REDUCING RISKS MAXIMIZING RETURNS FROM HIPAA 5010 TRANSITION

– Vijaya Kumar Bhuttar

Abstract

Healthcare is a complex ecosystem with "many-to-many" interactions among payers, providers, clearinghouses and employers. Enormous amount of data is exchanged between these entities on a daily basis using the standard X12 4010 transaction formats for Electronic Data Interchange (EDI). The mandate on the healthcare industry to move from HIPAA 4010 to 5010 transaction standards is both a source of opportunities and a transition laden with risks. Infosys believes that upfront planning and effective risk management strategies identified in this article are key to mitigating the risks and maximizing the returns from the transition.

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Introduction

Healthcare is one of the most data intensive industries in the United States. Even a not-so-big health plan may support millions of members and may process several thousand claims on a daily basis. These claims come from hundreds to thousands of providers and clearinghouses. EDI has been key in keeping the operations costs down by allowing "Straight Through Processing" of a large percentage of these claims.

Several auxiliary transactions are also used in the healthcare industry. These transactions range from premium payment and member enrollment to eligibility verification, authorization and claims status enquiry. Auxiliary transactions have not been as successful in terms of adoption by the industry as claims transactions. Standardizing electronic transactions between covered healthcare entities has been a key focus area for HIPAA. The currently used 4010A1 standards for EDI have been successful to a great extent in meeting this objective, but there's still scope for improvement. While a marginal improvement in claims EDI can result in savings of millions of dollars, other transactions like claims status enquiry and eligibility inquiry can also help in reducing the overall cost of healthcare - it is with this intention and based on the feedback received from the industry that the 5010 standards were developed. All HIPAA covered entities using EDI will need to comply with the new standards by January of 2012. Analysts have projected up to a 20% increase in HIPAA adoption rates in the decade following 5010 implementation, which could result in operational cost savings to the tune of USD 45 billion for the industry.

The HIPAA 5010 file format has 1,000+ unique changes as compared to HIPAA 4010A1. These changes range from as simple a change as expanding the name fields by 25 bytes to more significant changes as sending and accepting new data. Analyzing and remediating the impact of each one of these 1,000+ elements on organizations' business processes and IT systems is a significant challenge. Inadequate remediation or small glitches in remediation can result in hundreds of thousands of claims dropping to paper - if a 2% increase in auto adjudication saves USD 1-2 million for a health plan, a drop of 2% will increase the manual adjudication cost by the same amount. In addition, payments will be delayed, attracting penalties and resulting in provider/customer dissatisfaction. To circumvent such a problem occurring on a large scale, adequate planning and a clear strategy for integration testing, pilot and rollout are necessary. Automation components are also going to play an important role in reducing the risk and keeping the cost of transition down. Currently, several organizations are performing gap analyses and assessment of 5010 impact to their processes and systems. Other organizations are waiting either with the hope that the compliance date will be pushed further, or because they've underestimated the impact of the change - which in our view is the biggest risk with the transition.

Approach to HIPAA 5010 Transition

Infosys recommends a 5-phase high level approach to minimize the risks and maximize returns with the 5010 transition. The approach is based on the sound principles of software engineering and our experience with similar programs.

Planning → Execution → Testing → Pilot Rollout → Rollout → Steady State

Planning

Planning for the execution, testing, pilot and rollout phases should occur in this phase. Gap analysis and assessment should be carried out to identify the comprehensive impact of HIPAA 5010 to processes and systems. Based on the assessment, detailed requirements should be gathered around how systems and processes will need to be modified to achieve compliance.

Most changes in HIPAA 5010 follow patterns. As much as possible, assessment should be carried out using automation components. SMEs should be engaged in reviewing tool output rather than performing the analysis manually.

Organizations that don't have code analysis tools should acquire one for this transition. The cost savings brought by the tool will pay for itself by the end of the transition. And in most cases, the tools acquired for the 5010 transition can be leveraged for the ICD-10 transition as well.

Standard lists of opportunities with HIPAA 5010 are available with most consulting organizations that have dedicated offerings for HIPAA 5010. Cost benefit analysis should be performed for opportunities that can achieve efficiencies beyond compliance. For example, the ability in 5010 to handle more number of payers for "Coordination of Benefits" may be of importance to a health plan that drops significant number of claims to paper due to the limitation of the segment in 4010. Requirements should be gathered for the shortlisted opportunities and handed over to the execution teams for implementation. To measure and monetize the benefits from HIPAA 5010 opportunities, it is important that organizations baseline their current EDI adoption rates and process efficiencies.

Dedicated governance for trading partner management from an integration testing, pilot and rollout standpoint is desirable. The project plan should be able to dynamically accommodate changes in

the trading partners' transition schedule and progress. For example, if a key trading partner is delayed for integration testing, the slot should be promptly filled with another trading partner of similar size and business significance.

HIPAA 5010 support from product vendors may be limited to basic compliance.

Product support roadmap should be discussed with respective vendors and planning for bridging the gaps in support should be carried out in this phase.

Execution

Execution primarily entails process and systems remediation using iterative, agile or any other approach deemed appropriate. Unit and independent testing should be performed in this phase to ensure path coverage. Effective remediation will reduce or eliminate the cost of rework in later phases. Since the most of HIPAA 5010 impact points follow a pattern, automation components can bring significant productivity improvement in systems remediation. Automatic remediation components should be carefully selected to make sure that they integrate easily with the impact analysis components.

Piloting of the execution phase in one unit, line of business or transaction set can help reduce the risk of the transition in large organizations. The lessons learned from the pilot can be leveraged to make the execution smoother in the broader organization.

Testing

5010 impact on IT systems is very wide. It may not be feasible to ensure testing coverage of each and every impact point in the limited timeframe; risk-based testing will reduce risks with the coverage in such a situation.

Testing should be split into 2 sub-phases:

1. System and regression testing to ensure Level-1 compliance: System and regression testing should be performed using a simulator that can generate 5010 transactions from 4010 transactions. Business scenarios in the 5010 transaction format should be generated by applying valid combinations of new and modified data, on 4010 transactions.
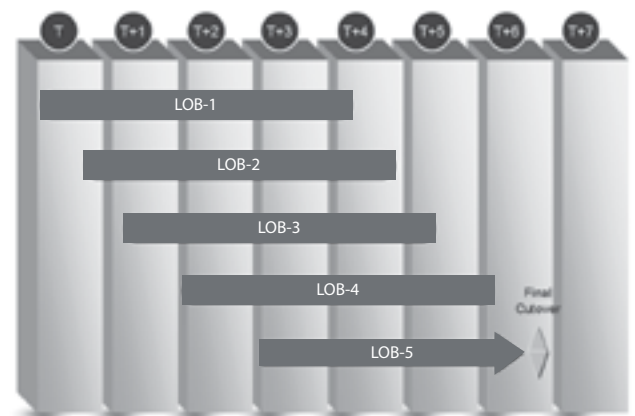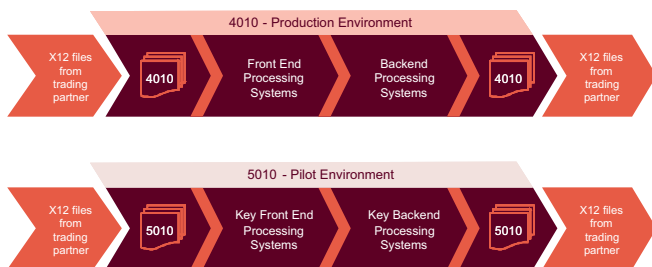
2. Integration testing with trading partners to ensure Level-2 compliance: Integration testing should be performed between the test environments of trading partners. This will provide an early opportunity to identify potential EDI issues that could crop up due to changes made to internal systems.

Pilot Rollout

Integration testing alone is not sufficient. The volume and entire gamut of production business scenarios can't possibly be recreated in the test environment. To cover the gap, a distinct "pilot" phase should be included in the project plan. It is advisable that a pilot path be created for important production systems that are heavily impacted due to HIPAA 5010. The following diagram illustrates a potential arrangement for piloting.

Key trading partners should send the 4010 and 5010 versions of the same transactions to be processed through the production and pilot environments, and the results should be compared. Any discrepancies identified during the pilot should be triaged, replicated in the development and test environments and addressed in a timely manner. Piloting should also be used as a checkpoint to measure the effectiveness of the opportunities. Opportunities with maximum return on investment should be picked up for implementation in the wider rollout.

Rollout

Integration testing and piloting will reduce the risks with HIPAA 5010 transition to a great extent. But to ensure minimal impact to business continuity, organizations should plan for a batch-wise transition of trading partners from HIPAA 4010 to 5010. The failure of a big bang approach for transitioning a large number of trading partners in a short timeframe can have wide and deep repercussions on business continuity.

Trading partners for rollout should be selected based on the Line of Business, Provider Network, Geographical Area or any other parameter based on the distribution of transaction and business volumes.

Once steady state has been reached, the EDI adoption rate and process efficiencies should be monitored for a few weeks. Any improvements recorded should be monetized and ROI calculated.
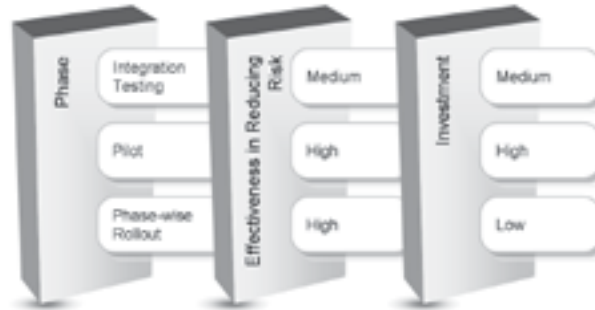
Conclusion

The following table summarizes the effectiveness of different phases in reducing the risks with HIPAA 5010 transition.

Program management is going to play an important role in ensuring that resources are optimally utilized during integration testing, piloting and phase-wise rollout. The dependencies between trading partners' plans to transition should be closely tracked and issues addressed on time. Robust governance, effective communication, upfront and flexible planning, and dynamism and swiftness in response are going to be very important for a successful transition.

Organizations need to be prepared for contingencies by adding short-term/ contract staff to their operations teams. These staff can help with the additional workload created due to situations like claims dropping to paper.

Last but not the least, organizations need to pay attention to the following aspects of opportunities:

- Select and implement the opportunities that have maximum ROI for the organization
- Baseline and measure the return on investment for the implemented opportunities By adopting the strategies described above, organizations can greatly reduce the risks to their business continuity and maximize their returns from HIPAA 5010.

About the Author

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