

#### An EDI Testing Strategy

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## Agenda

Why do you need it and What is it?

 What should be included in a testing strategy?

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 What are some risks to a successful testing project?

 What to do and Where can you go for more information?

# Why do you need it?

 When have you ever implemented so many software changes to multiple systems?

When have you ever had to test so many levels as part of the testing phases

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#### What is it?

A high level plan to support the objectives of your testing approach

 A definition of the resources (software, hardware and people) needed during the course of the process



#### What is it?

 A list to assist the team (at a high level) in understanding the events that need to take place

 A guide/checklist as the detail plans are developed.



#### What is it?

 A first look at the risks and dependencies that could impact the success of the testing effort

 A list of the deliverables that will be created and used during the testing events



#### What should be included?



Transactions, code sets, software changes

- Lines of business
- Trading partners
- Interfaces
- Special processing
- The phases and techniques
- Test schedule (high level)
- Acceptance criteria



#### What should be included?



- Roles and Responsibilities
- Description of the test environment
- Test data management process
- Test reporting process and controls
- Transactions flowing through the systems



### Creating transaction flow

Things to think about?

 What contacts are made internally for EDI work to start?

 How do you communicate with your external IS (in the provide organization) contacts?

 What is the timetable for bringing a new major provider into a full EDI relationship?

 How are inbound/outbound transmissions tested?



## Creating transaction flow

Things to think about?



Where are the reports from?

Where do the reports go?

Who monitors the EDI reports?

Who handles EDI errors?

 What non-standard data files are created for external entities?

 What non-standard data files are received from external entities?



## Creating transaction flow

Touch point table?



1.1 837 Inbound Claim Touch Point Table (System XYZ)

#	Pathway Description	Related Transa ction	Related HIPAA Touch Points	Touch Point Contact Name
1	Paper Claims via Reformat XXX to Claims Processing	837	Mailroom	
			Imaging	
			Reformat	Mary Jones
			XXX	
			System XYZ	



#### What are some risks?

Large number of changes to be tested

 Large number of testing events to be included

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 Availability of the test environment when needed

Available testing resources

#### What are some risks?

HIPAA knowledgeable testing resources

 Large number of testing with partners

Tight testing schedule

 Dependencies on vendor software



#### What to do?

 Start the test planning process now, develop a project plan

Assign a test manager

Get all parties involved now

Track issues and risks, resolve issues and mitigate risks quickly



#### What to do?

 Understand your organization roll out strategy

Identify resources needed

Identify tools needed to support the effort

Identify training requirements

Identify a testing methodology



HIPAA Testing Methodology

 Goal: To develop a comprehensive, "practical" HIPAA Testing Methodology to address unique challenges of HIPAA transaction/code set compliance.

3 major objectives:

Direct Resources to areas of Highest Risk

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- Maximize Value of Testing Expenditures
- Address Challenges of "Time vs Resources"

 Methodology uses "Risk-Based Testing Approach".

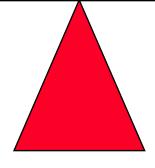
### Balance - Time/Cost With Risk

 The goal of absolute safety is balanced by the constraints of a Transaction regulation deadline

Given the schedule and resource constraints, an alternate goal is required.

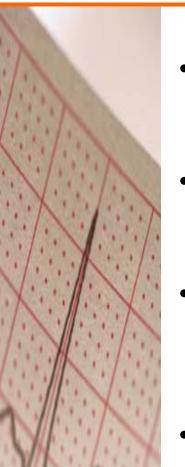


\$\$\$\$\$ Time/Cost



Risk

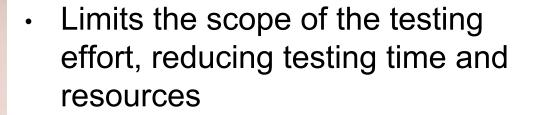
Testing - How Much to Do? Evaluate 4 Factors



- Cost of Testing
  - Follows law of Diminishing Returns
- Cost of Failure
  - All failures are not equal
- Likelihood of Failure
  - The potential cost of failure is adjusted by the likelihood to occur
- Tolerance for Risk
  - Varies by Organization and Application



## Risk-Based Approach



Uses application risk information to select and stack-rank the following:

Applications

Functions within applications

Test paths within functions



#### Risk Assessment

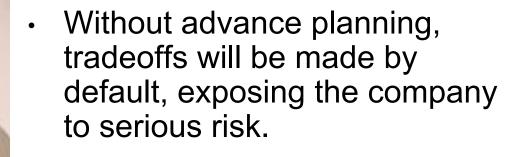
 The optimal level of testing cannot be decided without the assistance of the business area owners.

 Cost of consequential errors and risk tolerance must be provided by the business areas.

 IT organizations will be forced to make tradeoffs between maximum risk avoidance and available time, resources and skills.



Risk Assessment (continued)

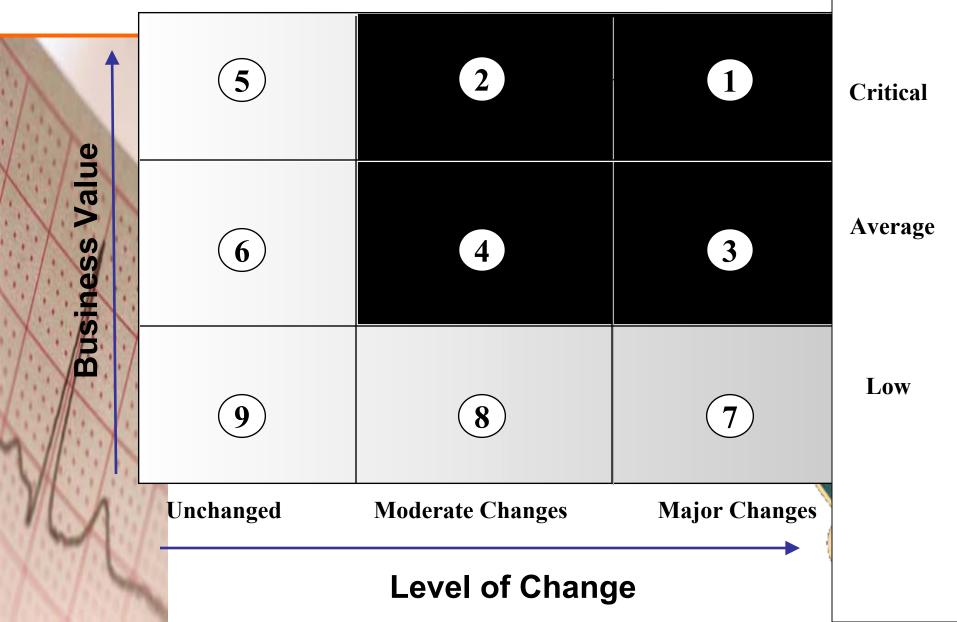


Careful analysis allows
 management to select which
 risks are acceptable and which
 are intolerable.

 Ultimately, the question of how much testing is enough is a business decision to be made by the managers that own the application.



# Function Priority Scheme



#### Conclusion



Goal: Achieve "Compliance"

 Not Practical to test everything 100%

Not likely to mean perfection

Apply Common Sense



#### For more information?

- www.wedi.org
  - White papers
    - Transaction compliance certification
    - Business-to-business transaction set testing
- www.claredi.com
  - Test files
  - Scenarios

www.foresightcorp.com



### Thank You!

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