in resolving the problem.

The HINT/HIPAA TCS Test Project Team operates at the provider/payer level. A testing project team must be formed for each business partnership that transacts claims, claims status, and remittances electronically and on paper. For example, one project team will be set up for Atlantic City Medical Center (ACMC) and Horizon Blue Cross to test all the transactions between those two business partners. Other vendors and business partners involved in the transmission and handling of these transactions will also be part of the TCS Test Project Team. For example, ACMC utilizes a Clearinghouse and must test with Horizon through the Clearinghouse. The TCS Test Project Team and the test project itself are considered to be in effect until every HINT/HIPAA transaction and code set has been fully tested, mutually agreed upon and deemed operational by both the provider and payer involved.

Early adopters are required to submit status reports to DOBI and its designees for the development of a report documenting the successes and failures of the TCS testing plan and processes and explaining the lessons learned and best practices that evolved. All information resulting from and related to the test project must be kept confidential by task force members.

As issues are identified, test teams will check the HINT/HIPAA-mandated Change Request System to see if their issues are already being addressed. Issues should also be tracked on an issues/resolutions list for future reference.

5. Pre-Testing Considerations

5.1 Testing Preparations

It is recommended that each provider conduct the following preparations before testing begins in earnest.

5.2 Payer Direct or Clearinghouse?

Your entity may be planning on transmitting HINT/HIPAA transactions to payers using a clearinghouse instead of utilizing a direct connection. The clearinghouse will implement their own project plan that will more than likely use the steps listed below. While the clearinghouse will take care of most of the technical issues, it is important that you understand all the steps related to testing and implement a plan of action as needed for your site. If you are planning on submitting transactions directly to payers, the following steps should be considered extremely critical.

5.3 Host System Analysis

It is important to understand your host system(s) and the data that is collected and stored. For each transaction type that you work with, (claim, claim acknowledgement, claim status request or response, claim payment/remittance advice), it is imperative that you or your vendor obtain a copy of the X12 Implementation Guide for that transaction. Perform an assessment of your host system with respect to the X12 Implementation Guide. The X12 Implementation Guides are available for free via the Internet, at http:/www.wpc-edi.com/hipaa.

If you are planning on generating a HIPAA transaction from one of your host systems, chances are that either you or your host system vendor will complete this step – regardless of whether you transmit directly to payers or utilize a clearinghouse. However, if you are utilizing a third party EDI vendor and do not plan on generating a HIPAA-compliant file yourself, you will need to communicate with your vendor on how you plan on generating any new data previously missing from your data file.

While your host system and/or EDI vendor are also completing this step, do not fall into a false sense of security. Since the ultimate responsibility for accurate and complete data fall on the provider, it is important, where possible, that you understand both your host system(s) and the requirements published in the Implementation Guide. Determine any data shortcomings, including system integration issues, and address them as soon as possible.

5.4 Stress Testing

During your internal testing phases, do not overlook the importance of stress testing your host system(s)/internal systems. The idea of stress testing is to determine if your system can handle the load for both the import and export of the ANSI X12 HIPAA transactions. By attempting to overload your systems, both by generating and importing different transactions, you can be relatively confident that you will not encounter problems when you go into production. Your EDI translator application should also be included in you internal stress testing.

5.5 Payer Companion Guide

The previous step addressed the assessment between the host system and the HIPAA Transaction Implementation Guides. In this phase we go one step farther; that is, performing an analysis of published payer requirements using each payer's Companion Guide.

The payer Companion Guide should have all the information related to payer-specific connectivity issues, file-naming conventions, system security, system access and other permission-related information. Any and all payer-specific information that needs to be included in a HIPAA transaction should be noted in the payer's Companion Guide.

For those providers using a clearinghouse service, the vendor will address all of these issues. However, there are still pieces of important information contained within the Companion Guide that should compel each provider to collect and understand each payer’s requirements.

The Companion Guide is extremely important and should be a top priority since the provider billing systems, EDI systems and clearinghouse software all may need to be modified to meet the requirements of the Companion Guide.

To assist with a push for consistency for these guides, the DOBI Implementation Task Force is creating consensus Companion Guides containing information for each payer belonging to the task force. The guides are being created using an easy to read format that providers and clearinghouses can use to ensure their systems can generate correct data.

5.6 Documenting and Understanding Test Environments and Protocols

It is important that you receive documentation from each trading partner outlining testing requirements including; Number of claims required, the type of claims required, testing data content required (i.e. ISA15 Usage Indicator - Test/Production), filename conventions, and communication specifications. Also, be aware that many trading partners will be testing with many entities at the same

time, so there is a chance you will need to schedule a testing time well prior to actually being ready to submit a file.

Find out what type of responses and the expected turnaround time you will receive back from the payer (i.e. paper or electronic). The response information you receive back will be used to determine if the test file was successful along with making any internal changes necessary to handle the response file. Each payer may not be ready for all of the HINT/HIPAA mandated standards and therefore may not respond using ANSI X12 277 transactions.

Remember, it is critical that all test activity be tightly controlled and kept separate from production. All test files need to be noted as such, and mechanisms must be created to provide automated controls for preventing test data from landing "in production". Before the start of a test, trading partners will review each other's documentation describing test environments and protocols. Testing should not start until each party is satisfied with the other's approaches.

5.7 Testing Confirmation

Before moving on to a next step of the test phase, both payers and providers must confirm that each step in the process outlined below has agreed upon pre-defined success criteria. Be aware that each phase of testing may have different objectives, therefore different acceptance conditions. It is critical that you understand how you will determine if each testing phase meets your testing objectives. Before beginning a test process, it will also be helpful that everyone test internally as much as they possibly can. This will help to make the testing process more efficient for everyone, thereby reducing the burden placed on testing resources and other related entities.

6. Testing

This portion of the Testing Guide describes the steps involved with completing two types of HIPAA testing: Transactions Compliance Testing and Business-to-Business Testing. The steps for Transaction Compliance testing are described first.

6.1 Transaction Compliance Testing (by Third Party)

Prior to sending an ANSI X12 837i or 837p test file to a trading partner it is imperative that the file format and data content be tested by an independent HIPAA testing entity. If the file is being transmitted via an EDI clearinghouse, the clearinghouse should also have their file certified by an independent HIPAA testing entity.

The most important reason for performing compliance testing is to ensure the file format and data content match the ANSI X12 837i or 837p Implementation

Guide. Equally important is the fact that the successful compliance testing is accepted industry wide as proof that an entity can generate an ANSI X12 837i or 837p file that would be accepted for processing by an EDI trading partner.

If your site generates multiple ANSI X12 837i or 837p files using different systems, you must certify each system. Do not assume because one system becomes certified that all systems will be equal in format and content. Also, any changes made to your system, regardless of how minor, should be retested to ensure continued compliance to the HINT/HIPAA standards.

One compliance testing entity, Claredi Corporation, is a member of the DOBI Implementation Task Force. Using the task force consensus companion guide, Claredi Corporation will incorporate the New Jersey payer requirements into their compliance testing system for New Jersey providers. However, there are many vendors who test the ANSI X12 837i or 837p format. These other compliance tool vendors can be identified using internet searching tools.

6.2 General Scope of Compliance Testing

The following Types of testing[1] will be employed during the individual testing units beginning with "Test-Unit 1 - ANSI X12 837i or 837p & 997" and continuing through the complete cycle testing in "Test-Unit 5. End-to End Transaction Testing or Complete Cycle Testing". The specific scope of testing that each modular testing unit covers will be summarized in each unit testing section:

Type 1: EDI syntax integrity testing – Testing of the EDI file for valid segments, segment order, element attributes, testing for numeric values in numeric data elements, validation of ANSI X12, and compliance with ANSI X12. This will validate the basic syntactical integrity of the EDI submission.

Type 2: HIPAA syntactical requirement testing – Testing for X12 Implementation Guide-specific syntax requirements, such as limits on repeat counts, used and not used qualifiers, codes, elements and segments. Also included in this type is testing for HIPAA required or intra-segment situational data elements, testing for non-medical code sets as laid out in the Implementation Guide, and values and codes noted in the Implementation Guide via an ANSI X12 code list or table.

Type 3: Balancing – Testing the transaction for balanced field totals, financial balancing of claims and/or remittance advice, and balancing of summary fields, if appropriate. An example of this includes items such as all claim line item amounts equal the total claim amount. (See Section

[1] Reference: WEDI/SNIP Transactions Work Group/Testing Sub Work Group, white paper entitled "Transaction Compliance and Certification", Version 3.0, pp 15-16 available at the http://www.wedi.org/snip.

2.2.1 of the "X12N Implementation Guide for the 835 of Health Care Claim Payment/Advice – 835 ASCX12N (004010X091), May 2000", pp 19-22).

Type 4: Situational testing – The testing of specific inter-segment situations described in the X12 Implementation Guides, such that: If A occurs then B must be populated. This is considered to include the validation of situational fields given values or situations present elsewhere in the file. Example: if the claim is for an accident, the accident date must be present.

Type 5: External code set testing – Testing for valid Implementation Guide-specific code set values and other code sets adopted as HIPAA standards. This level of testing will not only validate the code sets but also make sure the usage is appropriate for any particular transaction and appropriate with the coding guidelines that apply to the specific code set. Validates external code sets and tables such as CPT, ICD9, CDT, NDC, status codes, adjustment reason codes, and their appropriate use for the transaction.

Type 6: Product types or line of services - This testing type is required to ensure that the segments/records of data that differ based on certain healthcare services are properly created and processed into claims data formats. These specific requirements are described in the Implementation Guides for the different product types or lines of service. For example, ambulance, chiropractic, podiatry, home health, parenteral and enteral nutrition, durable medical equipment, psychiatry, and other specialized services have specific requirements in the Implementation Guide that must be tested before putting the transaction in production. This type of testing only applies to a trading partner candidate that conducts transactions for the specific line of business or product type.

Type 7: Implementation guide-specific trading partners - The Implementation Guides contain some HIPAA requirements that are specific to Medicare, Medicaid, and Horizon. Compliance or testing with these payer specific requirements is not required from all trading partners. If the trading partner candidate intends to exchange transactions with one of these Implementation Guide special payers, this type of testing is required. When a certification service certifies a trading partner for compliance, the certification service must indicate whether these payer specific requirements were met during the certification process. Other payers and trading partners may have their own specific business requirements; but, unless they are listed in the X12 Implementation Guides, they are not HIPAA requirements. These non-HIPAA trading partner specific requirements must be tested as part of the business-to-business testing. For further information on business-to-business testing and for further

information on testing trading partner rules that are not contained in the Implementation Guides, please see the Business-To-Business Testing White Paper which can be found at: http://www.wedi.org/snip/public/articles/index%7E12.htm.

6.3 Business-to-Business Testing: Philosophy and Steps

What is described below are the individual testing units that, if used together, will provide complete cycle testing between trading partners. The testing units are interchangeable. If trading partners were able to incorporate multiple testing units into a single testing unit, then that approach would be acceptable providing there is agreement among the trading partners.

For the most part, the testing units that follow describe ideal testing models where all HINT/HIPAA transactions are available for use by both trading partners. Recognizing this may not be the reality for some trading partners; some test units make practical suggestions on what proprietary reports to use to begin or move forward with testing. The Testing Guide's recommendation for proprietary reports or verbal acknowledgements should not be considered a replacement for transactions that meet HINT/HIPAA standards. Each payer and provider must ascertain which transactions they use and make sure that those transactions meet the HINT/HIPAA guidelines.

In all testing units actual claims data must be used.[2] These cases should be actual cases that have been fully processed and adjudicated by the payer that is testing the new formats. Using adjudicated claims makes it easier for the involved parties to review and confirm testing results, as claims correctly submitted in the new format should result in the claim being adjudicated in a manner consistent with the original submission process. Using this methodology will help focus software debugging efforts rather than new issues raised by data related problems.

Each team will re-use its test files for all test units. Initially, only one Unit Test File should be created for each payer; that one file will be used for all test units. Subsequent testing may also be appropriate and depending on the payer, it may be required.

Within telecommunications, there are multiple methods used for sending and receiving business transactions. Frequently, different methods involve different timings. Two methods applicable for EDI transactions are batch and real time. The Testing Guide is intended for use in a Batch only environment.

Batch - When transactions are used in batch mode, they are typically grouped together in large quantities and processed en-masse. In a batch mode, the sender sends multiple transactions to the receiver, either directly or through a switch

[2] The 276/277-claim status and response transaction may be an exception to this recommendation.

(clearinghouse), and does not remain connected while the receiver processes the transactions. If there is an associated business response transaction (such as a 271 response to a 270 for eligibility), the receiver creates the response transaction for the sender off-line. The original sender typically reconnects at a later time (the amount of time is determined by the original receiver or switch) and picks up the response transaction. Typically, the results of a transaction that is processed in a batch mode would be completed for the next business day if it has been received by a predetermined cut off time.

Note: When in batch mode, the 997 Functional Acknowledgement transaction must be returned as quickly as possible to acknowledge that the receiver has or has not successfully received the batch transaction. In addition, the TA1 segment must be supported for interchange level errors.

Real Time (***Fast Batch***)— Transactions that are used in a real time mode typically are those that require an immediate response. In a real time mode, the sender sends a request transaction to the receiver, either directly or through a switch (clearinghouse), and remains connected while the receiver processes the transaction and returns a response transaction to the original sender. Typically, response times range from a few seconds to around thirty seconds, and should not exceed one minute.

Note: When in real time mode, the receiver must send a response of either the response transaction, a 997 Functional Acknowledgement, or a TA1 segment. When this mode is being used, it is then important for intermediaries to be included in the testing described above.

6.4 Test-Unit 1 - 837i or 837p & 997 Claims Testing

Unit 1A. Specific Scope of Testing – The purpose of this testing unit is to ensure claims are received and are in the proper ANSI X12 format. This test also verifies communication functionality. The trading partner may use Types 1 through 7 to validate the data, depending on their testing situation. Testing should, at a minimum, perform **Type 1: EDI syntax integrity testing and Type 2: HIPAA syntactical requirement testing.**

Unit 1B. Claims Pathway Testing – Transmit a minimum of 10 or a maximum of 50 claims per institution in ANSI X12 837i or 837p format from the provider's billing system to the EDI vendor through the clearinghouse (if applicable) and then onto the payer for processing and adjudication. Payer should reply with a 997 functional acknowledgement or proprietary acknowledgement. The 997 functional acknowledgement is used by the payer to communicate that the payer's file passed or didn't pass syntax rules and structure. If the file passed it will be accepted into the next step of the claims process. If it didn't pass, the file will be rejected and the provider is notified in the 997. If no further processing takes place and the claims in the file are all rejected, then the file syntax or structure

needs to be examined. A new file will need to be submitted. We highly recommend that the payer provide the 997.

Unit 1C. Claims Volume Testing – Transmit a minimum of 1 week's claims and a maximum of one month of claim transactions, per institution, in ANSI X12 837i or 837p format. The claim transactions should flow from the provider's billing system to the EDI vendor through the clearinghouse (if applicable) and then onto the payer for processing and adjudication.

6.5 Test Unit 2 - 277 Health Care Claim Acknowledgement

Unit 2A. Specific Scope of Testing - After submission of the 837 4010 claims transaction, the payer will furnish, a Health Care Claim Acknowledgement, ASC ANSI X12N 277 (004040X167), or a proprietary receipt acknowledging claim level detail and dates about when claims were accepted and rejected. If the payer has this transaction available, then this Test-Unit can be used in conjunction with Test-Unit 1. Otherwise, this Test-Unit is used after Test-Unit 1 is completed between trading partners. A Provider should use a known set of rejected and accepted claim transactions. This testing should reflect trading partner specific, pre-adjudication edits, including situational edits.

Unit 2B. Claim Type Acknowledgement Pathway Testing
Provider should verify that each claim sent in the 837i and 837p file is present and accounted for on the claim acknowledgement receipt. The quantity and amount of approved and rejected claims should be consistent with direct-submitted claims. When involving a business associate, clearinghouse, or other third party mechanism to submit claims, the quantity and amount values need point-to-point verification. A master list should be retained for all claims submitted. This list should be used to verify that all payers acknowledge receipt of their portion of the transmission. Otherwise, claims could get lost in the process. A recommended success criterion is to use the clearinghouse report as a "check-off" list to verify receipts from each payer to which the clearinghouse forwards claims. If claims were rejected, pay particular attention to the reject reason codes.

Unit 2C. Claim Status Type Acknowledgement
Providers should verify and research reason codes for rejected claims, if that information is present on the ANSI X12 277 or proprietary receipt furnished, by the payer. The reasons should be validated against the data submitted on the claim. The provider should review the STC12 element against the STC01, STC10, and STC11 elements. In future versions of this transaction, the usage of the STC12 will change to NOT USED. [3] This research may help verify whether the payer is processing HIPAA standard code sets correctly or verify edits about whether other payer specific edits are correctly applied. Claims that are rejected at this point never make it to the payment processing area (adjudication), so

[3] Reference Implementation Guide ANSI X12N 277 004040x167

diligence in researching and fixing the noted problems on these rejected claims is important.

6.6 Test Unit 3 - 276/277 Claims Status and Response

Unit 3A. Specific Scope of Testing – This unit addresses testing of the transactions for the HIPAA-mandated Claim Status Request and Response. Testing will be in either Batch mode or Real Time mode.

Unit 3B. Claims Status and Response Pathway Testing
Provider should transmit a minimum of 10 and a maximum of 50 claim status requests per institution in ANSI X12 276 format from the provider's billing system to the EDI vendor through the clearinghouse (if applicable) and then onto the payer. Claim status requests should relate to claims submitted for Test Unit 1, unless this Test Unit 3 is being executed at a time when Test Unit 1 claims have already completed "adjudication". In such cases, a new batch of claims should be created and submitted in preparation for executing this section of 276/277 testing.

Upon receipt of the 276 transaction(s), it is suggested that the payer reply with a 997 Functional Acknowledgement transaction to specify Type 1 ANSI X12 syntactical errors, if any, or to acknowledge successful receipt of the batch. The payer may or may not reply with an 824 transaction, to report type 2 through 7 errors.

Payers should respond to each 276 transaction with a 277 transaction. Provider(s) should verify that at least one 277 has been received for each 276 sent. At a minimum, the provider number, patient identifier, date(s) of service, and submitted charges should match. If the 276 does not uniquely identify the claim within the payer's system, (for example, if duplicate claims have been submitted), the 277 may include multiple claims that meet the identification parameters supplied by the requester.

The amount of information returned in the 277 will vary with the status of claims through the payers' adjudication process. Review of this detail will be done in section 3.C, below.

Unit 3C. Claims Trading Partner Testing
This testing can either make use of Option 1 or Option 2, described below. Option 1 will address live claims; Option 2 will address claims in the payer's test system.

Option 1. - This testing will take place in the payer's production environment. This is possible because the transactions don't actually change anything in that environment; they just take information from it.

Possible Claim Status Scenarios, reprinted here from the 276/277 Implementation Guide, are described below. The provider should identify

claims that meet each of the scenarios commonly experienced with the trading partner in test. The provider will then generate a 276 transaction for each of these claims. The provider will then verify, claim by claim, that it has received the expected claim status information.

Option 2 - If the claims created in Test Unit 1C are still active in the payer's test system, the provider will generate claim status transactions for each of the claims previously submitted. Alternately, the provider will create a new claim file to submit to the payer, and will submit that file in preparation for executing this test. The payer will process the claims until they reach the range of states described in the Claim Status Scenarios below. The payer will notify the provider when a process may have altered a claim in the test system. The provider will then generate 276 transactions for each of the claims originally submitted to check claim status.

The payer will generate the appropriate 277 responses, and the provider will confirm that the proper number of responses has been received. The provider will then review a significant sample of the responses to confirm that they make sense. For example, the provider will confirm that claims of a type that usually adjudicate without question, and claims that usually generate a request for additional information, both have appropriate information reflected in their associated 277 transaction.

Claim Status Scenarios - Examples of status locations within a payer's adjudication process, which vary from payer to payer, may include the following:

- pre-adjudication (accepted/rejected claim status)
- claim pended for development (incorrect/incomplete claim(s) within adjudication process) or suspended claim(s) requesting additional information
- finalized claims that may have outcomes that include the following:
- finalized rejected claim(s)
- finalized denied claim(s)
- finalized approved claim(s) pre-payment
- finalized approved claim(s) post-payment

The status locations are described briefly to convey a cohesive understanding of the use of the 277 Health Care Claim Status Response.
Pre-Adjudication System Status (X12 Implementation Guide 1.3.2.1) - Payers may pre-process claims to determine whether or not to introduce them to their adjudication system. This process is performed so that incorrectly formatted claims or those that are missing information can be returned to the provider for correction. Returned claims may not have claim numbers assigned by the payer.

Claims Pended or Suspended (X12 Implementation Guide 1.3.2.2) - Payers may perform validation editing within their adjudication system and may accept or pend, erroneous claims. Generally, the payer assigns a claim number to the pended claim, notifies the provider of the reason(s) why the claim is pended, requests corrective action, and continues the adjudication process when the corrected information is received. Similar to a pended claim, a suspended claim requires additional information to complete the adjudication process. Generally, this information is not billing information but rather supplemental information that supports or explains the rendered health care services. This information may be required according to the insurer's medical or utilization policy to monitor the provider's health care delivery patterns, or to manage and coordinate the health care delivered to the individual. The payer uses the 277 Health Care Claim Request for Additional Information to notify the provider of claims that are pended or suspended and of the specific, additional information requested to release each claim for continued adjudication processing. The Testing Guide does not detail the actual request for additional information.

Finalized Claims (X12 Implementation Guide 1.3.2.3) - Claims that complete the adjudication process are referred to as "finalized claims." These claims are returned to the provider/submitter by way of the Health Care Claim Payment/Advice (835). The adjudication determination is concluded. Subsequent business events (e.g., an adjustment or an appeal) may occur, but the claim would be given additional identification. Claims may be finalized and rejected, denied, approved for payment, or paid.

- **Finalized Rejected Claims -** Pended claims (i.e., incorrect or incomplete claims within the payer's adjudication system) that exceed the response time frame are finalized and rejected. Generally, the payer removes the claim(s) from his or her pended workload and retains this information in history files.

- **Finalized Denied Claims -** Claims may reach final adjudication status and not result in a claim payment. One reason is that the claim services billed on the claim are denied. Reasons why services may be denied include the following: no contract is in effect for the patient, the contract does not cover the services billed, and prior claims were paid to the maximum allowed covered benefit for the currently billed services.

- **Finalized Approved Claims Pre-Payment -** Claims may be in final adjudication status but have not yet resulted in a check (electronic or paper) being issued. Due to processing requirements within payment systems, claims may be in this status for specific time intervals. For example, some payers create checks for disbursement on a weekly

basis while other payers issue checks no more frequently than fourteen days from receipt. Generally, the amount to be paid is available for claims in this status; however, it is typical that the check number is unknown.

- **Finalized Approved Claims Post-Payment -** When claims reach final adjudication status and are paid, complete information is available for inquiry. In some situations the claims approved for payment may not have a check issued. Two examples of this include penalty withholdings and recoveries from erroneously made prior payments. A payer can expect to receive inquiries for claims that complete the adjudication process. Examples of reasons for post-payment claim status inquiries include the following: coordination of benefits, appeal of adjudication results, and adjustment billing.

6.7 Test-Unit 4 - 835 Remit Testing

Unit 4A. Scope of Testing – The purpose of this testing unit is to verify and reconcile the electronic remittance data being received in the ANSI X12 835 4010 format. In some cases payers are allowing submitters to choose whether they elect to receive the 835 v4010 or continue to receive a paper remittance. This testing unit may use Types 1 through 7 to validate the data with a specific emphasis on the following testing **Types;** ***Type 3: Balancing, Type 4: Situational testing and Type 5: External code set testing.***

This testing unit will also test the communication functionality between trading partners for the receipt of this ANSI 835 file. The communication processes utilized by a specific payer for the 837 claim transmissions may be different from the communication processes utilized for the 835 remittance transactions.

Unit 4B. Remit Pathway Testing – The approach providers will utilize to test the 835 4010 is different from testing the 837 claims transaction, in that; with this testing unit the provider is receiving an outbound transaction from the payer. In order to translate the data, the provider must utilize the capabilities of their in house patient accounting system or download a free piece of software called PC-Print to read and verify the 835 files. A copy of the PC-Print software can be downloaded from http://www.riverbendgba.com/prov/PCPrint/PCPrint.htm. The version of PC-Print available here for download is v3.02 dated April 2002. This version of PC-Print processes ERA Versions 3051.3A, 3051.4A and, ERA Version 4010.

Note: PC-Print will only translate the Medicare Part A remittance data. Part B submitters will not be able to use this tool.

It is recommended that submitters initiate a parallel test for this testing unit. The provider should receive a minimum of 10 to 50 claims remit transactions from the

payer in the ANSI X12 835 4010 format. These remit transactions may or may not correspond to the exact claims submitted during the claims pathway testing defined in testing Test-Unit 1B above. In addition to the ANSI 835 4010 data received, the provider should receive the same 10 to 50 claims remit transactions in their current electronic or paper format. The provider must verify and reconcile the remittance data found in the 4010 format and ensure the results match the current electronic or paper format. The provider will utilize their in-house patient accounting system or PC-Print to print the 835 4010 file to verify the results. This comparison testing approach will ensure the provider has received complete remittance data.

Unit 4C. Remit Trading Partner Testing – Again, using the same parallel testing approach as defined in 4B the provider will receive a larger volume of claim remit transactions to verify and reconcile the larger batch of transactions. The same steps as defined in 4B should be followed here. In addition to the parallel testing requirement providers should focus on line item reject reason codes to verify any specific HIPAA code set problems or payer specific edits. Any discrepancies should be corrected prior to starting Test-Unit 5. Test success criteria: Explanation of discrepancies between the remittance advice, corrections of appropriate discrepancies and retest to confirm accuracy of corrections.

6.8 Test-Unit 5. End-to End Transaction Cycle Testing

Unit 5A. Scope of Testing – The purpose of this testing unit is to incorporate Testing Units 1 through 4 into a complete cycle test. It is understood that all of the individual transaction sets may not be available for testing simultaneously. Individual or multiple transactions may be put into production prior to all transactions being available for testing. This testing may be done as End-to-End Transaction Tests. Individual transactions can be phased into this testing cycle as each trading partner completes their internal testing and development. During this testing unit proprietary formats are an acceptable response for those transactions not yet available for testing. The following types of testing should be covered in this unit: **Type 1: EDI syntax integrity testing, Type 2: HIPAA syntactical requirement testing, Type 3: Balancing, Type 4: Situational testing, Type 5: External code set testing and Type 6: Product types/types or line of services.**

Unit 5B. Pathway End-to-End Transaction Testing or Complete Cycle Testing – The provider should transmit 10 to 50 claims per institution to the payer in ANSI X12 837i or 837p format. Payer will reply with a 997 functional acknowledgement. Payer will reply with a HINT-mandated claim-by-claim acknowledgement (refer to Test Unit 2)[4]. The payer should notify the provider of each status cycle or milestone and the provider in turn should transmit an ANSI X12 276 and receive back the ANSI X12 277 response back from the payer for each status change. Once the claims have been fully adjudicated the payer should notify the provider for one last ANSI X12 276 claims status and ANSI

[4] Federal payers do not have to comply with HINT requirements.

X12 277 claims status response cycle. The payer will then transmit an ANSI X12 835 Remit advice to the provider.

As stated in 5A, it is acceptable to complete individual End-to-End Transaction tests, until such time as all transactions are available for testing, receiving proprietary formats for those units not yet available for testing. Once this complete cycle has been fully debugged the project team can start **5C. Trading Partner End-to-End Unit Volume Testing or Complete Cycle Testing.**

Unit 5C. Trading Partner End-to-End Volume Testing or Complete Cycle Testing – The provider should transmit one week to one month of claims per institution to the payer in ANSI X12 837i or 837p format. It is also recommended that a few problematic claims get inserted into this test batch to test error status. Everyone should be made aware which claims are problems so no time is lost searching for software bugs that don't exist. Payer will reply with 997 functional acknowledgement. Payer will reply with a HINT-mandated 277 transaction. The provider should then transmit a claims status request to the payer in ANSI X12 276 format. The payer should then transmit an ANSI X12 277 response back to the provider. The payer should notify the provider of each status cycle or milestone and the provider in turn should transmit an ANSI X12 276 and receive back the ANSI X12 277 response back from the payer for each change. Once the claims have been fully adjudicated the payer should notify the provider for one last ANSI X12 276 claims status and ANSI X12 277 claims status response cycle. The payer will then transmit an ANSI X12 835 Remit advice.

As stated in 5A, it is acceptable to complete individual End-to-End Transaction tests, until such time as all transactions are available for testing, receiving proprietary formats for those units not yet available for testing. Once this complete cycle has been fully debugged the project team can begin testing Eligibility and benefit enrollment transactions.

Example - Suggested Test Success Criteria:

- Successful receipt of the file and integration into the claims adjudication system.
- Confirmation that total number of claims received is accurate; confirmation that claim-by-claim receipts are accurate.
- Confirmation that payer-selected claim status codes are being accurately communicated 100% of the time.
- Production of remittance advice that are 100 percent accurate.

7. Executive Summary

This transaction Testing Guide, developed by the New Jersey Department of Banking and Insurance's (DOBI) HINT/HIPAA testing subcommittee, is a living document that proposes a modular approach to testing. While the guide proposes complete testing of the claims lifecycle, it takes into consideration the fact that not every industry player is ready to test each transaction and offers a practical solution to this dilemma. The committee made up of healthcare providers, payers, healthcare associations and vendors used common industry practices and actual experience to develop this Testing Guide. The Testing Guide, as summarized below, offers insight that can be used to begin the HINT/HIPAA testing process now and for future changes to HIPAA transaction and codes sets.

The Testing Guide's intended audience consists of physician practices, home health agencies, third party billing agencies, vendors, payer, large and small healthcare institutions and other intermediaries. This Testing Guide offers full claims lifecycle testing but breaks the testing process into flexible and manageable phases that can be used to create the building blocks for full-cycle testing. The Testing Guide also includes a sample project management plan, an index of third party testing entities, a 'lessons learned' compilation of testing experiences and a Testing Guide Check List (Appendix B).

The ASC ANSI X12N transactions that make up the claim lifecycle included in this Testing Guide are 837 Health Care Claim, the 276Claim Status Request and Response, the 277 Claim Acknowledgement (HINT) and the 835 Claim Payment /Advice. Pre-testing preparations are explained that include, for example, understanding what data providers host system does and does not generate for the HIPAA transactions. Similarly, preparations include having payer specific HIPAA companion guides for each payer with which you are testing. New Jersey DOBI Testing and Standards Subcommittee's Consensus Companion Guide is one recommended companion guide because it represents payers that process approximately 80% of all New Jersey's healthcare claims.

The idea that each covered entity should first have their transactions tested by a third party testing entity is strongly recommended. In addition, the Testing Guide gives a step-by-step approach to direct Business-to-Business Testing. This important task includes testing each transaction in the lifecycle independently and then as an end-to-end transaction cycle test. Each test unit explains the scope of the test for the individual transaction, the general expected results of the test and how to verify that a successful pathway has been created and traveled by the test claim. Reports and other verification tools are suggested and described.

This Testing Guide will be a living document to be maintained by the WEDI/SNIP regional affiliate user group, New Jersey SHORE (Strategic HIPAA and Healthcare Organization Regional Effort), as an important testing tool for all New Jersey healthcare covered entities.

8. Lessons Learned

Under construction to be added Q1 2003

9. References

a) Reference Implementation Guide ANSI X12N 277 004040x167

b) WEDI/SNIP Transactions Work Group/Testing Sub Work Group's white paper entitled "Transaction Compliance and Certification", Version 3.0, pp 15-16 available at the http://snip.wedi.org/

c) http://snip.wedi.org

d) The X12 Implementation Guides are available for free via the Internet at http:/www.wpc-edi.com.

e) Business-To-Business Testing White Paper which can be found at: http://www.wedi.org/snip/public/articles/index%7E12.htm

f) http://www.riverbendgba.com/prov/PCPrint/PCPrint.htm

10. Appendix A- Project Plan

ID	Task_Name	Notes
1	**HIPAA Transaction & Code Set Test Plan**	
2	**Define Project Scope**	
3	Identification of Providers/Payers/Application Vendors	Determine within your organization whether you are a provider, Payer or both. Then determine what application software supports these payers/providers. Then determine if the software is supported by a vendor or in house development.
4	Identification of Project Team	Include members of provider/Payer and both in house development and application support.
5	**Setup Weekly Project Meetings**	
6	Identify Project Leads	Identify project leads and roles/responsibilities of the team
7	Identify Confidential versus Shared Information Included in Status Report	Ensure protected Patient Information is masked if including this information in the report.
8	Check HIPAA Mandated Change Request System for Identified Issues	http://www.hipaa-dsmo.org/crs/
9	Submit Milestone Status Reports to DOBI Task Force as Early Adapter	Report should be submitted as milestones are completed
10	Submit Status Reports Weekly to Project Leadership and Business Partners	
11	**Provider & Payer Task Force**	Modular Transaction Testing
12	837 Health Care Claim	
13	276/277 Health Care Claim Status Request and Response	
14	277 Health Care Claim Acknowledgement	
15	835 Health Care Claim Payment/Advice	
16	**Pre-Testing Considerations**	
17	Payer or Clearinghouse	
18	**Host System Analysis**	http://wpc-edi.com/hipaa
19	**Validate Certification of HIPAA Readiness with Application Vendor's**	
20	Perform System Analysis and Remediation	Test the new data elements that have been identified to meet HIPAA requirements against your current systems.

21		Validate/Update System to HIPAA Compliant Version (per Transaction)	Some of your applications will need to be upgraded with the HIPAA Version form your vendor before you begin testing.
22	Stress testing		
23	**Payer Companion Guide**		
24	**Compliance Testing (Independent from Trading Partner's-**		
25	Obtain Payer Companion Guide's per Payer		
26	Payer Specific Requirements		i.e. Medicare, Medicaid, Horizon
27	**Documentation of Test Environment and Protocols**		
28	Setup Test Environment (where possible)		
29	Telecommunications/Connectivity		Identify the connectivity protocol for systems utilized.
30	System Security, Authentication, Access		
31	System Access/Permission Related Information		
32	Data Format		
33	Data Content (generic HIPAA requirements)		
34	File Naming Conventions		
35	Schedule Testing with Application Vendor		
36	Test Transaction Set against Certification System		
37	**Testing Confirmation**		
38	Schedule Testing with Certification Vendor		
39	HIPAA Business Rules		
40	Receive Certification from Certification System re: Transactions		
41	**Transaction Compliance Testing by Third Party**		
42	Determine Format and Data Content for Transaction Testing		ANSI X12 Transaction Guide's
43	Identify Acceptance Testing Criteria		Identify both Payer and Provider Criteria
44	**Scope of Compliance Testing**		
45	EDI Syntax Integrity Testing		Using ANSI X12
46	HIPAA Syntactical Requirement Testing		i.e. repeat count limits, qualifiers, codes, elements, segments
47	Verify Balancing of Field Totals		i.e. Financials for claims, remittance, etc.
48	Situational Field/Segment Testing		
49	External Code Set Testing		i.e. ICD9, CPT4, NDC, CDT
50	Product Types or Line of Services Testing		i.e. Ambulatory, DME, Specialized Services

51	Implementation of Guide-Specific Trading Partners	
52	**Business to Business Testing**	
53	**Identify Transaction Sets Utilized**	
54	Identify Batch versus Real Time (Fast Batch)	
55	Verify Transaction Sets meet HINT/HIPAA Requirements	
56	Setup Test Environment (where possible)	
57	Identify Existing Processed Data for Testing	
58	Identify Controls for Test Data	
59	**Test Unit 1 - 837i or 837p and 997 Claims Testing**	
60	Verify Communication Functionality	
61	**Validate Test Data**	
62	Integrity Test	
63	Requirement Test	
64	**Claims Pathway Testing**	
65	Transmission of Provider Claims to EDI Vendor	Minimum of 10, Maximum of 50 Per Institution
66	Validate Claim Processing and/or Adjudication	
67	Verify Receipt of 997 Transaction	
68	**Claims Volume Testing**	
69	Transmission of Provider Claims to EDI Vendor	Minimum of 1 Week of Claims, Maximum of 1 Month of Claims Per Institution
70	Validate Claim Processing and /or Adjudication	
71	Verify Receipt of 997 Transaction	
72	**Test Unit 2 - 277 Claims Acknowledgement**	
73	Verify Communication Functionality	
74	Identify Test Data Mix (Accepted and Rejected Data)	
75	**Claim Type Acknowledgement Pathway Testing**	
76	Verify Approved and Rejected Claims against Direct Submission	Minimum of 10, Maximum of 50 Per Institution
77	**Claims Status Type Acknowledgement**	
78	Verify Reason Codes for Rejected Claims	Minimum of 1 week of claims, Maximum of 1month of Claims Per Institution
79	Validate Reasons against Submitted Data	
80	Review STC12 Element against the STC01, STC10, and STC11 Elements	

- **Test Unit 3 - 276/277 Claims Status and Response**
  - Identify Testing using Batch or Real Time Mode
  - **Claims Status and Pathway Response Testing**
    - Utilize Data from Unit 1 for Claim Status Testing
    - Provider to Reply with 997 Transaction upon Receipt of 276 Transaction
  - **Verify a 277 Transaction Response for the Related 276 Transaction Sent**
    - **Verification of Minimum Matching criteria**
      - Provider Number
      - Patient Identifier
      - Dates of Service
      - Submitted Charges
  - **Claims Trading Partner Testing**
    - Option 1 - Live Claims
    - Option 2 - Previously Submitted or Newly Created Claims
  - **Claim Status Scenarios**
    - Pre-Adjudicated (Accepted/Rejected) Claim Status
    - Claim Pended for Development or Suspended
    - **Finalized Claims**
      - Finalized Rejected Claims
      - Finalized Denied Claims
      - Finalized Approved Claims Prepayment
      - Finalized Approved Claims Post Payment
- **Test Unit 4 - 835 Remit Testing**
  - Verify and Reconcile Electronic Remittance Data Received
  - Select 835 v4010 or Paper Remittance
  - **Testing Types**
    - Balancing
    - Situation Testing and Type

109		Code Set Testing	
110	**Remit Pathway Testing**		
111		Utilizing In House Accounting System or PC-Print Software	http://www.riverbendgba.com/prov/PCPrint/PCPrint.htm
112		Verify and Reconcile V4010 Remittance Data to Electronic or Paper Format	Minimum of 10, Maximum of 50
113	**Remit Trading Partner Testing**		
114		Utilizing In House Accounting System or PC-Print Software	http://www.riverbendgba.com/prov/PCPrint/PCPrint.htm
115		Verify and Reconcile V4010 Remittance Data to Electronic or Paper Format	Minimum of 1 Week of Claims, Maximum of 1 Month of Claims
116	**Test Unit 5 - End to End Transaction Cycle Testing**		
117	Integrity Testing		
118	Requirement Testing		
119	Balancing		
120	Situation Testing		
121	Code Set Testing		
122	Product Types/Types of Service Testing		
123	**Pathway End to End Transaction Testing or Complete Cycle Testing**		
124		Transmission of Provider Claims to Payer in ANSI X12 837i or 837p format	Minimum of 10, Maximum of 50 Per Institution
125		Verify Receipt of Payer 997 Functional Acknowledgement	
126		Verify Payer Claim by Claim Acknowledgement	
127		Notification from Payer to Provider of Status Cycle/Milestone	
128		Notification from Provider to Payer using ANSI X12 276 Transaction	
129		Verify Receipt of ANSI X12 277 Claim Status Payer Response	
130		Transmission from Payer of ANSI X12 835 Remittance Advice to Provider	
131	**Pathway End to End Transaction Testing or Complete Cycle Testing**		

132	Transmission of Provider Claims to Payer in ANSI X12 837i or 837p format	Minimum of 1 Week of Claims, Maximum of 1 Month of Claims Per Institution
133	Verify Receipt of Payer 997 Functional Acknowledgement	
134	Verify Payer Claim by Claim Acknowledgement	
135	Notification from Payer to Provider of Status Cycle/Milestone	
136	Notification from Provider to Payer using ANSI X12 276 Transaction	
137	Verify Receipt of ANSI X12 277 Claim Status Payer Response	
138	Transmission from Payer of ANSI X12 835 Remittance Advice to Provider	
139	**Test Success Criteria**	
140	Successful Receipt of File into Adjudication System	
141	Confirmation of Accuracy for Claims Received	
142	Confirmation of Accuracy for Payer Selected Claim Status Codes (100%)	
143	Confirmation of Accuracy for Remittance Advice (100%)	

11. Appendix B- Testing Guide Check List

- ❑ Read HINT/HIPAA Transaction & Code Set Testing Guide.
- ❑ Verify HIPAA compliance status of your third party vendor.
- ❑ Install HIPAA compliance software changes from vendor. (If necessary)
- ❑ Complete your Host System Analysis.
- ❑ Understand payer-specific requirements utilizing each payers Companion Guide.
- ❑ Complete Stress Testing.
- ❑ Contact Each Trading Partner and identify testing requirements.
- ❑ Identify testing success criteria with each trading partner.
- ❑ Conduct transaction compliance testing with third party
- ❑ Complete Test Unit 1- 837 Claims Pathway Testing.
- ❑ Complete Test Unit 1- 837 Claims Volume Testing.
- ❑ Complete Test Unit 2- 277 Claim Type Acknowledgement Pathway Testing.
- ❑ Complete Test Unit 2- 277 Claim Status Type Acknowledgement.
- ❑ Complete Test Unit 3- 276/277 Claim Status and Response Pathway Testing.
- ❑ Complete Test Unit 3- 276/277 Claim Status and Response Trading Partner Testing.
- ❑ Complete Test Unit 4- 835 Remit Pathway Testing.
- ❑ Complete Test Unit 4- 835 Remit Trading Partner Testing.
- ❑ Complete Test Unit 5- Pathway End-to-End Complete Cycle Testing.
- ❑ Complete Test Unit 5- Trading Partner End-to-End Volume Complete Cycle Testing.