Version 5010 Regulatory Impact Analysis – Supplement

September 2008

This document was prepared by Gartner, Inc., under a contract to the Centers for Medicare & Medicaid Services (CMS), to conduct primary and secondary research to support the Regulatory Impact Analysis in the proposed rule: 45 CFR Part 162 Health Insurance Reform: Modifications to the Health Insurance Portability and Accountability Act (HIPAA) Electronic Transaction Standards." This NPRM was published in the Federal Register/Vol. 73 No. 164 on Friday, August 22, 2008.

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1.0 Intended Use of this Document

This report has been prepared for explicit use during the comment period for the "45 CFR Part 162 Health Insurance Reform; Modifications to the Health Insurance Portability and Accountability Act (HIPAA) Electronic Transaction Standards; Proposed Rule" published to the Federal Register/Vol. 73 No. 164 on Friday, August 22nd, 2008. The information provided in this report is intended only to supplement the proposed rule and provide additional clarity regarding the Version 5010 Impact Analysis. This report also does not include any of the analysis pertaining to Version D.0 (pharmacy) or Version 3.0 (Medicaid subrogation), as those analyses were conducted separately. This report is for instructive purposes only to help provide additional context and explanation for the calculations set forth in the proposed rule. The content of this report is not meant for comment. Any comments that might stem from this document should be directed to the specific section and language provided in the Notice of Proposed Rule Making (NPRM) and should be provided through the designated channel.

2.0 Cost Benefit Analysis Methodology

In preparing the 5010 Regulatory Impact Analysis, a detailed Cost-Benefit study was conducted to examine the impact of this change across the industry. As part of this endeavor, a methodology was developed to identify the individual segments across the full spectrum of health care and to evaluate each segment from a cost-benefit perspective.

The segments and sub segments that were identified included:

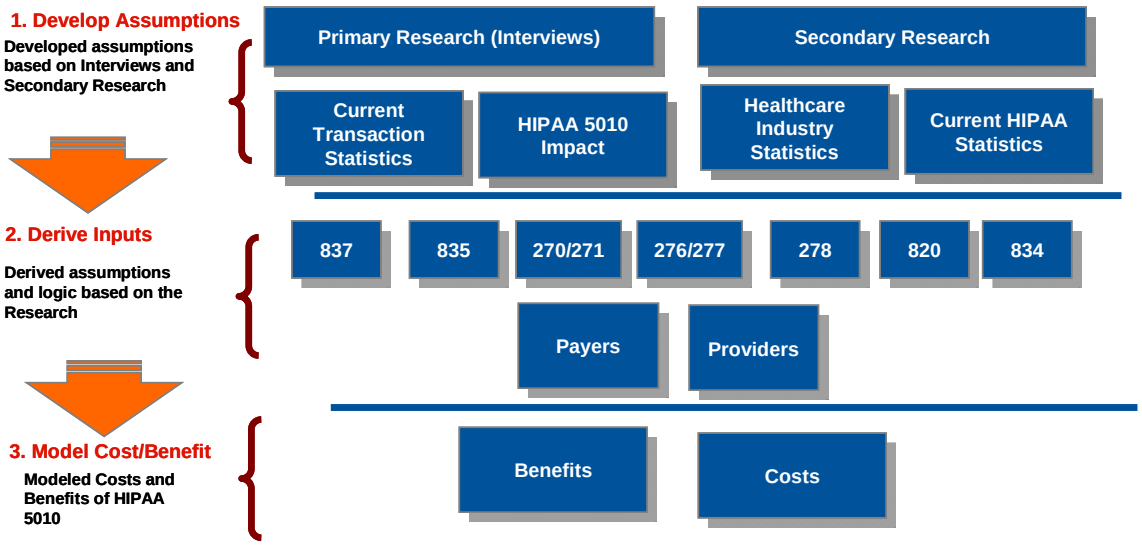
Table 1. Healthcare Segments

Segments	Sub Segments
Providers	• Hospitals • Physicians • Dentists • Pharmacies
Health Plans	• Health Plans • Government Plans and Programs
Clearinghouses and Vendors	• Clearinghouses • Vendors

Based on this segmentation strategy, select individuals with representative perspectives from each of these segments were identified and interviewed. These individuals represented both the business and technical areas for their respective organizations and were capable of articulating the potential cost-benefit of changes to their existing systems and processes. In addition to these interviews, secondary research was conducted to better assess the current usage and industry patterns for each of the HIPAA transactions and to complement data brought forth through the primary research. This secondary research included data collection from leading associations and other constituencies that represented one or more of the segments identified (e.g. MGMA, HIMSS, BCBSA, etc.). Throughout this process, sources were cited and assumptions were tested and verified where possible.

All of the input from this research was used to construct a Cost-Benefit model that synthesized the findings from the interviews as well as the inputs from the secondary research. This model was constructed in order to estimate the net impact of 5010 across the entire health care spectrum inclusive of all of the individual segments. Quality Assurance reviews were conducted throughout the process and multiple iterations of the model were reviewed before the final product was baselined. The Quality Assurance process included multiple stages of validation, sensitivity testing, and peer review with Internal and External Subject Matter Experts. Figure 1 below depicts the process by which this cost-benefit model was constructed.

Figure 1. Cost Benefit Model Development Process



The result of this cost-benefit analysis and the cost-benefit model were then used to help form the basis for the Regulatory Impact Analysis section of the proposed rule. As a result of these exhaustive efforts, estimates were arrived at that can reasonably be assumed to be representative of the expected impact across the industry.

The remainder of this document will provide additional context behind the cost-benefit model and should be considered a supplement to the proposed rule.

3.0 Key Assumptions

The following are the key assumptions used in developing the cost benefit analysis:

3.1 Model Assumptions

The cost benefit analysis was developed for a ten (10) year period.

3.2 Cost Analysis Assumptions

The majority of costs incurred for the Version 5010 HIPAA regulation are related to System Implementation Costs. These costs are assumed to be incurred over a two (2) year period as follows:

- System Implementation costs are distributed evenly between years one (1) and two (2)
- System Implementation costs vary by segment
- Transition costs begin in year three (3)

3.3 Benefit Analysis Assumptions

The benefits are not realized until one year after the implementation compliance date. The

benefits are realized from years three (3) to year ten (10) and vary by segment.

4.0 Costs Overview

4.1 Summary

HIPAA systems implementation costs form the majority of costs associated with the HIPAA Version 5010 proposed rule. The following table summarizes the cost categories and an estimate of each category as a percentage of total costs incurred. The major cost item is the testing costs—these costs on average are estimated to account for 60% to 70% of the total costs that will be incurred.

Table 2. Systems Implementation Cost Categories

Cost Category	Percentage of Total Costs (Providers)	Percentage of Total Costs (Health Plans)
Hardware Procurement	0%	0%
Software Costs	15%	10%
Transmission Costs	0%	0%
New Data Collection	0%	0%
Customized Software Development	5%	2.5%
Testing Costs	60%	70%
Training Costs	5%	2.5%
Transition Costs	15%	15%
Total	**100%**	**100%**

Each interview participant was asked to estimate the costs for Version 5010 implementation on their respective organizations. Interview participants were able to provide an estimate based on their experience in implementing Version 4010/4010A transactions. Interview participants provided a historical estimate on the costs incurred for implementing Version 4010/4010A transactions as well as their projections on what percentage of those costs would be incurred to upgrade to Version 5010. The slate of interview participants estimated their organizations costs to implement 5010 would be between 20% and 40% of the costs they incurred to implement Version 4010/4010A in their respective organizations.

The following table summarizes the total estimated costs to move to Version 5010 across the healthcare industry (excluding Clearinghouses) as a result of the proposed rule:

Table 3. Total Estimated Version 5010 Costs for Healthcare Industry

	Minimum (Millions $)	Maximum (Millions $)
Providers Costs	$1,666	$3,333
Health Plans Costs	$3,852	$7,682
Clearinghouses	$36	$45
[1]***Healthcare Industry Costs (Providers Costs + Health Plan Costs). Excludes pharmacies***	***$5,554***	***$11,060***

4.2 Cost Analysis Methodology

4.2.1 Cost Calculations Overview

The next sections use the following pattern in providing the costs calculations. First the key assumptions are stated. Second, the formula that uses the key assumptions is outlined. Finally, the results from the calculations are documented in the summary section. This section 4.2, and the following section, 5.2, are explanatory only. The actual data and formulas are provided in Section 6 – the impact analysis by segment. A list of all of the assumptions provided in these methodology sections is provided in Attachment 1 and may be used as a side-by-side guide while reviewing section 6.

4.2.2 Cost Calculations

The following assumptions are used in the cost calculations:

Cost Assumption 1: For each Healthcare segment, there was a determination of how many entities would be impacted. For example, The Healthcare providers segment is broken down into three sub-segments: 400+ bed, 100-400 beds and < 100 beds. The costs were different for each segment and sub-segment. Costs varied by each sub-segment based on a variety of factors such as current configuration of systems, complexity of testing with trading partners, and transaction volumes.

Cost Assumption 2: Developed an estimate of Version 4010/4010A implementation costs incurred by each type of healthcare organization or entity in the sub-segment. The estimate is based on data gathered from primary research and secondary research.

Cost Assumption 3: The Version 5010 implementation costs were estimated to be 20% to 40% of Version 4010/4010A implementation costs. This range was established by the interviewees for each respective sub-segment.

The costs are calculated for each Healthcare sub segment based on the following formula:

Costs incurred by each sub segment = *Cost Assumption 1 X Cost Assumption 2 X Cost Assumption 3*

The costs incurred by each sub-segment are aggregated to develop the total costs incurred by the Healthcare industry. Again, the detailed data for each formula is provided in Section 6, and

[1] - This total costs does not include the estimates gathered for Clearinghouses.

Attachment 1 includes all of the assumptions, and a reference to the tables to which they pertain.

5.0 Benefits Overview

5.1 Summary

A number of benefits were articulated during the interviews. These benefits were evaluated, prioritized and quantified where possible. The quantifiable benefits fall into three major categories and are discussed at length in the proposed rule. They include:

I. *Operational savings due to better standards for claims transactions:* The deficiencies in Version 4010/4010A specifications have caused much of the industry to rely on "companion guides" created by health plans to address areas of Version 4010/4010A that are not specific enough or require work-around solutions to address business needs. These companion guides are unique, plan-specific implementation instructions for the situational use of certain fields and/or data elements that are needed to support current business operations. Increased standardization will reduce the reliance on "companion guides" and potentially increase automation of claims transactions processing increasing the operational savings for healthcare industry.

II. *Cost savings due to an increase in EDI for claims transactions by more covered entities:* Providers and Clearinghouses/Vendors maintain multiple connections (a connection represents a specific implementation specific to Health plan) for claims processing. Increased standardization potentially reduces the incremental costs to implement additional connections increasing the uptake in EDI transactions. The table below reflects the estimated current and projected adoption rates for each of the HIPAA standards. We assumed that acceptance rates would gradually increase in the first 5 years after implementation, through 2016, and after that time the rates would remain level.

Table 4. Current and projected adoption rates for use for HIPAA standards across all covered entities-over 10 years

Standard	Current Acceptance	Increase (minimum)	Increase (maximum)
837-claims	75%	2%	5%
835-remittance advice	60%	5%	10%
278-referral request & response	0% **	10%	20%
276/277-claims status request & response	10%	10%	20%
270/271-eligibility request and response	10%	10%	20%
834-enrollment/disenrollment	3%	0%	0%
820-premium	2%	0%	0%
** minimal use – while there is not zero percent uptake, the use of this transaction is so minimal, it does not register on any scale; therefore, we state its current acceptance rate as negligible.			

III. *Operational savings due to increased use of auxiliary (non-claims transactions such as eligibility and referral requests and responses) transactions through EDI:* Better standardization for the auxiliary transactions will increase uptake in Electronic EDI for these transactions increasing the operational benefits

The following table summarizes the Total benefits realized by the healthcare industry because of the proposed rule:

Table 5. Total Benefits realized by Healthcare Industry

Benefit Category	Minimum (Millions $)	Maximum (Millions $)
Providers		
Operational savings due to better standards for claims transactions	$2,289	$6,173
Cost savings due to an increase in EDI for claims transactions by more covered entities	$382	$1,149
Operational savings due to increased use of auxiliary transactions through EDI	$7,452	$19,149
Provider Benefits	***$10,124***	***$26,471***
Health Plans		
Operational savings due to better standards for claims transactions	$1,561	$4,176
Cost savings due to an increase in EDI for claims transactions by more covered entities	$135	$338
Operational savings due to increased use of auxiliary transactions through EDI	$5,339	$13,885
Health Plan Benefits	***$7,036***	***$18,400***
Healthcare Industry Benefits (Providers Benefits + Health Plan Benefits)	***$17,160***	***$44,871***

5.2 Benefit Analysis Methodology

5.2.1 Benefit Calculations Overview

The next sections use the following pattern in providing the benefits calculations. First the key assumptions are stated. Second, the formula that uses the key assumptions is outlined. Finally, the results from the calculations are documented in summary section. Attachment 1 is a list of all of the assumptions, and a reference to the tables to which they pertain within this document.

5.2.2 Operational savings due to better standards for claims transactions

The following assumptions are used in the calculations:

Benefit Assumption 1: Based on the data provided in a recent AHIP report[2] the percentage of pended claims was assumed to be 14% of total claims.

Benefit Assumption 2: Pended claims will be reduced by 0.28% (minimum) to 0.7% (maximum). Using the research and interviews, it was assumed that the pended claim percentage, currently 14% (**Benefit Assumption 1**), would be reduced through standardization.

Benefit Assumption 3: Reduced manual intervention will reduce the costs for providers by $3.20 per call and for plans by $1.60 per call. Manual intervention is required to resolve pended claims and both Healthcare providers and Health Plans incur these operational costs. On an average, the following was assumed as the time spent and cost per minute and per call by the customer service representatives to resolve the pended claims:

Table 6. Time incurred to resolve Pended Claims

	Time	Cost Per Minute	Cost Per Call
Time taken by a provider agent to process manual intervention for a pended claim	10 minutes	$0.32	$3.20
Time taken by a plan claims processor to process manual intervention for a pended claim	5 minutes	$0.32	$1.60

Benefit Assumption 4: Based on the AHIP report[3] assumed the percentage of non auto-adjudicated claims is 29% of total claims.

Benefit Assumption 5: Non auto-adjudicated claims will be reduced by 1.45% (minimum) to 2.9% (maximum). Using the research and interviews, it was assumed that the non auto-adjudicated claims, currently 29% (**Benefit Assumption 4**), would be reduced through standardization.

Benefit Assumption 6: Reduced manual intervention will reduce the costs for providers by $2.88 per call and for plans by $2.40 per call. Manual intervention is required to resolve the non auto-adjudicated claims—Healthcare providers and Health Plans both incur these operational costs. On an average, the following was assumed as the time spent and cost per minute and per call by the by customer service representatives to resolve the Non Auto-Adjudicated claims:

Table 7. Time incurred to resolve Non Auto-Adjudicated Claims

	Time	Cost Per Minute	Cost Per Call
Time taken by a provider billing agent to process non Auto adjudicated claims	6 minutes	$0.48	$2.88
Time taken by a plan claims processor to process non Auto adjudicated claims	5 minutes	$0.48	$2.4

[2] AHIP Report: An Updated Survey of Health Care Claims Receipt and Processing Times, May 2006 is available at http://www.ahipresearch.org/pdfs/PromptPayFinalDraft.pdf

[3] AHIP Report: An Updated Survey of Health Care Claims Receipt and Processing Times, May 2006 is available at http://www.ahipresearch.org/pdfs/PromptPayFinalDraft.pdf

The Operational savings due to better standards are calculated based on the following formula:

Benefits *=Σ(Benefit Assumption 2 X Benefit Assumption 3 X Total claim transactions for each year) + Σ (Benefit Assumption 5 X Benefit Assumption 6 X Total claim transactions for each year)*

5.2.3 Cost savings due to an increase in EDI for claims transactions by more covered entities

The following assumptions are used in the calculations:

Benefit Assumption 7: Cost savings for Healthcare Provider segment is $0.55 and cost savings for Health Plan is $0.18. According to AHIP report[1] the cost savings from using an electronic transaction versus using paper transaction is $0.73. This estimate is used as the basis for cost savings due to increase in EDI for claims transactions and $0.55 cost savings is allocated for Healthcare Provider and $0.18 cost savings is allocated for Health Plan

Benefit Assumption 8: The uptake of the electronic claim transactions based on proposed rule is assumed between 2% (minimum) and 5% (maximum)

The cost savings due to an increase in EDI are calculated based on the following formula:

Benefits *= Σ(Benefit Assumption 7 X Benefit Assumption 8 X Total claim transactions for each year)*

5.2.4 Operational savings due to increased use of auxiliary transactions through EDI

The following assumptions are used in the calculations:

Benefit Assumption 9: The following uptake of auxiliary electronic claim transactions is assumed:

- 278 (Referral request & response) between 10% (minimum) and 20% (maximum)
- 276/277 (Claims status request & response) between 10% (minimum) and 20% (maximum)
- 270/271 (Eligibility request and response) between 10% (minimum) and 20% (maximum)

Benefit Assumption 10: Reduced manual intervention will reduce the costs for providers and plans by the amounts noted below for calls required to get additional information to support claim processing. On average, the following is the time spent by customer service representatives to get additional information:

Table 8. Healthcare Providers - Time incurred to get additional information to support Claims Processing

	Time	Cost Per Minute	Cost Per Call
Time taken by a provider's office staff member to find out Eligibility information	5 minutes	$0.32	$1.60
Time taken by a provider agent to find out the status of the claim	12 minutes	$0.32	$3.84
Time taken by a provider's office staff member to find out the status of a referral	10 minutes	$0.32	$3.20

Table 9. Health Plans - Time incurred to get additional information to support Claims Processing

	Time	Cost Per Minute	Cost Per Call
Time taken by a plan customer service representative to give eligibility information	5 minutes	$0.32	$1.60
Time taken by a plan customer service representative to give status of the claim	8 minutes	$0.32	$2.56
Time taken by a plan Utilization Review representative to give status of a referral	8 minutes	$0.32	$2.56

The operational savings due to increased use of auxiliary transactions through EDI are calculated based on the following formula

Benefits = Σ *(Benefit Assumption 9 X Benefit Assumption 10 X Total claim transactions for each year)*

6.0 Impact Analysis by Segment

6.1 How to use this section

The costs and benefits for each industry sector are provided here, and are identical to the cost benefit analysis found in the regulation. Each category lists the assumptions and provides the actual figures found in the tables in the proposed rule. The calculation is then provided, showing how the assumptions were used. Attachment 1 lists all of the assumptions and references the relevant tables which contain the data. It may be used as a side companion to this section.

6.2 Hospitals

6.2.1 Cost Calculations Overview

Cost Assumption 1: The following is the Hospital breakdown used in the calculations.

Table 10. Hospitals Size Breakdown

Hospital Size	Total
400+ Bed	521
100-400 Bed	2,486
Fewer than 100 Bed	2,757
Total	**5,764**
Source: AHA Hospital Statistics, 2007 edition	

Cost Assumption 2: Average costs incurred by Hospitals in implementing Version 4010/4010A. The estimate is based on data gathered from primary research and secondary research.

Table 11. Hospital Providers – 4010/4010A implementation costs

Hospital Size	Costs (in Millions)
400+ Bed	$1.900
100-400 Bed	$0.950
Fewer than 100 Bed	$0.475

Cost Assumption 3: The costs incurred for system implementations for Version 5010 is 20% to 40% of the total costs of implementing Version 4010/4010A.

The costs incurred by this Healthcare segment can be computed using the formula: *Cost Assumption 1 X Cost Assumption 2 X Cost Assumption 3.*

For example, in the case of the sub-segment of 400+ bed hospitals the calculation was derived by multiplying 521 X 1.9 X .20 to calculate the low end of the cost range for this segment as $198 million. The high end of the cost range would be calculated the same way with the exception that Cost Assumption 3 would use the 40%, or .4, as the multiplier resulting in a total of $396 million in estimated costs.

6.2.2 Benefit Calculations Overview

6.2.2.1 Operational savings due to better standards for claims transactions

Benefit Assumption 11: The following table outlines the total transactions by year. This information can be found in Table 2 on page 49762 in the proposed rule.

Table 12. Projected [4]Hospital Claims

(in Millions)	2012	2013	2014	2015	2016	2017	2018	2019
Minimum	861	896	932	969	1,008	1,048	1,090	1,134
Maximum	1,121	1,165	1,212	1,260	1,311	1,363	1,418	1,475

Source: Claims Attachments Regulation: Federal Register 45 CFR Part 162, Published: September 23, 2005. The claims are extrapolated to increase by 4% per year

Note: *The benefits are not realized until post implementation and hence benefits for years 2010 and 2011 are not calculated*

Benefits = Σ *(Benefit Assumption 2 X Benefit Assumption 3 X Benefit Assumption 11) +* Σ *(Benefit Assumption 5 X Benefit Assumption 6 X Benefit Assumption 11).*

Please note, to use these formulas, several iterations of the calculations will have to be made in order to calculate the year by year cost or benefit, and then to sum those figures together for a total ten year cost benefit picture.

[4] Hospitals claims estimates included full breadth of institutional providers including entities beyond the traditional hospitals such as Long Term Care facilities.

6.2.2.2 Cost savings due to an increase in EDI for claims transactions by more covered entities

Benefits *= Σ (Benefit Assumption 7 X Benefit Assumption 8 X Benefit Assumption 11)*

For the purpose of providing an example of the benefits calculation, this could be calculated by multiplying $0.55 (Assumed cost reduction for use of EDI for claims transactions) X 2% (minimum uptake in % of electronic claims) X 861 million (estimated minimum number of claims for segment in 2012). This same logic could be carried through for each subsequent year based on the estimated claims for those years. Also, the maximum could be calculated both by using the high end of the uptake % as well as the maximum number of claims by year.

6.2.2.3 Operational savings due to increased use of auxiliary transactions through EDI

Benefits *= Σ (Benefit Assumption 9 X Benefit Assumption 10 X Benefit Assumption 11)*

6.2.3 Summary

The following table outlines the summary of costs and benefits for the hospital segment

Table 13. Hospital Cost Benefit Analysis Summary

	Minimum (Millions $)	Maximum (Millions $)
Costs		
Total Costs	***$932***	***$1,864***
Benefits		
Operational savings due to better standards for claims transactions	$403	$1,096
Cost savings due to an increase in EDI for claims transactions by more covered entities	$66	$219
Operational savings due to increased use of auxiliary transactions through EDI	$1,314	$3,414
Total Benefits	***$1,783***	***$4,729***
Net Benefits	**$851**	**$2,865**

6.3 Physicians and Other Providers

6.3.1 Cost Calculations Overview

Cost Assumption 1: The following is the Physicians and Other Provider breakdown used in the calculations

Table 14. Physicians and Other Providers Breakdown

Physician and Other Provider Practice Size	Total
100 + Physicians	393

Physician and Other Provider Practice Size	Total
50 - 100 Physicians	590
3 - 49 Physicians	38,961
1 - 2 Physicians	194,278
Total	**234,222**
Source: MGMA	

Cost Assumption 2: Average costs incurred by Physicians and Other Providers in implementing Version 4010/4010A. The estimate is based on data gathered from primary research and secondary research.

Table 15. Physicians and Other Providers – 4010/4010A implementation costs

Physician and Other Provider Practice Size	Costs (in Millions)
100 + Physicians	$0.900
50 - 100 Physicians	$0.450
3 - 49 Physicians	$0.015
1 - 2 Physicians	$0.005

Cost Assumption 3: The costs incurred for system implementations for Version 5010 is 20% to 40% of the total costs of implementing Version 4010/4010A

The costs incurred by this Healthcare segment can be computed using the formula: *Cost Assumption 1 X Cost Assumption 2 X Cost Assumption 3*

6.3.2 Benefit Calculations Overview

6.3.2.1 Operational savings due to better standards for claims transactions

Benefit Assumption 12: The following table outlines the total transactions by year for physicians

Table 16. Projected Physician Claims

(in Millions)	2012	2013	2014	2015	2016	2017	2018	2019
Minimum	3,446	3,583	3,727	3,876	4,031	4,192	4,360	4,534
Maximum	4,480	4,659	4,845	5,039	5,241	5,450	5,668	5,895

Source: Claims Attachments Regulation: Federal Register 45 CFR Part 162, Published: September 23, 2005. The claims are extrapolated to increase by 4% per year

Note: *The benefits are not realized until post implementation and hence benefits for years 2010 and 2011 are not calculated*

***Benefits** = Σ (Benefit Assumption 2 X Benefit Assumption 3 X Benefit Assumption 12) + Σ (Benefit Assumption 5 X Benefit Assumption 6 X Benefit Assumption 12)*

6.3.2.2 Cost savings due to an increase in EDI for claims transactions by more covered entities

***Benefits** = Σ (Benefit Assumption 7 X Benefit Assumption 8 X Benefit Assumption 12)*

6.3.2.3 Operational savings due to increased use of auxiliary transactions through EDI

***Benefits** = Σ (Benefit Assumption 9 X Benefit Assumption 10 X Benefit Assumption 12)*

6.3.3 Summary

The following table outlines the summary of costs and benefits for Physician and Other Providers segment

Table 17. Physician and Other Providers Cost Benefit Analysis Summary

	Minimum (Millions $)	Maximum (Millions $)
Costs		
Total Costs	***$435***	***$870***
Benefits		
Operational savings due to better standards for claims transactions	$1,612	$4,378
Cost savings due to an increase in EDI for claims transactions by more covered entities	$270	$874
Operational savings due to increased use of auxiliary transactions through EDI	$5,251	$13,562
Total Benefits	***$7,133***	***$18,814***
Net Benefits	**$6,698**	**$17,944**

6.4 Dentists

6.4.1 Cost Calculations Overview

Cost Assumption 1: The following is the Dentist breakdown used in the calculations

Table 18. Dentists Breakdown

Dentist Practice Size	Total
General DDS	138,420
Specialists DDS	36,588
Total	**175,008**
Source: ADA	

Cost Assumption 2: Average costs incurred by Dentists in implementing 4010/4010A standard. The estimate is based on data gathered from primary research and secondary research

Table 19. Dentists – 4010/4010A implementation costs

Dentist Practice Size	Costs (in Millions)
100 + Physicians	$0.010
50 - 100 Physicians	$0.003

Cost Assumption 3: The costs incurred for system implementations for Version 5010 is 20% to 40% of the total costs of implementing Version 4010/4010A

The costs incurred by this Healthcare segment can be computed using the formula: *Cost Assumption 1 X Cost Assumption 2 X Cost Assumption 3*

6.4.2 Benefit Calculations Overview

6.4.2.1 Operational savings due to better standards for claims transactions

Benefit Assumption 13: The following table outlines the total transactions by year for dentists

Table 20. Projected Dentists Claims

(in Millions)	2012	2013	2014	2015	2016	2017	2018	2019
Minimum	584	607	631	657	683	710	738	768
Maximum	713	742	772	802	834	868	903	939

Source: Claims Attachments Regulation: Federal Register 45 CFR Part 162, Published: September 23, 2005. The claims are extrapolated to increase by 4% per year

Note: *The benefits are not realized until post implementation and hence benefits for years 2010 and 2011 are not calculated*

Benefits = Σ *(Benefit Assumption 2 X Benefit Assumption 3 X Benefit Assumption 13) +* Σ *(Benefit Assumption 5 X Benefit Assumption 6 X Benefit Assumption 13)*

6.4.2.2 Cost savings due to an increase in EDI for claims transactions by more covered entities

Benefits = Σ *(Benefit Assumption 7 X Benefit Assumption 8 X Benefit Assumption 13)*

6.4.2.3 Operational savings due to increased use of auxiliary transactions through EDI

Benefits = Σ *(Benefit Assumption 9 X Benefit Assumption 10 X Benefit Assumption 13)*

6.4.3 Summary

The following table outlines the summary of costs and benefits for Dentist segment

Table 21. Dentists Cost Benefit Analysis Summary

	Minimum (Millions $)	Maximum (Millions $)
Costs		
Total Costs	***$299***	***$598***
Benefits		
Operational savings due to better standards for claims transactions	$274	$699
Cost savings due to an increase in EDI for claims transactions by more covered entities	$45	$56
Operational savings due to increased use of auxiliary transactions through EDI	$889	$2,173
Total Benefits	***$1,208***	***$2,928***
Net Benefits	**$909**	**$2,330**

6.5 Pharmacy

6.5.1 Overview

As stated in the proposed rule on page 49770, Pharmacies are using two of the Version 4010/4010A standards, but largely use Version 5.1 for their EDI transactions. We are proposing to adopt Version D.0, which will directly affect the pharmacy sector. The impact analysis for pharmacies is included in the D.0 portion of the proposed rule so we did not provide analytical information in the Version 5010 section, and therefore do not provide any additional assumptions here.

6.6 Health Plans

6.6.1 Cost Calculations Overview

Cost Assumption 1: The following is the Health Plan breakdown used in the calculations.

Table 22. Health Plan Breakdown

Health Plan Category	Total
National and Super regional	12
Large	75
Mid-sized	325
Small	3,537
Total	**3,949**
Source: Estimated based on industry research and input	

Cost Assumption 2: Average costs incurred by Health Plans in implementing 4010/4010A standard. The estimate is based on data gathered from primary research and secondary research.

Table 23. Health Plans – 4010/4010A implementation costs

Health Plan Category	Costs (in Millions)
National and Super regional	$27.5
Large	$15.0
Mid-sized	$9.1
Small	$3.9

Cost Assumption 3: The costs incurred for system implementations for Version 5010 are 20% to 40% of the total costs of implementing Version 4010/4010A.

The costs incurred by this Health care segment can be computed using the formula: *Cost Assumption 1 X Cost Assumption 2 X Cost Assumption 3.*

6.6.2 Benefit Calculations Overview

6.6.2.1 Operational savings due to better standards for claims transactions

Benefit Assumption 14: The following table outlines the total transactions by year.

Table 24. Projected Claims (Hospitals, Physicians, and Dentists)

(in Millions)	2012	2013	2014	2015	2016	2017	2018	2019
Minimum	4,307	4,479	4,658	4,845	5,039	5,240	5,450	5,668
Maximum	5,600	5,824	6,057	6,300	6,552	6,814	7,086	7,370

Source: Claims Attachments Regulation: Federal Register 45 CFR Part 162, Published: September 23, 2005. The claims are extrapolated to increase by 4% per year

Note: *The benefits are not realized until post implementation and hence benefits for years 2010 and 2011 are not calculated*

Benefit Assumption 15: These claims are served by both Private and Government Health Plans. The following table outlines the benefit allocations for Private and Government Health Plans.

Table 25. Health Plan Benefit Allocation

Health Plan Category	Benefit Allocation
Private Health Plans	82%
Government Health Plans	18%
Source: Harvard - JFK School of Public Policy - "Health care delivery covered lives - Summary of Findings"	

Total Payer Benefits *= Σ(Benefit Assumption 2 X Benefit Assumption 3 X Benefit Assumption 14 X Benefit Assumption 15) + Σ(Benefit Assumption 5 X Benefit Assumption 6 X Benefit Assumption 14 X Benefit Assumption 15)*

6.6.2.2 Cost savings due to an increase in EDI for claims transactions by more covered entities

Benefits *= Σ (Benefit Assumption 7 X Benefit Assumption 8 X Benefit Assumption 14 X Benefit Assumption 15)*

6.6.2.3 Operational savings due to increased use of auxiliary transactions through EDI

Benefits *= Σ (Benefit Assumption 9 X Benefit Assumption 10 X Benefit Assumption 14 X Benefit Assumption 15)*

6.6.3 Summary

The following table outlines the summary of costs and benefits for Health Plans segment

Table 26. Health Plans Cost Benefit Analysis Summary (private plans)

	Minimum (Millions $)	Maximum (Millions $)
Costs		
Total Costs	***$3,604***	***$7,209***
Benefits		
Operational savings due to better standards for claims transactions	$1,283	$3,430
Cost savings due to an increase in EDI for claims transactions by more covered entities	$111	$276
Operational savings due to increased use of auxiliary transactions through EDI	$4,386	$11,406
Total Benefits	***$5,780***	***$15,112***
Net Benefits	**$2,175**	**$7,903**

6.7 Government Plans and Programs

6.7.1 Cost Calculations Overview

The costs incurred by this Healthcare segment can be computed using the formula: *(Cost Assumption 1 X Cost Assumption 2 X Cost Assumption 3) + (Cost Assumption 4) + (Cost Assumption 5).*

6.7.1.1 Medicaid Cost Calculations Overview

Cost Assumption 1: The following is the breakdown for Medicaid agencies used in the calculations

Table 27. Medicaid Breakdown

Hospital Plan Category	Total
Medicaid	51

Hospital Plan Category	Total
Total	**51**
Source: CMS	

Cost Assumption 2: Average costs incurred by Medicaid plans in implementing the Version 4010/4010A. The estimate is based on data gathered from primary research.

Table 28. Medicaid – 4010/4010A implementation costs

Health Plan Category	Costs (in Millions)
Medicaid	$18.8

Cost Assumption 3: The costs incurred for Medicaid system implementations for Version 5010 is 20% to 40% of the total costs of implementing Version 4010/4010A

6.7.1.2 Medicare Cost Calculations Overview

Cost Assumption 4: The following table outlines average costs incurred by Medicare to implement 5010 proposed rule. The estimate is based on data gathered from primary research.

Table 29. Medicare – 5010 implementation costs

Health Plan Category	Minimum Costs (in Millions)	Maximum Costs (in Millions)
Medicare	$10	$25

6.7.1.3 Other Government Programs Calculations Overview

Cost Assumption 5: The following table outlines average costs incurred by Other Government Programs (DoD, VA etc.) to implement the 5010 proposed rule. The estimate is based on data gathered from primary research and secondary research.

Table 30. Other Government Programs – 5010 implementation costs

	Minimum Costs (in Millions)	Maximum Costs (in Millions)
Other Government Programs	$49.5	$99

6.7.2 Benefit Calculations Overview

6.7.2.1 Operational savings due to better standards for claims transactions

Total Government Payer Benefits *= Σ(Benefit Assumption 2 X Benefit Assumption 3 X Benefit Assumption 14 X Benefit Assumption 15) + Σ(Benefit Assumption 5 X Benefit Assumption 6 X Benefit Assumption 14 X Benefit Assumption 15)*

6.7.2.2 Cost savings due to an increase in EDI for claims transactions by more covered entities

***Benefits** = Σ (Benefit Assumption 7 X Benefit Assumption 8 X Benefit Assumption 14 X Benefit Assumption 15)*

6.7.2.3 Operational savings due to increased use of auxiliary transactions through EDI

***Benefits** = Σ (Benefit Assumption 9 X Benefit Assumption 10 X Benefit Assumption 14 X Benefit Assumption 15)*

6.7.3 Summary

The following table outlines the summary of costs and benefits for the Health Plans segment.

Table 31. Government health plans Cost Benefit Analysis Summary

	Minimum (Millions $)	Maximum (Millions $)
Costs		
Total Costs	***$252***	***$481***
Benefits		
Operational savings due to better standards for claims transactions	$279	$746
Cost savings due to an increase in EDI for claims transactions by more covered entities	$24	$60
Operational savings due to increased use of auxiliary transactions through EDI	$953	$2,480
Total Benefits	***$1,256***	***$3,286***
Net Benefits	**$1,004**	**$2,805**

6.8 Clearinghouses

6.8.1 Cost Calculations Overview

Cost Assumption 6: The following table outlines total costs incurred by clearinghouses for implementing 4010/4010A standard

Table 32. Clearinghouses 4010/4010A costs

	Total (in Millions)
Costs	137
Source: Estimated based on industry research and input	

Cost Assumption 3: The costs incurred for system implementations for Version 5010 is 20% to 40% of the total costs of implementing Version 4010/4010A

The costs incurred by this Healthcare segment can be computed using the formula: *Cost Assumption 6 X Cost Assumption 3*

6.8.2 Benefit Calculations Overview

The clearinghouse segment does not expect to receive any benefits from the transition to Version 5010 and subsequently none was accounted for in the cost-benefit model.

6.8.3 Summary

The following table outlines the summary of costs and benefits for Health Plans segment

Table 33. Clearinghouses and Vendors Cost Analysis Summary

	Minimum Costs (in Millions)	Maximum Costs (in Millions)
Clearinghouses	$37	$45

6.9 Vendors

Per the explanation set forth in the proposed rule Vendors have not provided data on the financial or business impact of 5010, and this regulation does not include the costs and benefits for the vendor industry.

7.0 Cost/Benefit Summary

In summary, the overall cost-benefits explained in this document are all included in Table 27a and Table 27b on pages 49784 - 49789 of the proposed rule in the Federal Register. The following tables have been provided to specifically isolate the minimum and maximum costs, benefits, and net impact for the Version 5010 contribution of the overall rule. As a reminder, this supplement does not include any data for Version D.0 or Version 3.0, because such data was not available through the industry.

Table 34. Version 5010 Costs Schedule by sub segment (minimum) in Millions

Industry	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
5010 - Implementation costs											
Hospitals	$396	$396	$0	$0	$0	$0	$0	$0	$0	$0	$792
Physicians	$185	$185	$0	$0	$0	$0	$0	$0	$0	$0	$370
Dentists	$127	$127	$0	$0	$0	$0	$0	$0	$0	$0	$254
Health Plans	$1,532	$1,532	$0	$0	$0	$0	$0	$0	$0	$0	$3,064
Government Health Plans	$105	$105	$0	$0	$0	$0	$0	$0	$0	$0	$210
Clearinghouses	$17	$16	$0	$0	$0	$0	$0	$0	$0	$0	$33
Total Implementation Costs	$2,362	$2,361	$0	$0	$0	$0	$0	$0	$0	$0	$4,723
5010 Transition costs											
Hospitals	$0	$0	$140	$0	$0	$0	$0	$0	$0	$0	$140
Physicians	$0	$0	$65	$0	$0	$0	$0	$0	$0	$0	$65
Dentists	$0	$0	$45	$0	$0	$0	$0	$0	$0	$0	$45
Health Plans	$0	$0	$541	$0	$0	$0	$0	$0	$0	$0	$541
Government Health Plans	$0	$0	$37	$0	$0	$0	$0	$0	$0	$0	$37
Clearinghouses	$0	$0	$3	$0	$0	$0	$0	$0	$0	$0	$3
Total Transition Costs	$0	$0	$831	$0	$0	$0	$0	$0	$0	$0	$831
Total Costs	$2,362	$2,361	$831	$0	$0	$0	$0	$0	$0	$0	$5,554

Table 35. 5010 Costs Schedule by sub segment (maximum) in Millions

Industry	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
5010 - Implementation costs											
Hospitals	$792	$792	$0	$0	$0	$0	$0	$0	$0	$0	$1,584
Physicians	$370	$370	$0	$0	$0	$0	$0	$0	$0	$0	$740
Dentists	$254	$254	$0	$0	$0	$0	$0	$0	$0	$0	$508
Health Plans	$3,064	$3,064	$0	$0	$0	$0	$0	$0	$0	$0	$6,128
Government Health Plans	$201	$201	$0	$0	$0	$0	$0	$0	$0	$0	$402
Clearinghouses	$21	$20	$0	$0	$0	$0	$0	$0	$0	$0	$41
Total Implementation Costs	$4,702	$4,701	$0	$0	$0	$0	$0	$0	$0	$0	$9,403
5010 Transition costs											
Hospitals	$0	$0	$280	$0	$0	$0	$0	$0	$0	$0	$280
Physicians	$0	$0	$131	$0	$0	$0	$0	$0	$0	$0	$131
Dentists	$0	$0	$90	$0	$0	$0	$0	$0	$0	$0	$90
Health Plans	$0	$0	$1,081	$0	$0	$0	$0	$0	$0	$0	$1,081
Government Health Plans	$0	$0	$71	$0	$0	$0	$0	$0	$0	$0	$71
Clearinghouses	$0	$0	$4	$0	$0	$0	$0	$0	$0	$0	$4
Total Transition Costs	$0	$0	$1,657	$0	$0	$0	$0	$0	$0	$0	$1,657
Total Costs	$4,702	$4,701	$1,657	$0	$0	$0	$0	$0	$0	$0	$11,060

Table 36. 5010 Benefits Schedule by sub segment (minimum) in Millions

Industry	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
5010 Operational Savings – Better Standards											
Hospitals	$0	$0	$44	$46	$47	$49	$51	$53	$55	$58	$403
Physicians	$0	$0	$175	$182	$189	$197	$205	$213	$221	$230	$1,612
Dentists	$0	$0	$30	$31	$32	$33	$35	$36	$38	$39	$274
Health Plans and Government Health Plans	$0	$0	$169	$176	$183	$191	$198	$206	$214	$223	$1,560.0
Clearinghouses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	$0	$0	$418	$435	$451	$470	$489	$508	$528	$550	$3,849
5010 Cost Savings – Increase in Transactions											
Hospitals	$0	$0	$2	$4	$6	$8	$11	$11	$12	$12	$66
Physicians	$0	$0	$8	$16	$24	$34	$44	$46	$48	$50	$270
Dentists	$0	$0	$1	$3	$4	$6	$7	$8	$8	$8	$45
Health Plans and Government Health Plans	$0	$0	$9	$13	$17	$18	$18	$19	$20	$21	$135
Clearinghouses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	$0	$0	$20	$36	$51	$66	$80	$84	$88	$91	$516
5010 Operational Savings – increase in auxiliary claim transactions											
Hospitals	$0	$0	$35	$74	$117	$165	$217	$226	$235	$245	$1,314
Physicians	$0	$0	$139	$294	$467	$658	$870	$904	$941	$978	$5,251
Dentists	$0	$0	$24	$50	$79	$111	$147	$153	$159	$166	$889
Health Plans and Government Health Plans	$0	$0	$141	$299	$474	$669	$885	$920	$957	$995	$5,340
Clearinghouses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Industry	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Total	$0	$0	$339	$717	$1,137	$1,603	$2,119	$2,203	$2,292	$2,384	$12,794
Total Benefits	$0	$0	$777	$1,188	$1,639	$2,139	$2,688	$2,795	$2,908	$3,025	$17,159

Table 37. 5010 Benefits Schedule by sub segment (maximum) in Millions

Industry	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
5010 Operational Savings – Better Standards											
Hospitals	$0	$0	$119	$124	$129	$134	$139	$145	$150	$156	$1,096
Physicians	$0	$0	$475	$494	$514	$535	$556	$578	$601	$625	$4,378
Dentists	$0	$0	$76	$79	$82	$85	$89	$92	$96	$100	$699
Health Plans and Government Health Plans	$0	$0	$453	$471	$490	$510	$530	$551	$573	$596	$4,174
Clearinghouses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	$0	$0	$1,123	$1,168	$1,215	$1,264	$1,314	$1,366	$1,420	$1,477	$10,347
5010 Cost Savings – Increase in Transactions											
Hospitals	$0	$0	$6	$13	$20	$28	$36	$37	$39	$40	$219
Physicians	$0	$0	$25	$51	$80	$110	$143	$149	$155	$161	$874
Dentists	$0	$0	$2	$3	$5	$7	$9	$10	$10	$10	$56
Health Plans and Government Health Plans	$0	$0	$24	$33	$43	$44	$46	$48	$50	$52	$340
Clearinghouses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	$0	$0	$57	$100	$148	$189	$234	$244	$254	$263	$1,489
5010 Operational Savings – increase in auxiliary claim transactions											
Hospitals	$0	$0	$90	$191	$303	$428	$566	$588	$612	$636	$3,414
Physicians	$0	$0	$361	$765	$1,123.0	$1,711.0	$2,261.0	$2,352.0	$2,446.0	$2,543.0	$13,562.0

Industry	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Dentists	$0	$0	$58	$122	$193	$272	$360	$374	$389	$405	$2,173
Health Plans and Government Health Plans	$0	$0	$367	$777	$1,233.0	$1,740.0	$2,300.0	$2,392.0	$2,488.0	$2,587.0	$13,884.0
Clearinghouses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	$0	$0	$876	$1,855	$2,852	$4,151	$5,487	$5,706	$5,935	$6,171	$33,033
Total Benefits	$0	$0	$2,056	$3,123	$4,215	$5,604	$7,035	$7,316	$7,609	$7,911	$44,869

Table 38. 5010 Net Impact (minimum) in Millions

Industry	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Costs											
System Implementation Costs	$2,362	$2,361	$0	$0	$0	$0	$0	$0	$0	$0	$4,723
Transition Costs	$0	$0	$831	$0	$0	$0	$0	$0	$0	$0	$831
Total Costs	$2,362	$2,361	$831	$0	$0	$0	$0	$0	$0	$0	$5,554
Benefits											
Operational Savings	$0	$0	$418	$435	$451	$470	$489	$508	$528	$550	$3,849
Cost Savings	$0	$0	$20	$36	$51	$66	$80	$84	$88	$91	$516
Operational Savings	$0	$0	$339	$717	$1,137	$1,603	$2,119	$2,203	$2,292	$2,384	$12,794
Total Benefits	$0	$0	$777	$1,188	$1,639	$2,139	$2,688	$2,795	$2,908	$3,025	$17,159
Net Impact	($2,362)	($2,361)	($54)	$1,188	$1,639	$2,139	$2,688	$2,795	$2,908	$3,025	$11,605

Table 39. 5010 Net Impact (maximum) in Millions

Industry	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Costs											
System Implementation Costs	$4,702	$4,701	$0	$0	$0	$0	$0	$0	$0	$0	$9,403
Transition Costs	$0	$0	$1,657	$0	$0	$0	$0	$0	$0	$0	$1,657
Total Costs	$4,702	$4,701	$1,657	$0	$0	$0	$0	$0	$0	$0	$11,060
Benefits											
Operational Savings	$0	$0	$1,123	$1,168	$1,215	$1,264	$1,314	$1,366	$1,420	$1,477	$10,347
Cost Savings	$0	$0	$57	$100	$148	$189	$234	$244	$254	$263	$1,489
Operational Savings	$0	$0	$876	$1,855	$2,852	$4,151	$5,487	$5,706	$5,935	$6,171	$33,033
Total Benefits	$0	$0	$2,056	$3,123	$4,215	$5,604	$7,035	$7,316	$7,609	$7,911	$44,869
Net Impact	($4,702)	($4,701)	$399	$3,123	$4,215	$5,604	$7,035	$7,316	$7,609	$7,911	$33,809

Attachment 1 – Listing of Assumptions

Cost Assumptions

Cost Assumption 1: For each Healthcare segment, there was a determination of how many entities would be impacted. For example, The Healthcare providers segment is broken down into three sub-segments: 400+ bed, 100-400 beds and < 100 beds. The costs were different for each segment and sub-segment. Costs varied by each sub-segment based on a variety of different factors such as current configuration of systems, complexity of testing with trading partners, and transaction volumes.

Cost Assumption 2: Developed an estimate of Version 4010/4010A implementation costs incurred by each Healthcare entity in the sub-segment. The estimate is based on data gathered from primary research and secondary research.

Cost Assumption 3: The Version 5010 implementation costs were estimated to be 20% to 40% of Version 4010/4010A implementation costs. This range was established by the interviewees for each respective sub-segment.

Cost Assumption 4: Table 29 outlines average costs incurred by Medicare to implement the 5010 proposed rule. The estimate is based on data gathered from primary research.

Cost Assumption 5: Table 30 outlines average costs incurred by Other Government Programs (DoD, VA etc.) to implement the 5010 proposed rule. The estimate is based on data gathered from primary research and secondary research.

Cost Assumption 6: Table 32 outlines total costs incurred by clearinghouses for implementing Version 4010/4010A.

Benefit Assumptions

Benefit Assumption 1: Based on the data provided in a recent AHIP report[5] the percentage of pended claims was assumed to be 14% of total claims.

Benefit Assumption 2: Pended claims will be reduced by 0.28% (minimum) to 0.7% (maximum). Using the research and interviews, it was assumed that the pended claim percentage, currently 14% (**Benefit Assumption 1**), would be reduced through standardization.

Benefit Assumption 3: As illustrated in Table 6, it is assumed that the cost for manual intervention will be reduced for providers and for plans by the designated amounts per call. Manual intervention is required to resolve pended claims and both Healthcare providers and Health Plans incur these operational costs.

Benefit Assumption 4: Based on the AHIP report assumed the percentage of non auto-adjudicated claims is 29% of total claims.

[5] AHIP Report: An Updated Survey of Health Care Claims Receipt and Processing Times, May 2006 is available at http://www.ahipresearch.org/pdfs/PromptPayFinalDraft.pdf

Benefit Assumption 5: Non auto-adjudicated claims will be reduced by 1.45% (minimum) to 2.9% (maximum). Using the research and interviews, it was assumed that the non auto-adjudicated claims, currently 29% (**Benefit Assumption 4**), would be reduced through standardization.

Benefit Assumption 6: As illustrated in Table 7, it is assumed that the cost for manual intervention will be reduced for providers and for plans by the designated amounts per call. Manual intervention is required to resolve the non auto-adjudicated claims—Healthcare providers and Health Plans both incur these operational costs.

Benefit Assumption 7: Cost savings for Healthcare Provider segment is $0.55 and cost savings for Health Plan is $0.18. According to AHIP report[1] the cost savings from using an electronic transaction versus using paper transaction is $0.73. This estimate is used as the basis for cost savings due to increase in EDI for claims transactions and $0.55 cost savings is allocated for Healthcare Provider and $0.18 cost savings is allocated for Health Plan

Benefit Assumption 8: The uptake of the electronic claim transactions based on proposed rule is assumed between 2% (minimum) and 5% (maximum).

Benefit Assumption 9: The following uptake of auxiliary electronic claim transactions is assumed:

- 278 (Referral request & response) between 10% (minimum) and 20% (maximum)
- 276/277 (Claims status request & response) between 10% (minimum) and 20% (maximum)
- 270/271 (Eligibility request and response) between 10% (minimum) and 20% (maximum)

Benefit Assumption 10: As illustrated in Tables 8 and 9, it is assumed that the cost for manual intervention related to supporting claim processing will be reduced for providers and for plans by the designated amounts per call

Benefit Assumption 11: Table 12 outlines the total estimated claims by year for Hospitals.

Benefit Assumption 12: Table 16 outlines the total estimated claims by year for Physicians.

Benefit Assumption 13: Table 20 outlines the total estimated claims by year for Dentists.

Benefit Assumption 14: Table 24 outlines the total estimated claims by year for Institutions, Physicians, & Dentists.

Benefit Assumption 15: Table 25 outlines the benefit allocation for Private and Government Health Plans based on the % claims handled by each sub-segment.