

**Cost Development****Accidental puncture or laceration during a procedure, NEC**

Frequency with which injury is associated with error: &gt;90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	273
18-44	M	0.002%	57,523,012	1,352
45-64	M	0.009%	38,103,272	3,429
65-74	M	0.019%	9,264,928	1,796
Over 75	M	0.021%	7,199,875	1,535
0-17	F	0.001%	36,108,331	362
18-44	F	0.009%	55,666,902	4,751
45-64	F	0.017%	39,954,974	6,728
65-74	F	0.026%	10,858,013	2,815
Over 75	F	0.024%	11,546,900	2,738
<b>Total</b>		<b>0.008%</b>	<b>304,059,724</b>	<b>25,781</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.021%	37,833,517	7,921
18-44	M	0.008%	57,523,012	4,528
45-64	M	0.010%	38,103,272	3,757
65-74	M	0.011%	9,264,928	1,064
Over 75	M	0.027%	7,199,875	1,965
0-17	F	0.011%	36,108,331	4,038
18-44	F	0.010%	55,666,902	5,448
45-64	F	0.010%	39,954,974	4,051
65-74	F	0.015%	10,858,013	1,661
Over 75	F	0.027%	11,546,900	3,163
<b>Total</b>		<b>0.012%</b>	<b>304,059,724</b>	<b>37,597</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	63,378	\$ 6,360	\$ 403
Mortality cost	63,378	\$ -	\$ -
Disability cost	63,378	\$ 367	\$ 23
<b>Total</b>	<b>63,378</b>	<b>\$ 6,728</b>	<b>\$ 426</b>

**Measurable Medical Costs**

**Accidental puncture or laceration during a procedure, NEC**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	11,189	41,851	\$ 44,146	\$ 30,670	\$ 13,475	0.000	\$ 13,475
Next 9 months	9,940	36,196	\$ 16,574	\$ 14,757	\$ 1,817	0.000	\$ 1,817
Year 2	6,972	24,312	\$ 16,913	\$ 17,224	\$ (310)	0.713	\$ -
Year 3	4,487	16,197	\$ 15,505	\$ 15,730	\$ (225)	0.644	\$ -
Year 4	3,094	11,020	\$ 15,140	\$ 15,054	\$ 86	0.460	\$ -
Year 5	1,942	7,173	\$ 13,549	\$ 14,263	\$ (714)	0.831	\$ -
<b>All Periods (present value)</b>							\$ 15,209

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	19,806	78,800	\$ 5,579	\$ 5,285	\$ 294	0.021	\$ 294
Next 9 months	17,921	70,760	\$ 6,431	\$ 6,699	\$ (267)	0.941	\$ -
<b>All Periods</b>							\$ 293

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	25,781	\$ 15,209	\$ 392
<b>Outpatient</b>	37,597	\$ 293	\$ 11
<b>Total</b>	<b>63,378</b>	<b>\$ 6,360</b>	<b>\$ 403</b>

**In Hospital Mortality Costs**

**Accidental puncture or laceration during a procedure, NEC**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	11,189	41,851	153	540	0.075%	0.5370
Next 9 months	9,940	36,196	78	260	0.066%	0.4939

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	19,806	78,800	97	389	-0.006%	0.9170
Next 9 months	17,921	70,760	11	71	-0.040%	0.1206

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	1.00	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	25,781	0	\$ -	\$ -	\$ -
Outpatient	37,597	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>63,378</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

**Accidental puncture or laceration during a procedure, NEC**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	404	1,479	60	51	8.31	0.0141
Outpatient	618	2,402	12	11	1.14	0.2532

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 2	\$ -	\$ 2
Male, 45-64	\$ 183.86	\$ 5	\$ -	\$ 5
Male, 65-74	\$ 74.13	\$ 1	\$ -	\$ 1
Male, Over 75	\$ 44.91	\$ 1	\$ -	\$ 1
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 5	\$ -	\$ 5
Female, 45-64	\$ 114.58	\$ 6	\$ -	\$ 6
Female, 65-74	\$ 64.53	\$ 2	\$ -	\$ 2
Female, Over 75	\$ 44.33	\$ 1	\$ -	\$ 1
<b>Total</b>		<b>\$ 23</b>	<b>\$ -</b>	<b>\$ 23</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	25,781	\$ 903	\$ 23
<b>Outpatient</b>	37,597	\$ -	\$ -
<b>Total</b>	<b>63,378</b>	<b>\$ 367</b>	<b>\$ 23</b>

**Cost Development**

**Air Embolism (Medicare Never Event)**

Frequency with which injury is associated with error: >90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	-
18-44	M	0.000%	57,523,012	20
45-64	M	0.000%	38,103,272	45
65-74	M	0.000%	9,264,928	-
Over 75	M	0.000%	7,199,875	-
0-17	F	0.000%	36,108,331	18
18-44	F	0.000%	55,666,902	18
45-64	F	0.000%	39,954,974	14
65-74	F	0.000%	10,858,013	-
Over 75	F	0.000%	11,546,900	-
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>115</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	18
18-44	M	0.000%	57,523,012	-
45-64	M	0.000%	38,103,272	15
65-74	M	0.000%	9,264,928	-
Over 75	M	0.000%	7,199,875	-
0-17	F	0.000%	36,108,331	18
18-44	F	0.000%	55,666,902	54
45-64	F	0.000%	39,954,974	28
65-74	F	0.000%	10,858,013	-
Over 75	F	0.001%	11,546,900	71
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>203</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	318	\$ 26,100	\$ 8
Mortality cost	318	\$ 12,358	\$ 4
Disability cost	318	\$ -	\$ -
<b>Total</b>	<b>318</b>	<b>\$ 38,458</b>	<b>\$ 12</b>

**Measurable Medical Costs**  
**Air Embolism (Medicare Never Event)**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	43	162	\$ 102,672	\$ 51,586	\$ 51,086	0.034	\$ 51,086
Next 9 months	38	139	\$ 42,587	\$ 20,865	\$ 21,722	0.028	\$ 21,722
Year 2	23	80	\$ 26,817	\$ 19,940	\$ 6,877	0.304	\$ -
Year 3	14	58	\$ 12,165	\$ 20,998	\$ (8,833)	0.951	\$ -
Year 4	12	40	\$ 68,240	\$ 16,336	\$ 51,905	0.158	\$ -
Year 5	5	21	\$ 14,553	\$ 10,595	\$ 3,959	0.345	\$ -
<b>All Periods (present value)</b>							<b>\$ 72,222</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	102	394	\$ 10,050	\$ 6,546	\$ 3,503	0.107	\$ -
Next 9 months	86	353	\$ 5,883	\$ 9,415	\$ (3,532)	0.967	\$ -
<b>All Periods</b>							<b>\$ -</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	115	\$ 72,222	\$ 8
<b>Outpatient</b>	203	\$ -	\$ -
<b>Total</b>	<b>318</b>	<b>\$ 26,100</b>	<b>\$ 8</b>

**In Hospital Mortality Costs**  
**Air Embolism (Medicare Never Event)**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	43	162	2	5	1.337%	0.6430
Next 9 months	38	139	2	5	1.335%	0.6437

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.97	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	102	394	3	1	2.555%	0.0295
Next 9 months	86	353	0	0	0.000%	N/A

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	2.555%	5	\$ 757,464	\$ 3,934,693
Next 9 months	1.00	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	9%
Male, 18-44	N/A	0%
Male, 45-64	N/A	7%
Male, 65-74	N/A	0%
Male, Over 75	N/A	0%
Female, 0-17	N/A	9%
Female, 18-44	N/A	26%
Female, 45-64	N/A	14%
Female, 65-74	N/A	0%
Female, Over 75	N/A	35%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	115	0	\$ -	\$ -	\$ -
Outpatient	203	5	\$ 757,464	\$ 19,351	\$ 4
<b>Total</b>	<b>318</b>	<b>5</b>	<b>\$ 757,464</b>	<b>\$ 12,358</b>	<b>\$ 4</b>

**Short-Term Disability Costs**

**Air Embolism (Medicare Never Event)**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	1	4	98	52	46.26	NA
Outpatient	3	12	9	6	2.45	0.4149

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	115	\$ -	\$ -
<b>Outpatient</b>	203	\$ -	\$ -
<b>Total</b>	318	\$ -	\$ -



**Cost Development**

**Amputation stump complication**

Frequency with which injury is associated with error: <10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	4
18-44	M	0.000%	57,523,012	11
45-64	M	0.000%	38,103,272	38
65-74	M	0.000%	9,264,928	26
Over 75	M	0.000%	7,199,875	22
0-17	F	0.000%	36,108,331	-
18-44	F	0.000%	55,666,902	1
45-64	F	0.000%	39,954,974	21
65-74	F	0.000%	10,858,013	16
Over 75	F	0.000%	11,546,900	17
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>156</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	9
18-44	M	0.000%	57,523,012	39
45-64	M	0.000%	38,103,272	137
65-74	M	0.001%	9,264,928	67
Over 75	M	0.001%	7,199,875	50
0-17	F	0.000%	36,108,331	4
18-44	F	0.000%	55,666,902	14
45-64	F	0.000%	39,954,974	37
65-74	F	0.000%	10,858,013	22
Over 75	F	0.000%	11,546,900	30
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>407</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	563	\$ 27,042	\$ 15
Mortality cost	563	\$ -	\$ -
Disability cost	563	\$ 3,419	\$ 2
<b>Total</b>	<b>563</b>	<b>\$ 30,460</b>	<b>\$ 17</b>

**Measurable Medical Costs**  
**Amputation stump complication**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,117	3,672	\$ 70,535	\$ 45,707	\$ 24,828	0.000	\$ 24,828
Next 9 months	963	3,140	\$ 50,024	\$ 38,207	\$ 11,816	0.000	\$ 11,816
Year 2	601	2,004	\$ 47,926	\$ 40,734	\$ 7,193	0.042	\$ 7,193
Year 3	350	1,295	\$ 39,427	\$ 30,328	\$ 9,099	0.018	\$ 9,099
Year 4	200	819	\$ 37,950	\$ 28,959	\$ 8,991	0.049	\$ 8,991
Year 5	121	503	\$ 29,276	\$ 34,074	\$ (4,798)	0.833	\$ -
<b>All Periods (present value)</b>							\$ 59,775

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	2,844	11,114	\$ 16,220	\$ 12,813	\$ 3,407	0.000	\$ 3,407
Next 9 months	2,580	9,818	\$ 31,784	\$ 20,443	\$ 11,341	0.000	\$ 11,341
<b>All Periods</b>							\$ 14,527

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	156	\$ 59,775	\$ 9
<b>Outpatient</b>	407	\$ 14,527	\$ 6
<b>Total</b>	<b>563</b>	<b>\$ 27,042</b>	<b>\$ 15</b>

**In Hospital Mortality Costs**  
**Amputation stump complication**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,117	3,672	21	87	-0.490%	0.3337
Next 9 months	963	3,140	25	69	0.401%	0.4670

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	2,844	11,114	53	173	0.302%	0.2550
Next 9 months	2,580	9,818	13	45	0.045%	0.7717

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	156	0	\$ -	\$ -	\$ -
Outpatient	407	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>563</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**  
Amputation stump complication

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	11	33	152	74	77.88	0.0522
Outpatient	63	231	60	20	40.07	0.0005

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ 0	\$ 0
Male, 45-64	\$ 183.86	\$ -	\$ 1	\$ 1
Male, 65-74	\$ 74.13	\$ -	\$ 0	\$ 0
Male, Over 75	\$ 44.91	\$ -	\$ 0	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ 0	\$ 0
Female, 45-64	\$ 114.58	\$ -	\$ 0	\$ 0
Female, 65-74	\$ 64.53	\$ -	\$ 0	\$ 0
Female, Over 75	\$ 44.33	\$ -	\$ 0	\$ 0
<b>Total</b>		\$ -	\$ 2	\$ 2

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	156	\$ -	\$ -
Outpatient	407	\$ 4,726	\$ 2
<b>Total</b>	<b>563</b>	<b>\$ 3,419</b>	<b>\$ 2</b>

**Cost Development****Blood-Type Incompatibility (Medicare Never Event)**

Frequency with which injury is associated with error: &gt;90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	454
18-44	M	0.000%	57,523,012	-
45-64	M	0.000%	38,103,272	89
65-74	M	0.000%	9,264,928	44
Over 75	M	0.001%	7,199,875	102
0-17	F	0.001%	36,108,331	416
18-44	F	0.001%	55,666,902	661
45-64	F	0.000%	39,954,974	194
65-74	F	0.002%	10,858,013	185
Over 75	F	0.001%	11,546,900	142
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>2,288</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	218
18-44	M	0.001%	57,523,012	758
45-64	M	0.000%	38,103,272	149
65-74	M	0.001%	9,264,928	89
Over 75	M	0.005%	7,199,875	327
0-17	F	0.001%	36,108,331	199
18-44	F	0.003%	55,666,902	1,572
45-64	F	0.001%	39,954,974	236
65-74	F	0.002%	10,858,013	231
Over 75	F	0.002%	11,546,900	283
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>4,062</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	6,350	\$ 5,911	\$ 38
Mortality cost	6,350	\$ 5,827	\$ 37
Disability cost	6,350	\$ -	\$ -
<b>Total</b>	<b>6,350</b>	<b>\$ 11,738</b>	<b>\$ 75</b>

**Measurable Medical Costs**  
**Blood-Type Incompatibility (Medicare Never Event)**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,189	4,616	\$ 37,250	\$ 26,404	\$ 10,846	0.000	\$ 10,846
Next 9 months	997	3,824	\$ 19,101	\$ 13,399	\$ 5,702	0.024	\$ 5,702
Year 2	627	2,041	\$ 16,317	\$ 12,687	\$ 3,630	0.089	\$ -
Year 3	363	1,291	\$ 12,248	\$ 11,890	\$ 359	0.435	\$ -
Year 4	209	733	\$ 9,409	\$ 7,988	\$ 1,421	0.180	\$ -
Year 5	105	397	\$ 10,590	\$ 6,484	\$ 4,106	0.171	\$ -
<b>All Periods (present value)</b>							\$ 16,404

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,780	6,937	\$ 12,736	\$ 11,291	\$ 1,444	0.069	\$ -
Next 9 months	1,568	6,065	\$ 11,907	\$ 13,368	\$ (1,461)	0.920	\$ -
<b>All Periods</b>							\$ -

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	2,288	\$ 16,404	\$ 38
<b>Outpatient</b>	4,062	\$ -	\$ -
<b>Total</b>	<b>6,350</b>	<b>\$ 5,911</b>	<b>\$ 38</b>

**In Hospital Mortality Costs**

**Blood-Type Incompatibility (Medicare Never Event)**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,189	4,616	33	85	0.915%	0.0459
Next 9 months	997	3,824	13	42	0.197%	0.6028

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.915%	21	\$ 996,796	\$ 20,864,579
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,780	6,937	16	75	-0.191%	0.4793
Next 9 months	1,568	6,065	9	11	0.389%	0.0120

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.389%	16	\$ 1,033,357	\$ 16,142,295

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	20%	5%
Male, 18-44	0%	19%
Male, 45-64	4%	4%
Male, 65-74	2%	2%
Male, Over 75	4%	8%
Female, 0-17	18%	5%
Female, 18-44	29%	39%
Female, 45-64	8%	6%
Female, 65-74	8%	6%
Female, Over 75	6%	7%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	2,288	21	\$ 996,796	\$ 9,119	\$ 21
Outpatient	4,062	16	\$ 1,033,357	\$ 3,974	\$ 16
<b>Total</b>	<b>6,350</b>	<b>37</b>	<b>\$ 1,012,420</b>	<b>\$ 5,827</b>	<b>\$ 37</b>

**Short-Term Disability Costs**

**Blood-Type Incompatibility (Medicare Never Event)**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	37	147	67	53	13.83	0.0968
Outpatient	73	286	23	21	2.21	0.3990

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	2,288	\$ -	\$ -
<b>Outpatient</b>	4,062	\$ -	\$ -
<b>Total</b>	<b>6,350</b>	<b>\$ -</b>	<b>\$ -</b>



**Cost Development****Cataract fragments in eye following cataract surgery**

Frequency with which injury is associated with error: &gt;90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	-
18-44	M	0.000%	57,523,012	-
45-64	M	0.000%	38,103,272	-
65-74	M	0.000%	9,264,928	44
Over 75	M	0.000%	7,199,875	20
0-17	F	0.000%	36,108,331	-
18-44	F	0.000%	55,666,902	-
45-64	F	0.000%	39,954,974	-
65-74	F	0.000%	10,858,013	-
Over 75	F	0.000%	11,546,900	47
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>112</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	73
18-44	M	0.000%	57,523,012	123
45-64	M	0.003%	38,103,272	954
65-74	M	0.014%	9,264,928	1,331
Over 75	M	0.037%	7,199,875	2,640
0-17	F	0.000%	36,108,331	18
18-44	F	0.000%	55,666,902	125
45-64	F	0.002%	39,954,974	610
65-74	F	0.013%	10,858,013	1,431
Over 75	F	0.023%	11,546,900	2,644
<b>Total</b>		<b>0.003%</b>	<b>304,059,724</b>	<b>9,949</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	10,061	\$ 1,498	\$ 15
Mortality cost	10,061	\$ -	\$ -
Disability cost	10,061	#N/A	#N/A
<b>Total</b>	<b>10,061</b>	<b>#N/A</b>	<b>#N/A</b>

**Measurable Medical Costs**

**Cataract fragments in eye following cataract surgery**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	45	172	\$ 29,564	\$ 23,301	\$ 6,263	0.164	\$ -
Next 9 months	39	145	\$ 16,519	\$ 20,080	\$ (3,561)	0.720	\$ -
Year 2	29	96	\$ 15,553	\$ 23,621	\$ (8,068)	0.921	\$ -
Year 3	24	67	\$ 18,225	\$ 18,917	\$ (693)	0.537	\$ -
Year 4	15	43	\$ 14,340	\$ 25,293	\$ (10,953)	0.953	\$ -
Year 5	8	31	\$ 13,168	\$ 10,957	\$ 2,211	0.360	\$ -
<b>All Periods (present value)</b>							\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	3,219	12,609	\$ 10,174	\$ 8,653	\$ 1,520	0.000	\$ 1,520
Next 9 months	2,927	11,336	\$ 11,024	\$ 12,290	\$ (1,266)	0.974	\$ -
<b>All Periods</b>							\$ 1,515

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	112	\$ -	\$ -
<b>Outpatient</b>	9,949	\$ 1,515	\$ 15
<b>Total</b>	<b>10,061</b>	<b>\$ 1,498</b>	<b>\$ 15</b>

**In Hospital Mortality Costs**

**Cataract fragments in eye following cataract surgery**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	45	172	-	4	-2.493%	0.5827
Next 9 months	39	145	1	1	1.874%	0.3799

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	3,219	12,609	40	141	0.121%	0.5638
Next 9 months	2,927	11,336	4	17	-0.013%	1.0000

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	112	0	\$ -	\$ -	\$ -
Outpatient	9,949	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>10,061</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

**Cataract fragments in eye following cataract surgery**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Outpatient	30	117	31	21	10.24	0.2456

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	#N/A	\$ -	#N/A
Male, 18-44	\$ 172.81	#N/A	\$ -	#N/A
Male, 45-64	\$ 183.86	#N/A	\$ -	#N/A
Male, 65-74	\$ 74.13	#N/A	\$ -	#N/A
Male, Over 75	\$ 44.91	#N/A	\$ -	#N/A
Female, 0-17	\$ -	#N/A	\$ -	#N/A
Female, 18-44	\$ 139.06	#N/A	\$ -	#N/A
Female, 45-64	\$ 114.58	#N/A	\$ -	#N/A
Female, 65-74	\$ 64.53	#N/A	\$ -	#N/A
Female, Over 75	\$ 44.33	#N/A	\$ -	#N/A
<b>Total</b>		<b>#N/A</b>	<b>\$ -</b>	<b>#N/A</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	112	#N/A	#N/A
<b>Outpatient</b>	9,949	\$ -	\$ -
<b>Total</b>	<b>10,061</b>	<b>#N/A</b>	<b>#N/A</b>

**Cost Development****Catheter - associated urinary tract infection (Medicare Never Event)**

Frequency with which injury is associated with error: &gt;90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	36
18-44	M	0.000%	57,523,012	266
45-64	M	0.002%	38,103,272	924
65-74	M	0.011%	9,264,928	976
Over 75	M	0.045%	7,199,875	3,254
0-17	F	0.000%	36,108,331	-
18-44	F	0.000%	55,666,902	71
45-64	F	0.001%	39,954,974	583
65-74	F	0.004%	10,858,013	462
Over 75	F	0.018%	11,546,900	2,054
<b>Total</b>		<b>0.003%</b>	<b>304,059,724</b>	<b>8,626</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	-
18-44	M	0.000%	57,523,012	61
45-64	M	0.001%	38,103,272	328
65-74	M	0.005%	9,264,928	466
Over 75	M	0.023%	7,199,875	1,678
0-17	F	0.000%	36,108,331	-
18-44	F	0.000%	55,666,902	89
45-64	F	0.001%	39,954,974	208
65-74	F	0.004%	10,858,013	485
Over 75	F	0.008%	11,546,900	897
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>4,212</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	12,839	\$ 24,901	\$ 320
Mortality cost	12,839	\$ 1,892	\$ 24
Disability cost	12,839	\$ -	\$ -
<b>Total</b>	<b>12,839</b>	<b>\$ 26,793</b>	<b>\$ 344</b>

**Measurable Medical Costs**

**Catheter - associated urinary tract infection (Medicare Never Event)**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	2,366	8,752	\$ 37,860	\$ 27,041	\$ 10,819	0.000	\$ 10,819
Next 9 months	1,920	6,951	\$ 31,349	\$ 22,922	\$ 8,427	0.000	\$ 8,427
Year 2	1,057	4,204	\$ 33,906	\$ 25,310	\$ 8,595	0.000	\$ 8,595
Year 3	562	2,455	\$ 30,026	\$ 24,055	\$ 5,971	0.014	\$ 5,971
Year 4	298	1,382	\$ 25,794	\$ 22,055	\$ 3,738	0.131	\$ -
Year 5	155	817	\$ 23,006	\$ 23,707	\$ (701)	0.571	\$ -
<b>All Periods (present value)</b>							\$ 32,820

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,150	4,576	\$ 16,007	\$ 12,592	\$ 3,415	0.000	\$ 3,415
Next 9 months	970	3,858	\$ 23,467	\$ 18,086	\$ 5,380	0.000	\$ 5,380
<b>All Periods</b>							\$ 8,684

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	8,626	\$ 32,820	\$ 283
<b>Outpatient</b>	4,212	\$ 8,684	\$ 37
<b>Total</b>	<b>12,839</b>	<b>\$ 24,901</b>	<b>\$ 320</b>

**In Hospital Mortality Costs**

**Catheter - associated urinary tract infection (Medicare Never Event)**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	2,366	8,752	65	435	-2.223%	0.0000
Next 9 months	1,920	6,951	68	176	1.008%	0.0169

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-2.223%	0	\$ -	\$ -
Next 9 months	0.95	1.008%	83	\$ 293,904	\$ 24,285,912

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,150	4,576	37	108	0.857%	0.0977
Next 9 months	970	3,858	8	29	0.083%	0.7943

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	0%	N/A
Male, 18-44	3%	N/A
Male, 45-64	11%	N/A
Male, 65-74	11%	N/A
Male, Over 75	38%	N/A
Female, 0-17	0%	N/A
Female, 18-44	1%	N/A
Female, 45-64	7%	N/A
Female, 65-74	5%	N/A
Female, Over 75	24%	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	8,626	83	\$ 293,904	\$ 2,815	\$ 24
Outpatient	4,212	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>12,839</b>	<b>83</b>	<b>\$ 293,904</b>	<b>\$ 1,892</b>	<b>\$ 24</b>

**Short-Term Disability Costs**

**Catheter - associated urinary tract infection (Medicare Never Event)**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	25	92	38	36	2.06	0.4396
Outpatient	16	64	40	41	0.00	0.5121

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	8,626	\$ -	\$ -
<b>Outpatient</b>	4,212	\$ -	\$ -
<b>Total</b>	<b>12,839</b>	<b>\$ -</b>	<b>\$ -</b>



**Cost Development**

**Colostomy and enterostomy complications**

Frequency with which injury is associated with error: <10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	15
18-44	M	0.000%	57,523,012	43
45-64	M	0.000%	38,103,272	100
65-74	M	0.001%	9,264,928	65
Over 75	M	0.001%	7,199,875	78
0-17	F	0.000%	36,108,331	15
18-44	F	0.000%	55,666,902	40
45-64	F	0.000%	39,954,974	122
65-74	F	0.001%	10,858,013	61
Over 75	F	0.001%	11,546,900	101
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>641</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	10
18-44	M	0.000%	57,523,012	59
45-64	M	0.000%	38,103,272	146
65-74	M	0.001%	9,264,928	107
Over 75	M	0.002%	7,199,875	129
0-17	F	0.000%	36,108,331	11
18-44	F	0.000%	55,666,902	48
45-64	F	0.000%	39,954,974	180
65-74	F	0.001%	10,858,013	112
Over 75	F	0.002%	11,546,900	220
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>1,023</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	1,664	\$ 31,921	\$ 53
Mortality cost	1,664	\$ 3,646	\$ 6
Disability cost	1,664	\$ 716	\$ 1
<b>Total</b>	<b>1,664</b>	<b>\$ 36,283</b>	<b>\$ 60</b>

**Measurable Medical Costs**  
**Colostomy and enterostomy complications**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	4,173	15,382	\$ 58,069	\$ 36,482	\$ 21,587	0.000	\$ 21,587
Next 9 months	3,604	13,021	\$ 36,888	\$ 23,123	\$ 13,764	0.000	\$ 13,764
Year 2	2,267	8,506	\$ 35,964	\$ 23,098	\$ 12,866	0.000	\$ 12,866
Year 3	1,396	5,436	\$ 29,220	\$ 19,307	\$ 9,912	0.000	\$ 9,912
Year 4	871	3,467	\$ 25,310	\$ 17,342	\$ 7,968	0.000	\$ 7,968
Year 5	543	2,125	\$ 23,289	\$ 16,976	\$ 6,312	0.006	\$ 6,312
<b>All Periods (present value)</b>							\$ 69,245

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	7,731	29,770	\$ 15,008	\$ 12,403	\$ 2,605	0.000	\$ 2,605
Next 9 months	7,072	26,696	\$ 25,991	\$ 19,936	\$ 6,055	0.000	\$ 6,055
<b>All Periods</b>							\$ 8,539

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	641	\$ 69,245	\$ 44
<b>Outpatient</b>	1,023	\$ 8,539	\$ 9
<b>Total</b>	<b>1,664</b>	<b>\$ 31,921</b>	<b>\$ 53</b>

**In Hospital Mortality Costs**  
Colostomy and enterostomy complications

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	4,173	15,382	110	375	0.188%	0.4882
Next 9 months	3,604	13,021	76	177	0.750%	0.0011

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.750%	5	\$ 563,014	\$ 2,640,721

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	7,731	29,770	155	496	0.332%	0.0465
Next 9 months	7,072	26,696	47	83	0.361%	0.0000

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.332%	3	\$ 491,386	\$ 1,666,416
Next 9 months	0.98	0.361%	4	\$ 484,177	\$ 1,758,343

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	2%	1%
Male, 18-44	7%	6%
Male, 45-64	16%	14%
Male, 65-74	10%	10%
Male, Over 75	12%	13%
Female, 0-17	2%	1%
Female, 18-44	6%	5%
Female, 45-64	19%	18%
Female, 65-74	9%	11%
Female, Over 75	16%	21%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	641	5	\$ 563,014	\$ 4,121	\$ 3
Outpatient	1,023	7	\$ 487,658	\$ 3,348	\$ 3
<b>Total</b>	<b>1,664</b>	<b>12</b>	<b>\$ 517,833</b>	<b>\$ 3,646</b>	<b>\$ 6</b>

**Short-Term Disability Costs**

**Colostomy and enterostomy complications**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	95	307	72	53	19.14	0.0293
Outpatient	129	481	33	23	9.99	0.0750

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 0	\$ -	\$ 0
Male, 45-64	\$ 183.86	\$ 0	\$ -	\$ 0
Male, 65-74	\$ 74.13	\$ 0	\$ -	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ -	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 0	\$ -	\$ 0
Female, 45-64	\$ 114.58	\$ 0	\$ -	\$ 0
Female, 65-74	\$ 64.53	\$ 0	\$ -	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ -	\$ 0
<b>Total</b>		<b>\$ 1</b>	<b>\$ -</b>	<b>\$ 1</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	641	\$ 1,859	\$ 1
<b>Outpatient</b>	1,023	\$ -	\$ -
<b>Total</b>	<b>1,664</b>	<b>\$ 716</b>	<b>\$ 1</b>

### Cost Development

#### Colostomy and enterostomy complications - Infection

Frequency with which injury is associated with error: >90 %

#### Inpatient Errors Prevalence Rates

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	73
18-44	M	0.000%	57,523,012	164
45-64	M	0.001%	38,103,272	224
65-74	M	0.001%	9,264,928	89
Over 75	M	0.001%	7,199,875	82
0-17	F	0.000%	36,108,331	18
18-44	F	0.000%	55,666,902	107
45-64	F	0.001%	39,954,974	291
65-74	F	0.001%	10,858,013	162
Over 75	F	0.001%	11,546,900	118
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>1,327</b>

#### Outpatient Errors Prevalence Rates

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	-
18-44	M	0.000%	57,523,012	102
45-64	M	0.000%	38,103,272	119
65-74	M	0.001%	9,264,928	89
Over 75	M	0.001%	7,199,875	102
0-17	F	0.000%	36,108,331	18
18-44	F	0.000%	55,666,902	107
45-64	F	0.000%	39,954,974	139
65-74	F	0.000%	10,858,013	23
Over 75	F	0.001%	11,546,900	71
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>771</b>

#### Summary of Measurable Costs

	Number of errors	Cost per error	Total cost (millions)
Medical cost	2,098	\$ 47,506	\$ 100
Mortality cost	2,098	\$ -	-
Disability cost	2,098	\$ -	-
<b>Total</b>	<b>2,098</b>	<b>\$ 47,506</b>	<b>\$ 100</b>

**Measurable Medical Costs**

**Colostomy and enterostomy complications - Infection**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	469	1,744	\$ 57,987	\$ 38,973	\$ 19,014	0.000	\$ 19,014
Next 9 months	403	1,455	\$ 44,082	\$ 24,638	\$ 19,444	0.001	\$ 19,444
Year 2	237	937	\$ 39,133	\$ 21,259	\$ 17,874	0.000	\$ 17,874
Year 3	146	587	\$ 27,257	\$ 18,525	\$ 8,732	0.046	\$ 8,732
Year 4	92	374	\$ 23,902	\$ 16,184	\$ 7,718	0.046	\$ 7,718
Year 5	58	252	\$ 14,072	\$ 14,383	\$ (311)	0.535	\$ -
<b>All Periods (present value)</b>							<b>\$ 70,201</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	474	1,843	\$ 12,805	\$ 10,111	\$ 2,693	0.013	\$ 2,693
Next 9 months	439	1,655	\$ 21,197	\$ 15,345	\$ 5,852	0.009	\$ 5,852
<b>All Periods</b>							<b>\$ 8,428</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	1,327	\$ 70,201	\$ 93
<b>Outpatient</b>	771	\$ 8,428	\$ 6
<b>Total</b>	<b>2,098</b>	<b>\$ 47,506</b>	<b>\$ 100</b>

**In Hospital Mortality Costs**

**Colostomy and enterostomy complications - Infection**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	469	1,744	8	48	-1.037%	0.2030
Next 9 months	403	1,455	14	30	1.427%	0.0948

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.97	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	474	1,843	6	27	-0.206%	0.7354
Next 9 months	439	1,655	1	4	-0.019%	1.0000

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	1,327	0	\$ -	\$ -	\$ -
Outpatient	771	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>2,098</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

**Colostomy and enterostomy complications - Infection**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	14	37	85	44	40.99	0.0648
Outpatient	18	71	37	19	18.42	0.1708

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	1,327	\$ -	\$ -
<b>Outpatient</b>	771	\$ -	\$ -
<b>Total</b>	<b>2,098</b>	<b>\$ -</b>	<b>\$ -</b>



**Cost Development****Complication of prosthetic joint**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	13
18-44	M	0.000%	57,523,012	155
45-64	M	0.002%	38,103,272	911
65-74	M	0.008%	9,264,928	704
Over 75	M	0.012%	7,199,875	897
0-17	F	0.000%	36,108,331	17
18-44	F	0.000%	55,666,902	148
45-64	F	0.003%	39,954,974	1,166
65-74	F	0.012%	10,858,013	1,257
Over 75	F	0.023%	11,546,900	2,683
<b>Total</b>		<b>0.003%</b>	<b>304,059,724</b>	<b>7,952</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	73
18-44	M	0.001%	57,523,012	471
45-64	M	0.005%	38,103,272	2,013
65-74	M	0.016%	9,264,928	1,492
Over 75	M	0.024%	7,199,875	1,735
0-17	F	0.000%	36,108,331	34
18-44	F	0.001%	55,666,902	482
45-64	F	0.006%	39,954,974	2,586
65-74	F	0.020%	10,858,013	2,159
Over 75	F	0.030%	11,546,900	3,516
<b>Total</b>		<b>0.005%</b>	<b>304,059,724</b>	<b>14,561</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	22,513	\$ 8,115	\$ 183
Mortality cost	22,513	\$ -	\$ -
Disability cost	22,513	\$ 2,293	\$ 52
<b>Total</b>	<b>22,513</b>	<b>\$ 10,407</b>	<b>\$ 234</b>

**Measurable Medical Costs**  
**Complication of prosthetic joint**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	5,529	15,115	\$ 35,431	\$ 30,894	\$ 4,538	0.000	\$ 4,538
Next 9 months	4,761	12,512	\$ 17,359	\$ 16,784	\$ 575	0.172	\$ -
Year 2	2,576	6,522	\$ 20,468	\$ 19,473	\$ 995	0.163	\$ -
Year 3	877	2,085	\$ 20,460	\$ 18,117	\$ 2,343	0.078	\$ -
Year 4	17	164	\$ 10,443	\$ 13,277	\$ (2,834)	0.712	\$ -
Year 5	-	-	\$ -	\$ -	\$ -	-	\$ -
<b>All Periods (present value)</b>							\$ 4,521

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	10,457	36,805	\$ 14,758	\$ 8,967	\$ 5,791	0.000	\$ 5,791
Next 9 months	9,085	31,308	\$ 17,694	\$ 13,306	\$ 4,388	0.000	\$ 4,388
<b>All Periods</b>							\$ 10,077

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	7,952	\$ 4,521	\$ 36
<b>Outpatient</b>	14,561	\$ 10,077	\$ 147
<b>Total</b>	<b>22,513</b>	<b>\$ 8,115</b>	<b>\$ 183</b>

**In Hospital Mortality Costs**  
**Complication of prosthetic joint**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	5,529	15,115	31	205	-0.796%	0.0000
Next 9 months	4,761	12,512	33	110	-0.183%	0.2351

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.796%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	10,457	36,805	42	169	-0.057%	0.4374
Next 9 months	9,085	31,308	13	50	-0.016%	0.7387

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	1.00	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	7,952	0	\$ -	\$ -	\$ -
Outpatient	14,561	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>22,513</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**  
**Complication of prosthetic joint**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	71	188	98	70	27.81	0.0248
Outpatient	170	634	53	27	26.02	0.0000

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 1	\$ 2	\$ 3
Male, 45-64	\$ 183.86	\$ 5	\$ 10	\$ 14
Male, 65-74	\$ 74.13	\$ 1	\$ 3	\$ 4
Male, Over 75	\$ 44.91	\$ 1	\$ 2	\$ 3
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 1	\$ 2	\$ 2
Female, 45-64	\$ 114.58	\$ 4	\$ 8	\$ 11
Female, 65-74	\$ 64.53	\$ 2	\$ 4	\$ 6
Female, Over 75	\$ 44.33	\$ 3	\$ 4	\$ 7
<b>Total</b>		<b>\$ 18</b>	<b>\$ 34</b>	<b>\$ 52</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	7,952	\$ 2,242	\$ 18
<b>Outpatient</b>	14,561	\$ 2,320	\$ 34
<b>Total</b>	<b>22,513</b>	<b>\$ 2,293</b>	<b>\$ 52</b>

**Cost Development****Complications affecting specified body systems, not elsewhere classified**

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	129
18-44	M	0.001%	57,523,012	510
45-64	M	0.003%	38,103,272	1,229
65-74	M	0.006%	9,264,928	560
Over 75	M	0.008%	7,199,875	597
0-17	F	0.000%	36,108,331	93
18-44	F	0.002%	55,666,902	924
45-64	F	0.003%	39,954,974	1,247
65-74	F	0.004%	10,858,013	488
Over 75	F	0.005%	11,546,900	564
<b>Total</b>		<b>0.002%</b>	<b>304,059,724</b>	<b>6,342</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	95
18-44	M	0.001%	57,523,012	377
45-64	M	0.002%	38,103,272	733
65-74	M	0.005%	9,264,928	455
Over 75	M	0.006%	7,199,875	406
0-17	F	0.000%	36,108,331	118
18-44	F	0.001%	55,666,902	772
45-64	F	0.002%	39,954,974	867
65-74	F	0.003%	10,858,013	311
Over 75	F	0.004%	11,546,900	409
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>4,543</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	10,885	\$ 13,645	\$ 149
Mortality cost	10,885	\$ 1,686	\$ 18
Disability cost	10,885	\$ 1,085	\$ 12
<b>Total</b>	<b>10,885</b>	<b>\$ 16,416</b>	<b>\$ 179</b>

**Measurable Medical Costs**

**Complications affecting specified body systems, not elsewhere classified**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	52,138	195,694	\$ 50,259	\$ 33,705	\$ 16,554	-	\$ 16,554
Next 9 months	45,930	169,338	\$ 20,267	\$ 17,587	\$ 2,680	0.000	\$ 2,680
Year 2	31,484	115,062	\$ 19,804	\$ 18,994	\$ 810	0.005	\$ 810
Year 3	20,653	76,274	\$ 17,470	\$ 17,146	\$ 324	0.176	\$ -
Year 4	13,960	52,145	\$ 16,335	\$ 16,049	\$ 285	0.234	\$ -
Year 5	8,787	33,615	\$ 14,624	\$ 15,211	\$ (587)	0.928	\$ -
<b>All Periods (present value)</b>							<b>\$ 19,899</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	34,964	135,616	\$ 15,073	\$ 11,875	\$ 3,198	0.000	\$ 3,198
Next 9 months	31,060	119,879	\$ 15,996	\$ 14,235	\$ 1,761	0.000	\$ 1,761
<b>All Periods</b>							<b>\$ 4,915</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	6,342	\$ 19,899	\$ 126
<b>Outpatient</b>	4,543	\$ 4,915	\$ 22
<b>Total</b>	<b>10,885</b>	<b>\$ 13,645</b>	<b>\$ 149</b>

**In Hospital Mortality Costs**

Complications affecting specified body systems, not elsewhere classified

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	52,138	195,694	951	3,123	0.225%	0.0003
Next 9 months	45,930	169,338	507	1,537	0.196%	0.0001

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.225%	14	\$ 697,357	\$ 9,929,138
Next 9 months	0.98	0.196%	12	\$ 687,126	\$ 8,420,680

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	34,964	135,616	381	1,357	0.086%	0.1518
Next 9 months	31,060	119,879	97	345	0.025%	0.4670

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	2%	N/A
Male, 18-44	8%	N/A
Male, 45-64	19%	N/A
Male, 65-74	9%	N/A
Male, Over 75	9%	N/A
Female, 0-17	1%	N/A
Female, 18-44	15%	N/A
Female, 45-64	20%	N/A
Female, 65-74	8%	N/A
Female, Over 75	9%	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	6,342	26	\$ 692,625	\$ 2,893	\$ 18
Outpatient	4,543	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>10,885</b>	<b>26</b>	<b>\$ 692,625</b>	<b>\$ 1,686</b>	<b>\$ 18</b>

**Short-Term Disability Costs**

Complications affecting specified body systems, not elsewhere classified

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	1,739	6,168	60	48	12.16	0.0000
Outpatient	971	3,676	29	23	6.39	0.0022

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 1	\$ 0	\$ 1
Male, 45-64	\$ 183.86	\$ 3	\$ 1	\$ 4
Male, 65-74	\$ 74.13	\$ 1	\$ 0	\$ 1
Male, Over 75	\$ 44.91	\$ 0	\$ 0	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 2	\$ 1	\$ 2
Female, 45-64	\$ 114.58	\$ 2	\$ 1	\$ 2
Female, 65-74	\$ 64.53	\$ 0	\$ 0	\$ 1
Female, Over 75	\$ 44.33	\$ 0	\$ 0	\$ 0
<b>Total</b>		<b>\$ 9</b>	<b>\$ 3</b>	<b>\$ 12</b>

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	6,342	\$ 1,362	\$ 9
<b>Outpatient</b>	4,543	\$ 698	\$ 3
<b>Total</b>	<b>10,885</b>	<b>\$ 1,085</b>	<b>\$ 12</b>



**Cost Development**

**Complications of medical care, not elsewhere classified**

Frequency with which injury is associated with error: <10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	20
18-44	M	0.000%	57,523,012	45
45-64	M	0.000%	38,103,272	90
65-74	M	0.000%	9,264,928	35
Over 75	M	0.001%	7,199,875	45
0-17	F	0.000%	36,108,331	17
18-44	F	0.000%	55,666,902	80
45-64	F	0.000%	39,954,974	99
65-74	F	0.000%	10,858,013	33
Over 75	F	0.000%	11,546,900	51
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>516</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	425
18-44	M	0.001%	57,523,012	457
45-64	M	0.002%	38,103,272	635
65-74	M	0.002%	9,264,928	186
Over 75	M	0.002%	7,199,875	120
0-17	F	0.001%	36,108,331	433
18-44	F	0.001%	55,666,902	768
45-64	F	0.002%	39,954,974	856
65-74	F	0.002%	10,858,013	194
Over 75	F	0.002%	11,546,900	185
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>4,258</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	4,774	\$ 2,817	\$ 13
Mortality cost	4,774	\$ -	\$ -
Disability cost	4,774	\$ -	\$ -
<b>Total</b>	<b>4,774</b>	<b>\$ 2,817</b>	<b>\$ 13</b>

**Measurable Medical Costs**

**Complications of medical care, not elsewhere classified**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	5,271	20,339	\$ 44,719	\$ 33,408	\$ 11,311	0.000	\$ 11,311
Next 9 months	4,434	16,804	\$ 25,528	\$ 19,719	\$ 5,809	0.000	\$ 5,809
Year 2	2,610	10,143	\$ 22,559	\$ 20,579	\$ 1,981	0.049	\$ 1,981
Year 3	1,686	6,850	\$ 20,174	\$ 17,413	\$ 2,761	0.037	\$ 2,761
Year 4	1,099	4,399	\$ 18,646	\$ 17,589	\$ 1,057	0.316	\$ -
Year 5	714	2,513	\$ 13,547	\$ 12,901	\$ 647	0.317	\$ -
<b>All Periods (present value)</b>							\$ 21,431

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	31,644	114,878	\$ 6,034	\$ 6,256	\$ (222)	0.965	\$ -
Next 9 months	28,945	102,906	\$ 10,004	\$ 9,432	\$ 572	0.004	\$ 572
<b>All Periods</b>							\$ 562

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	516	\$ 21,431	\$ 11
<b>Outpatient</b>	4,258	\$ 562	\$ 2
<b>Total</b>	<b>4,774</b>	<b>\$ 2,817</b>	<b>\$ 13</b>

**In Hospital Mortality Costs**

**Complications of medical care, not elsewhere classified**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	5,271	20,339	108	517	-0.498%	0.0364
Next 9 months	4,434	16,804	57	233	-0.099%	0.6128

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.498%	0	\$ -	\$ -
Next 9 months	0.97	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	31,644	114,878	204	697	0.035%	0.4800
Next 9 months	28,945	102,906	35	145	-0.020%	0.4272

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	516	0	\$ -	\$ -	\$ -
Outpatient	4,258	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>4,774</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

Complications of medical care, not elsewhere classified

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	151	565	59	55	4.28	0.2910
Outpatient	1,203	4,088	12	16	0.00	0.9996

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	516	\$ -	\$ -
Outpatient	4,258	\$ -	\$ -
<b>Total</b>	<b>4,774</b>	<b>\$ -</b>	<b>\$ -</b>

**Cost Development**

**Complications of transplanted organ**

Frequency with which injury is associated with error: <10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	72
18-44	M	0.000%	57,523,012	192
45-64	M	0.001%	38,103,272	401
65-74	M	0.001%	9,264,928	99
Over 75	M	0.000%	7,199,875	23
0-17	F	0.000%	36,108,331	31
18-44	F	0.000%	55,666,902	153
45-64	F	0.000%	39,954,974	199
65-74	F	0.001%	10,858,013	78
Over 75	F	0.000%	11,546,900	9
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>1,256</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	120
18-44	M	0.001%	57,523,012	580
45-64	M	0.003%	38,103,272	1,208
65-74	M	0.004%	9,264,928	357
Over 75	M	0.001%	7,199,875	82
0-17	F	0.000%	36,108,331	93
18-44	F	0.001%	55,666,902	431
45-64	F	0.002%	39,954,974	686
65-74	F	0.002%	10,858,013	223
Over 75	F	0.001%	11,546,900	109
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>3,891</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	5,147	\$ 55,654	\$ 286
Mortality cost	5,147	\$ 10,510	\$ 54
Disability cost	5,147	\$ 494	\$ 3
<b>Total</b>	<b>5,147</b>	<b>\$ 66,658</b>	<b>\$ 343</b>

**Measurable Medical Costs**  
**Complications of transplanted organ**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	8,419	27,050	\$ 125,699	\$ 66,906	\$ 58,793	0.000	\$ 58,793
Next 9 months	7,365	22,222	\$ 84,289	\$ 54,012	\$ 30,277	0.000	\$ 30,277
Year 2	4,488	13,527	\$ 77,785	\$ 58,058	\$ 19,727	0.000	\$ 19,727
Year 3	2,689	8,160	\$ 65,169	\$ 45,968	\$ 19,201	0.000	\$ 19,201
Year 4	1,646	4,922	\$ 59,717	\$ 39,210	\$ 20,507	0.000	\$ 20,507
Year 5	1,021	3,009	\$ 60,470	\$ 37,168	\$ 23,303	0.000	\$ 23,303
<b>All Periods (present value)</b>							\$ 163,896

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	25,726	99,222	\$ 21,467	\$ 16,347	\$ 5,119	0.000	\$ 5,119
Next 9 months	23,945	88,029	\$ 43,089	\$ 27,195	\$ 15,894	0.000	\$ 15,894
<b>All Periods</b>							\$ 20,703

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	1,256	\$ 163,896	\$ 206
<b>Outpatient</b>	3,891	\$ 20,703	\$ 81
<b>Total</b>	<b>5,147</b>	<b>\$ 55,654</b>	<b>\$ 286</b>

**In Hospital Mortality Costs**  
Complications of transplanted organ

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	8,419	27,050	350	939	0.681%	0.0035
Next 9 months	7,365	22,222	289	627	1.111%	0.0000

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.681%	9	\$ 898,504	\$ 7,684,502
Next 9 months	0.97	1.111%	13	\$ 885,322	\$ 11,926,677

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	25,726	99,222	592	1,429	0.852%	0.0000
Next 9 months	23,945	88,029	152	391	0.199%	0.0001

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.852%	33	\$ 848,105	\$ 28,115,076
Next 9 months	0.99	0.199%	8	\$ 835,663	\$ 6,365,311

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	6%	3%
Male, 18-44	15%	15%
Male, 45-64	32%	31%
Male, 65-74	8%	9%
Male, Over 75	2%	2%
Female, 0-17	3%	2%
Female, 18-44	12%	11%
Female, 45-64	16%	18%
Female, 65-74	6%	6%
Female, Over 75	1%	3%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	1,256	22	\$ 890,441	\$ 15,611	\$ 20
Outpatient	3,891	41	\$ 845,780	\$ 8,863	\$ 34
<b>Total</b>	<b>5,147</b>	<b>63</b>	<b>\$ 861,445</b>	<b>\$ 10,510</b>	<b>\$ 54</b>

**Short-Term Disability Costs**  
**Complications of transplanted organ**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	295	922	73	57	15.44	0.0087
Outpatient	745	2,850	22	23	0.00	0.7374

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 1	\$ -	\$ 1
Male, 45-64	\$ 183.86	\$ 1	\$ -	\$ 1
Male, 65-74	\$ 74.13	\$ 0	\$ -	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ -	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 0	\$ -	\$ 0
Female, 45-64	\$ 114.58	\$ 0	\$ -	\$ 0
Female, 65-74	\$ 64.53	\$ 0	\$ -	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ -	\$ 0
<b>Total</b>		<b>\$ 3</b>	<b>\$ -</b>	<b>\$ 3</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	1,256	\$ 2,025	\$ 3
<b>Outpatient</b>	3,891	\$ -	\$ -
<b>Total</b>	<b>5,147</b>	<b>\$ 494</b>	<b>\$ 3</b>



**Cost Development****Dermatitis due to substances taken internally**

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	51
18-44	M	0.000%	57,523,012	66
45-64	M	0.000%	38,103,272	106
65-74	M	0.000%	9,264,928	41
Over 75	M	0.001%	7,199,875	61
0-17	F	0.000%	36,108,331	49
18-44	F	0.000%	55,666,902	122
45-64	F	0.000%	39,954,974	130
65-74	F	0.001%	10,858,013	68
Over 75	F	0.001%	11,546,900	114
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>808</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.002%	37,833,517	689
18-44	M	0.001%	57,523,012	678
45-64	M	0.002%	38,103,272	852
65-74	M	0.004%	9,264,928	374
Over 75	M	0.006%	7,199,875	445
0-17	F	0.002%	36,108,331	742
18-44	F	0.003%	55,666,902	1,436
45-64	F	0.003%	39,954,974	1,381
65-74	F	0.006%	10,858,013	612
Over 75	F	0.006%	11,546,900	718
<b>Total</b>		<b>0.003%</b>	<b>304,059,724</b>	<b>7,928</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	8,736	\$ 2,682	\$ 23
Mortality cost	8,736	\$ -	\$ -
Disability cost	8,736	\$ 172	\$ 2
<b>Total</b>	<b>8,736</b>	<b>\$ 2,854</b>	<b>\$ 25</b>

**Measurable Medical Costs**

**Dermatitis due to substances taken internally**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	5,834	22,599	\$ 42,691	\$ 30,410	\$ 12,280	0.000	\$ 12,280
Next 9 months	5,097	19,243	\$ 28,101	\$ 21,234	\$ 6,866	0.000	\$ 6,866
Year 2	3,133	12,539	\$ 25,116	\$ 22,633	\$ 2,483	0.034	\$ 2,483
Year 3	2,014	7,597	\$ 20,864	\$ 20,181	\$ 683	0.314	\$ -
Year 4	1,220	4,679	\$ 18,951	\$ 18,160	\$ 790	0.310	\$ -
Year 5	713	2,702	\$ 15,636	\$ 17,499	\$ (1,863)	0.828	\$ -
<b>All Periods (present value)</b>							<b>\$ 21,351</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	58,561	233,428	\$ 4,695	\$ 5,146	\$ (452)	1.000	\$ -
Next 9 months	52,790	208,796	\$ 9,486	\$ 8,691	\$ 795	0.000	\$ 795
<b>All Periods</b>							<b>\$ 780</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	808	\$ 21,351	\$ 17
<b>Outpatient</b>	7,928	\$ 780	\$ 6
<b>Total</b>	<b>8,736</b>	<b>\$ 2,682</b>	<b>\$ 23</b>

**In Hospital Mortality Costs**

**Dermatitis due to substances taken internally**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	5,834	22,599	84	484	-0.704%	0.0006
Next 9 months	5,097	19,243	82	266	0.228%	0.2226

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.704%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	58,561	233,428	334	1,311	0.008%	0.8259
Next 9 months	52,790	208,796	62	213	0.016%	0.3189

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	808	0	\$ -	\$ -	\$ -
Outpatient	7,928	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>8,736</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

Dermatitis due to substances taken internally

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	151	545	69	50	19.25	0.0078
Outpatient	1,655	6,545	13	13	0.00	0.7059

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 0	\$ -	\$ 0
Male, 45-64	\$ 183.86	\$ 0	\$ -	\$ 0
Male, 65-74	\$ 74.13	\$ 0	\$ -	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ -	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 0	\$ -	\$ 0
Female, 45-64	\$ 114.58	\$ 0	\$ -	\$ 0
Female, 65-74	\$ 64.53	\$ 0	\$ -	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ -	\$ 0
<b>Total</b>		<b>\$ 2</b>	<b>\$ -</b>	<b>\$ 2</b>

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	808	\$ 1,859	\$ 2
Outpatient	7,928	\$ -	\$ -
<b>Total</b>	<b>8,736</b>	<b>\$ 172</b>	<b>\$ 2</b>

**Cost Development**

**Disorders of the pituitary gland and its hypothalamic control**

Frequency with which injury is associated with error: 65-90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	30
18-44	M	0.000%	57,523,012	67
45-64	M	0.000%	38,103,272	85
65-74	M	0.001%	9,264,928	54
Over 75	M	0.001%	7,199,875	50
0-17	F	0.000%	36,108,331	30
18-44	F	0.000%	55,666,902	58
45-64	F	0.000%	39,954,974	124
65-74	F	0.000%	10,858,013	19
Over 75	F	0.001%	11,546,900	58
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>575</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.002%	37,833,517	593
18-44	M	0.002%	57,523,012	1,387
45-64	M	0.004%	38,103,272	1,691
65-74	M	0.004%	9,264,928	416
Over 75	M	0.003%	7,199,875	217
0-17	F	0.001%	36,108,331	369
18-44	F	0.002%	55,666,902	1,166
45-64	F	0.003%	39,954,974	1,030
65-74	F	0.001%	10,858,013	151
Over 75	F	0.001%	11,546,900	116
<b>Total</b>		<b>0.002%</b>	<b>304,059,724</b>	<b>7,135</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	7,710	\$ 5,764	\$ 44
Mortality cost	7,710	\$ 3,496	\$ 27
Disability cost	7,710	\$ -	\$ -
<b>Total</b>	<b>7,710</b>	<b>\$ 9,260</b>	<b>\$ 71</b>

**Measurable Medical Costs**

**Disorders of the pituitary gland and its hypothalamic control**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	328	1,284	\$ 43,253	\$ 35,960	\$ 7,293	0.037	\$ 7,293
Next 9 months	302	1,120	\$ 29,910	\$ 20,868	\$ 9,042	0.010	\$ 9,042
Year 2	187	759	\$ 29,560	\$ 19,649	\$ 9,911	0.021	\$ 9,911
Year 3	134	511	\$ 23,197	\$ 18,615	\$ 4,582	0.212	\$ -
Year 4	90	353	\$ 20,636	\$ 18,324	\$ 2,312	0.305	\$ -
Year 5	55	218	\$ 18,785	\$ 15,888	\$ 2,897	0.253	\$ -
<b>All Periods (present value)</b>							\$ 25,624

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	3,481	13,808	\$ 6,878	\$ 6,380	\$ 499	0.120	\$ -
Next 9 months	3,187	12,371	\$ 15,074	\$ 10,833	\$ 4,241	0.000	\$ 4,241
<b>All Periods</b>							\$ 4,164

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	575	\$ 25,624	\$ 15
<b>Outpatient</b>	7,135	\$ 4,164	\$ 30
<b>Total</b>	<b>7,710</b>	<b>\$ 5,764</b>	<b>\$ 44</b>

**In Hospital Mortality Costs**

**Disorders of the pituitary gland and its hypothalamic control**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	328	1,284	2	32	-1.872%	0.0349
Next 9 months	302	1,120	3	12	-0.094%	1.0000

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-1.872%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	3,481	13,808	30	67	0.375%	0.0081
Next 9 months	3,187	12,371	1	17	-0.103%	0.1484

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.375%	27	\$ 1,008,708	\$ 26,955,296
Next 9 months	1.00	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	8%
Male, 18-44	N/A	19%
Male, 45-64	N/A	24%
Male, 65-74	N/A	6%
Male, Over 75	N/A	3%
Female, 0-17	N/A	5%
Female, 18-44	N/A	16%
Female, 45-64	N/A	14%
Female, 65-74	N/A	2%
Female, Over 75	N/A	2%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	575	0	\$ -	\$ -	\$ -
Outpatient	7,135	27	\$ 1,008,708	\$ 3,778	\$ 27
<b>Total</b>	<b>7,710</b>	<b>27</b>	<b>\$ 1,008,708</b>	<b>\$ 3,496</b>	<b>\$ 27</b>

**Short-Term Disability Costs**

**Disorders of the pituitary gland and its hypothalamic control**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	8	32	54	73	0.00	0.6688
Outpatient	120	480	11	19	0.00	0.9918

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	575	\$ -	\$ -
<b>Outpatient</b>	7,135	\$ -	\$ -
<b>Total</b>	<b>7,710</b>	<b>\$ -</b>	<b>\$ -</b>



**Cost Development****Disruption of operation wound**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	185
18-44	M	0.001%	57,523,012	514
45-64	M	0.003%	38,103,272	1,331
65-74	M	0.006%	9,264,928	594
Over 75	M	0.007%	7,199,875	538
0-17	F	0.000%	36,108,331	167
18-44	F	0.003%	55,666,902	1,768
45-64	F	0.004%	39,954,974	1,505
65-74	F	0.005%	10,858,013	585
Over 75	F	0.004%	11,546,900	509
<b>Total</b>		<b>0.003%</b>	<b>304,059,724</b>	<b>7,696</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.003%	37,833,517	1,123
18-44	M	0.003%	57,523,012	1,980
45-64	M	0.006%	38,103,272	2,352
65-74	M	0.014%	9,264,928	1,255
Over 75	M	0.018%	7,199,875	1,309
0-17	F	0.001%	36,108,331	532
18-44	F	0.005%	55,666,902	2,737
45-64	F	0.008%	39,954,974	3,200
65-74	F	0.011%	10,858,013	1,197
Over 75	F	0.011%	11,546,900	1,325
<b>Total</b>		<b>0.006%</b>	<b>304,059,724</b>	<b>17,010</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	24,706	\$ 14,827	\$ 366
Mortality cost	24,706	\$ 714	\$ 18
Disability cost	24,706	\$ 1,467	\$ 36
<b>Total</b>	<b>24,706</b>	<b>\$ 17,008</b>	<b>\$ 420</b>

**Measurable Medical Costs**  
**Disruption of operation wound**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	12,316	45,473	\$ 57,159	\$ 36,992	\$ 20,167	0.000	\$ 20,167
Next 9 months	10,713	38,649	\$ 25,222	\$ 19,271	\$ 5,951	0.000	\$ 5,951
Year 2	6,693	24,223	\$ 23,099	\$ 19,594	\$ 3,504	0.000	\$ 3,504
Year 3	4,123	15,260	\$ 22,161	\$ 17,399	\$ 4,762	0.000	\$ 4,762
Year 4	2,559	9,495	\$ 19,396	\$ 15,639	\$ 3,756	0.001	\$ 3,756
Year 5	1,510	5,662	\$ 18,431	\$ 15,287	\$ 3,144	0.008	\$ 3,144
<b>All Periods (present value)</b>							<b>\$ 39,850</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	26,624	102,428	\$ 10,089	\$ 8,996	\$ 1,093	0.000	\$ 1,093
Next 9 months	23,674	90,270	\$ 13,850	\$ 11,388	\$ 2,461	0.000	\$ 2,461
<b>All Periods</b>							<b>\$ 3,505</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	7,696	\$ 39,850	\$ 307
<b>Outpatient</b>	17,010	\$ 3,505	\$ 60
<b>Total</b>	<b>24,706</b>	<b>\$ 14,827</b>	<b>\$ 366</b>

**In Hospital Mortality Costs**  
Disruption of operation wound

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	12,316	45,473	186	742	-0.124%	0.3319
Next 9 months	10,713	38,649	135	369	0.306%	0.0053

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.306%	23	\$ 761,567	\$ 17,650,519

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	26,624	102,428	215	735	0.088%	0.1338
Next 9 months	23,674	90,270	48	145	0.042%	0.1613

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	2%	N/A
Male, 18-44	7%	N/A
Male, 45-64	17%	N/A
Male, 65-74	8%	N/A
Male, Over 75	7%	N/A
Female, 0-17	2%	N/A
Female, 18-44	23%	N/A
Female, 45-64	20%	N/A
Female, 65-74	8%	N/A
Female, Over 75	7%	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	7,696	23	\$ 761,567	\$ 2,293	\$ 18
Outpatient	17,010	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>24,706</b>	<b>23</b>	<b>\$ 761,567</b>	<b>\$ 714</b>	<b>\$ 18</b>

**Short-Term Disability Costs**  
 Disruption of operation wound

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	384	1,347	81	61	20.22	0.0000
Outpatient	791	2,962	29	19	10.19	0.0000

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 2	\$ 3	\$ 5
Male, 45-64	\$ 183.86	\$ 5	\$ 4	\$ 9
Male, 65-74	\$ 74.13	\$ 1	\$ 1	\$ 2
Male, Over 75	\$ 44.91	\$ 0	\$ 1	\$ 1
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 5	\$ 4	\$ 9
Female, 45-64	\$ 114.58	\$ 3	\$ 4	\$ 7
Female, 65-74	\$ 64.53	\$ 1	\$ 1	\$ 2
Female, Over 75	\$ 44.33	\$ 0	\$ 1	\$ 1
<b>Total</b>		<b>\$ 18</b>	<b>\$ 18</b>	<b>\$ 36</b>

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	7,696	\$ 2,313	\$ 18
<b>Outpatient</b>	17,010	\$ 1,084	\$ 18
<b>Total</b>	<b>24,706</b>	<b>\$ 1,467</b>	<b>\$ 36</b>

**Cost Development**

**Emphysema (subcutaneous) (surgical) resulting from procedure**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	17
18-44	M	0.000%	57,523,012	39
45-64	M	0.000%	38,103,272	155
65-74	M	0.001%	9,264,928	84
Over 75	M	0.001%	7,199,875	68
0-17	F	0.000%	36,108,331	17
18-44	F	0.000%	55,666,902	47
45-64	F	0.000%	39,954,974	105
65-74	F	0.001%	10,858,013	77
Over 75	F	0.001%	11,546,900	129
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>737</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	4
18-44	M	0.000%	57,523,012	44
45-64	M	0.000%	38,103,272	35
65-74	M	0.001%	9,264,928	53
Over 75	M	0.001%	7,199,875	63
0-17	F	0.000%	36,108,331	4
18-44	F	0.000%	55,666,902	34
45-64	F	0.000%	39,954,974	20
65-74	F	0.000%	10,858,013	33
Over 75	F	0.001%	11,546,900	67
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>357</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	1,094	\$ 9,537	\$ 10
Mortality cost	1,094	\$ -	\$ -
Disability cost	1,094	\$ -	\$ -
<b>Total</b>	<b>1,094</b>	<b>\$ 9,537</b>	<b>\$ 10</b>

**Measurable Medical Costs**

**Emphysema (subcutaneous) (surgical) resulting from procedure**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,239	4,746	\$ 58,691	\$ 47,617	\$ 11,074	0.000	\$ 11,074
Next 9 months	1,050	3,901	\$ 26,168	\$ 22,871	\$ 3,297	0.081	\$ -
Year 2	666	2,269	\$ 25,105	\$ 23,252	\$ 1,853	0.208	\$ -
Year 3	347	1,345	\$ 22,041	\$ 20,352	\$ 1,688	0.307	\$ -
Year 4	201	808	\$ 18,103	\$ 17,136	\$ 967	0.383	\$ -
Year 5	120	455	\$ 18,930	\$ 17,514	\$ 1,416	0.430	\$ -
<b>All Periods (present value)</b>							\$ 11,033

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	532	2,064	\$ 22,876	\$ 16,407	\$ 6,468	0.002	\$ 6,468
Next 9 months	454	1,788	\$ 21,767	\$ 18,265	\$ 3,501	0.131	\$ -
<b>All Periods</b>							\$ 6,445

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	737	\$ 11,033	\$ 8
<b>Outpatient</b>	357	\$ 6,445	\$ 2
<b>Total</b>	<b>1,094</b>	<b>\$ 9,537</b>	<b>\$ 10</b>

**In Hospital Mortality Costs**

Emphysema (subcutaneous) (surgical) resulting from procedure

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,239	4,746	46	184	-0.155%	0.7997
Next 9 months	1,050	3,901	23	79	0.174%	0.7248

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.96	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	532	2,064	4	31	-0.765%	0.1742
Next 9 months	454	1,788	1	7	-0.180%	1.0000

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	737	0	\$ -	\$ -	\$ -
Outpatient	357	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>1,094</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

Emphysema (subcutaneous) (surgical) resulting from procedure

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	36	136	61	75	0.00	0.7564
Outpatient	15	54	71	34	36.67	0.1370

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	737	\$ -	\$ -
Outpatient	357	\$ -	\$ -
<b>Total</b>	<b>1,094</b>	<b>\$ -</b>	<b>\$ -</b>



**Cost Development****Gastrostomy complications**

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	21
18-44	M	0.000%	57,523,012	19
45-64	M	0.000%	38,103,272	46
65-74	M	0.000%	9,264,928	27
Over 75	M	0.001%	7,199,875	58
0-17	F	0.000%	36,108,331	13
18-44	F	0.000%	55,666,902	15
45-64	F	0.000%	39,954,974	23
65-74	F	0.000%	10,858,013	22
Over 75	F	0.001%	11,546,900	63
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>307</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	93
18-44	M	0.000%	57,523,012	37
45-64	M	0.000%	38,103,272	62
65-74	M	0.001%	9,264,928	63
Over 75	M	0.002%	7,199,875	130
0-17	F	0.000%	36,108,331	77
18-44	F	0.000%	55,666,902	36
45-64	F	0.000%	39,954,974	53
65-74	F	0.000%	10,858,013	46
Over 75	F	0.002%	11,546,900	195
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>792</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	1,099	\$ 38,018	\$ 42
Mortality cost	1,099	\$ 11,096	\$ 12
Disability cost	1,099	\$ -	\$ -
<b>Total</b>	<b>1,099</b>	<b>\$ 49,115</b>	<b>\$ 54</b>

**Measurable Medical Costs**

**Gastrostomy complications**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,817	6,837	\$ 82,654	\$ 47,707	\$ 34,947	0.000	\$ 34,947
Next 9 months	1,436	5,342	\$ 50,848	\$ 27,421	\$ 23,428	0.000	\$ 23,428
Year 2	752	3,211	\$ 45,594	\$ 28,215	\$ 17,379	0.000	\$ 17,379
Year 3	402	1,845	\$ 43,150	\$ 21,476	\$ 21,674	0.000	\$ 21,674
Year 4	228	1,072	\$ 32,458	\$ 21,265	\$ 11,193	0.007	\$ 11,193
Year 5	128	607	\$ 32,057	\$ 19,287	\$ 12,770	0.007	\$ 12,770
<b>All Periods (present value)</b>							\$ 115,845

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	4,666	15,143	\$ 18,104	\$ 17,090	\$ 1,015	0.122	\$ -
Next 9 months	3,994	12,659	\$ 34,001	\$ 26,018	\$ 7,983	0.000	\$ 7,983
<b>All Periods</b>							\$ 7,837

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	307	\$ 115,845	\$ 36
<b>Outpatient</b>	792	\$ 7,837	\$ 6
<b>Total</b>	<b>1,099</b>	<b>\$ 38,018</b>	<b>\$ 42</b>

**In Hospital Mortality Costs**  
**Gastrostomy complications**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,817	6,837	100	345	0.438%	0.4519
Next 9 months	1,436	5,342	80	147	2.818%	0.0000

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.95	2.818%	8	\$ 550,605	\$ 4,526,687

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	4,666	15,143	176	376	1.283%	0.0000
Next 9 months	3,994	12,659	39	83	0.342%	0.0316

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	1.283%	10	\$ 601,225	\$ 6,109,320
Next 9 months	0.98	0.342%	3	\$ 592,405	\$ 1,563,710

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	7%	12%
Male, 18-44	6%	5%
Male, 45-64	15%	8%
Male, 65-74	9%	8%
Male, Over 75	19%	16%
Female, 0-17	4%	10%
Female, 18-44	5%	5%
Female, 45-64	7%	7%
Female, 65-74	7%	6%
Female, Over 75	21%	25%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	307	8	\$ 550,605	\$ 14,734	\$ 5
Outpatient	792	13	\$ 599,406	\$ 9,686	\$ 8
<b>Total</b>	<b>1,099</b>	<b>21</b>	<b>\$ 580,321</b>	<b>\$ 11,096</b>	<b>\$ 12</b>

**Short-Term Disability Costs**

**Gastrostomy complications**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	24	85	92	86	5.37	0.4132
Outpatient	39	137	32	33	0.00	0.5193

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	307	\$ -	\$ -
<b>Outpatient</b>	792	\$ -	\$ -
<b>Total</b>	<b>1,099</b>	<b>\$ -</b>	<b>\$ -</b>

**Cost Development****Gastrostomy complications - Infection**

Frequency with which injury is associated with error: &gt;90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	182
18-44	M	0.000%	57,523,012	82
45-64	M	0.001%	38,103,272	417
65-74	M	0.001%	9,264,928	67
Over 75	M	0.005%	7,199,875	327
0-17	F	0.000%	36,108,331	127
18-44	F	0.000%	55,666,902	18
45-64	F	0.001%	39,954,974	277
65-74	F	0.002%	10,858,013	254
Over 75	F	0.005%	11,546,900	543
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>2,294</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	218
18-44	M	0.000%	57,523,012	164
45-64	M	0.001%	38,103,272	194
65-74	M	0.002%	9,264,928	222
Over 75	M	0.003%	7,199,875	184
0-17	F	0.001%	36,108,331	290
18-44	F	0.000%	55,666,902	89
45-64	F	0.001%	39,954,974	208
65-74	F	0.001%	10,858,013	162
Over 75	F	0.004%	11,546,900	448
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>2,179</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	4,473	\$ 60,273	\$ 270
Mortality cost	4,473	\$ 6,492	\$ 29
Disability cost	4,473	\$ -	\$ -
<b>Total</b>	<b>4,473</b>	<b>\$ 66,765</b>	<b>\$ 299</b>

**Measurable Medical Costs**

**Gastrostomy complications - Infection**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	754	2,797	\$ 92,491	\$ 41,658	\$ 50,833	0.000	\$ 50,833
Next 9 months	602	2,203	\$ 56,215	\$ 32,002	\$ 24,213	0.000	\$ 24,213
Year 2	299	1,283	\$ 50,235	\$ 26,846	\$ 23,389	0.000	\$ 23,389
Year 3	149	779	\$ 35,038	\$ 23,902	\$ 11,135	0.003	\$ 11,135
Year 4	78	457	\$ 36,214	\$ 29,013	\$ 7,201	0.222	\$ -
Year 5	39	238	\$ 27,289	\$ 19,654	\$ 7,636	0.145	\$ -
<b>All Periods (present value)</b>							\$ 107,132

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	827	3,191	\$ 21,354	\$ 16,989	\$ 4,365	0.006	\$ 4,365
Next 9 months	718	2,699	\$ 30,594	\$ 23,881	\$ 6,713	0.002	\$ 6,713
<b>All Periods</b>							\$ 10,939

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	2,294	\$ 107,132	\$ 246
<b>Outpatient</b>	2,179	\$ 10,939	\$ 24
<b>Total</b>	<b>4,473</b>	<b>\$ 60,273</b>	<b>\$ 270</b>

**In Hospital Mortality Costs**

**Gastrostomy complications - Infection**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	754	2,797	41	143	0.335%	0.7125
Next 9 months	602	2,203	32	62	2.514%	0.0023

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.95	2.514%	55	\$ 530,480	\$ 29,035,431

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	827	3,191	21	78	0.092%	0.8784
Next 9 months	718	2,699	4	20	-0.174%	0.8023

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	8%	N/A
Male, 18-44	4%	N/A
Male, 45-64	18%	N/A
Male, 65-74	3%	N/A
Male, Over 75	14%	N/A
Female, 0-17	6%	N/A
Female, 18-44	1%	N/A
Female, 45-64	12%	N/A
Female, 65-74	11%	N/A
Female, Over 75	24%	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	2,294	55	\$ 530,480	\$ 12,657	\$ 29
Outpatient	2,179	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>4,473</b>	<b>55</b>	<b>\$ 530,480</b>	<b>\$ 6,492</b>	<b>\$ 29</b>

**Short-Term Disability Costs**

**Gastrostomy complications - Infection**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	10	40	60	60	0.00	0.5072
Outpatient	16	64	24	30	0.00	0.6331

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	2,294	\$ -	\$ -
<b>Outpatient</b>	2,179	\$ -	\$ -
<b>Total</b>	<b>4,473</b>	<b>\$ -</b>	<b>\$ -</b>



**Cost Development****Gastrostomy complications - Mechanical**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	164
18-44	M	0.000%	57,523,012	92
45-64	M	0.001%	38,103,272	215
65-74	M	0.001%	9,264,928	121
Over 75	M	0.005%	7,199,875	334
0-17	F	0.000%	36,108,331	116
18-44	F	0.000%	55,666,902	97
45-64	F	0.001%	39,954,974	233
65-74	F	0.002%	10,858,013	191
Over 75	F	0.003%	11,546,900	391
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>1,955</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.002%	37,833,517	723
18-44	M	0.001%	57,523,012	311
45-64	M	0.001%	38,103,272	487
65-74	M	0.004%	9,264,928	399
Over 75	M	0.012%	7,199,875	834
0-17	F	0.002%	36,108,331	605
18-44	F	0.001%	55,666,902	313
45-64	F	0.001%	39,954,974	486
65-74	F	0.004%	10,858,013	459
Over 75	F	0.011%	11,546,900	1,247
<b>Total</b>		<b>0.002%</b>	<b>304,059,724</b>	<b>5,864</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	7,819	\$ 45,955	\$ 359
Mortality cost	7,819	\$ 9,265	\$ 72
Disability cost	7,819	\$ -	\$ -
<b>Total</b>	<b>7,819</b>	<b>\$ 55,219</b>	<b>\$ 432</b>

**Measurable Medical Costs**  
**Gastrostomy complications - Mechanical**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	2,321	8,704	\$ 88,193	\$ 48,699	\$ 39,493	0.000	\$ 39,493
Next 9 months	1,829	6,840	\$ 63,528	\$ 27,259	\$ 36,269	0.000	\$ 36,269
Year 2	918	4,016	\$ 55,224	\$ 25,626	\$ 29,598	0.000	\$ 29,598
Year 3	517	2,399	\$ 51,558	\$ 21,143	\$ 30,415	0.000	\$ 30,415
Year 4	270	1,390	\$ 44,233	\$ 18,354	\$ 25,879	0.000	\$ 25,879
Year 5	138	750	\$ 39,460	\$ 16,409	\$ 23,051	0.004	\$ 23,051
<b>All Periods (present value)</b>							\$ 175,031

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	6,989	20,868	\$ 16,339	\$ 18,505	\$ (2,167)	1.000	\$ -
Next 9 months	6,132	17,160	\$ 31,647	\$ 28,684	\$ 2,964	0.002	\$ 2,964
<b>All Periods</b>							\$ 2,910

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	1,955	\$ 175,031	\$ 342
<b>Outpatient</b>	5,864	\$ 2,910	\$ 17
<b>Total</b>	<b>7,819</b>	<b>\$ 45,955</b>	<b>\$ 359</b>

**In Hospital Mortality Costs**  
**Gastrostomy complications - Mechanical**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	2,321	8,704	103	473	-0.996%	0.0554
Next 9 months	1,829	6,840	88	190	2.028%	0.0000

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.95	2.028%	38	\$ 563,482	\$ 21,133,843

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	6,989	20,868	273	531	1.350%	0.0000
Next 9 months	6,132	17,160	43	129	-0.040%	0.7623

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	1.350%	79	\$ 648,179	\$ 51,305,997
Next 9 months	0.97	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	8%	12%
Male, 18-44	5%	5%
Male, 45-64	11%	8%
Male, 65-74	6%	7%
Male, Over 75	17%	14%
Female, 0-17	6%	10%
Female, 18-44	5%	5%
Female, 45-64	12%	8%
Female, 65-74	10%	8%
Female, Over 75	20%	21%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	1,955	38	\$ 563,482	\$ 10,808	\$ 21
Outpatient	5,864	79	\$ 648,179	\$ 8,750	\$ 51
<b>Total</b>	<b>7,819</b>	<b>117</b>	<b>\$ 620,949</b>	<b>\$ 9,265</b>	<b>\$ 72</b>

**Short-Term Disability Costs**

**Gastrostomy complications - Mechanical**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	30	105	102	63	39.01	0.0507
Outpatient	46	176	69	43	25.57	0.0743

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	1,955	\$ -	\$ -
<b>Outpatient</b>	5,864	\$ -	\$ -
<b>Total</b>	<b>7,819</b>	<b>\$ -</b>	<b>\$ -</b>

**Cost Development****Hematoma complicating a procedure**

Frequency with which injury is associated with error: 35-65 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	306
18-44	M	0.002%	57,523,012	1,348
45-64	M	0.011%	38,103,272	4,136
65-74	M	0.021%	9,264,928	1,949
Over 75	M	0.036%	7,199,875	2,564
0-17	F	0.000%	36,108,331	143
18-44	F	0.006%	55,666,902	3,582
45-64	F	0.011%	39,954,974	4,534
65-74	F	0.025%	10,858,013	2,684
Over 75	F	0.031%	11,546,900	3,578
<b>Total</b>		<b>0.008%</b>	<b>304,059,724</b>	<b>24,824</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.002%	37,833,517	593
18-44	M	0.004%	57,523,012	2,308
45-64	M	0.009%	38,103,272	3,437
65-74	M	0.019%	9,264,928	1,762
Over 75	M	0.027%	7,199,875	1,928
0-17	F	0.001%	36,108,331	419
18-44	F	0.008%	55,666,902	4,193
45-64	F	0.015%	39,954,974	5,834
65-74	F	0.024%	10,858,013	2,635
Over 75	F	0.023%	11,546,900	2,696
<b>Total</b>		<b>0.008%</b>	<b>304,059,724</b>	<b>25,806</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	50,630	\$ 6,594	\$ 334
Mortality cost	50,630	\$ -	\$ -
Disability cost	50,630	\$ 917	\$ 46
<b>Total</b>	<b>50,630</b>	<b>\$ 7,511</b>	<b>\$ 380</b>

**Measurable Medical Costs**  
**Hematoma complicating a procedure**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	17,625	66,099	\$ 43,820	\$ 33,149	\$ 10,671	0.000	\$ 10,671
Next 9 months	15,509	56,844	\$ 20,537	\$ 18,773	\$ 1,763	0.000	\$ 1,763
Year 2	10,262	37,292	\$ 21,290	\$ 20,813	\$ 477	0.213	\$ -
Year 3	6,398	23,521	\$ 18,837	\$ 18,274	\$ 563	0.193	\$ -
Year 4	4,034	14,672	\$ 17,739	\$ 17,674	\$ 65	0.466	\$ -
Year 5	2,358	8,965	\$ 17,195	\$ 16,689	\$ 506	0.304	\$ -
<b>All Periods (present value)</b>							\$ 12,362

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	18,078	71,664	\$ 13,339	\$ 12,290	\$ 1,049	0.000	\$ 1,049
Next 9 months	16,176	63,255	\$ 13,787	\$ 13,509	\$ 278	0.178	\$ -
<b>All Periods</b>							\$ 1,045

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	24,824	\$ 12,362	\$ 307
<b>Outpatient</b>	25,806	\$ 1,045	\$ 27
<b>Total</b>	<b>50,630</b>	<b>\$ 6,594</b>	<b>\$ 334</b>

**In Hospital Mortality Costs**  
Hematoma complicating a procedure

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	17,625	66,099	214	1,015	-0.323%	0.0015
Next 9 months	15,509	56,844	150	527	0.040%	0.6475

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.323%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	18,078	71,664	142	564	-0.003%	0.9642
Next 9 months	16,176	63,255	27	106	-0.001%	0.9708

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	24,824	0	\$ -	\$ -	\$ -
Outpatient	25,806	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>50,630</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**  
Hematoma complicating a procedure

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	493	1,799	61	51	10.07	0.0062
Outpatient	549	2,123	29	22	7.25	0.0043

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 2	\$ 3	\$ 5
Male, 45-64	\$ 183.86	\$ 8	\$ 5	\$ 12
Male, 65-74	\$ 74.13	\$ 1	\$ 1	\$ 2
Male, Over 75	\$ 44.91	\$ 1	\$ 1	\$ 2
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 5	\$ 4	\$ 9
Female, 45-64	\$ 114.58	\$ 5	\$ 5	\$ 10
Female, 65-74	\$ 64.53	\$ 2	\$ 1	\$ 3
Female, Over 75	\$ 44.33	\$ 2	\$ 1	\$ 2
<b>Total</b>		\$ <b>26</b>	\$ <b>20</b>	\$ <b>46</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	24,824	\$ 1,056	\$ 26
<b>Outpatient</b>	25,806	\$ 783	\$ 20
<b>Total</b>	<b>50,630</b>	\$ <b>917</b>	\$ <b>46</b>



**Cost Development**

**Hemorrhage complicating a procedure**

Frequency with which injury is associated with error: 35-65 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.003%	37,833,517	1,253
18-44	M	0.004%	57,523,012	2,071
45-64	M	0.015%	38,103,272	5,807
65-74	M	0.035%	9,264,928	3,222
Over 75	M	0.057%	7,199,875	4,126
0-17	F	0.002%	36,108,331	810
18-44	F	0.010%	55,666,902	5,415
45-64	F	0.012%	39,954,974	4,812
65-74	F	0.022%	10,858,013	2,368
Over 75	F	0.026%	11,546,900	2,969
<b>Total</b>		<b>0.011%</b>	<b>304,059,724</b>	<b>32,852</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.010%	37,833,517	3,959
18-44	M	0.012%	57,523,012	6,751
45-64	M	0.012%	38,103,272	4,607
65-74	M	0.031%	9,264,928	2,895
Over 75	M	0.066%	7,199,875	4,751
0-17	F	0.011%	36,108,331	3,889
18-44	F	0.017%	55,666,902	9,401
45-64	F	0.011%	39,954,974	4,301
65-74	F	0.018%	10,858,013	1,931
Over 75	F	0.025%	11,546,900	2,882
<b>Total</b>		<b>0.015%</b>	<b>304,059,724</b>	<b>45,365</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	78,216	\$ 8,665	\$ 678
Mortality cost	78,216	\$ 2,828	\$ 221
Disability cost	78,216	\$ 778	\$ 61
<b>Total</b>	<b>78,216</b>	<b>\$ 12,272</b>	<b>\$ 960</b>

**Measurable Medical Costs**

**Hemorrhage complicating a procedure**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	25,461	95,550	\$ 49,129	\$ 33,630	\$ 15,500	0.000	\$ 15,500
Next 9 months	22,164	82,534	\$ 18,209	\$ 17,120	\$ 1,090	0.003	\$ 1,090
Year 2	14,797	55,247	\$ 18,273	\$ 18,837	\$ (564)	0.889	\$ -
Year 3	9,620	35,781	\$ 17,182	\$ 16,896	\$ 286	0.289	\$ -
Year 4	6,241	23,323	\$ 15,983	\$ 16,348	\$ (365)	0.708	\$ -
Year 5	3,817	14,515	\$ 15,684	\$ 15,273	\$ 411	0.280	\$ -
<b>All Periods (present value)</b>							\$ 16,513

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	35,012	130,560	\$ 11,515	\$ 9,503	\$ 2,011	0.000	\$ 2,011
Next 9 months	30,956	114,916	\$ 11,111	\$ 10,115	\$ 997	0.000	\$ 997
<b>All Periods</b>							\$ 2,983

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	32,852	\$ 16,513	\$ 542
<b>Outpatient</b>	45,365	\$ 2,983	\$ 135
<b>Total</b>	<b>78,216</b>	<b>\$ 8,665</b>	<b>\$ 678</b>

**In Hospital Mortality Costs**  
Hemorrhage complicating a procedure

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	25,461	95,550	554	1,616	0.479%	0.0000
Next 9 months	22,164	82,534	282	824	0.274%	0.0004

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.479%	157	\$ 691,339	\$ 108,883,411
Next 9 months	0.98	0.274%	89	\$ 681,197	\$ 60,292,646

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	35,012	130,560	284	894	0.124%	0.0140
Next 9 months	30,956	114,916	56	182	0.023%	0.3789

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.124%	56	\$ 924,173	\$ 52,040,360
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	4%	9%
Male, 18-44	6%	15%
Male, 45-64	18%	10%
Male, 65-74	10%	6%
Male, Over 75	13%	10%
Female, 0-17	2%	9%
Female, 18-44	16%	21%
Female, 45-64	15%	9%
Female, 65-74	7%	4%
Female, Over 75	9%	6%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	32,852	246	\$ 687,690	\$ 5,150	\$ 169
Outpatient	45,365	56	\$ 924,173	\$ 1,147	\$ 52
<b>Total</b>	<b>78,216</b>	<b>302</b>	<b>\$ 731,738</b>	<b>\$ 2,828</b>	<b>\$ 221</b>

**Short-Term Disability Costs**

**Hemorrhage complicating a procedure**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	778	2,766	58	48	10.45	0.0004
Outpatient	1,004	3,798	25	19	5.55	0.0026

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 4	\$ 6	\$ 10
Male, 45-64	\$ 183.86	\$ 11	\$ 5	\$ 16
Male, 65-74	\$ 74.13	\$ 2	\$ 1	\$ 4
Male, Over 75	\$ 44.91	\$ 2	\$ 1	\$ 3
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 8	\$ 7	\$ 15
Female, 45-64	\$ 114.58	\$ 6	\$ 3	\$ 8
Female, 65-74	\$ 64.53	\$ 2	\$ 1	\$ 2
Female, Over 75	\$ 44.33	\$ 1	\$ 1	\$ 2
<b>Total</b>		<b>\$ 36</b>	<b>\$ 25</b>	<b>\$ 61</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	32,852	\$ 1,093	\$ 36
<b>Outpatient</b>	45,365	\$ 550	\$ 25
<b>Total</b>	<b>78,216</b>	<b>\$ 778</b>	<b>\$ 61</b>

**Cost Development****Hypotension - Iatrogenic**

Frequency with which injury is associated with error: 35-65 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	76
18-44	M	0.000%	57,523,012	270
45-64	M	0.005%	38,103,272	2,001
65-74	M	0.012%	9,264,928	1,121
Over 75	M	0.023%	7,199,875	1,691
0-17	F	0.000%	36,108,331	95
18-44	F	0.001%	55,666,902	677
45-64	F	0.005%	39,954,974	1,869
65-74	F	0.012%	10,858,013	1,336
Over 75	F	0.018%	11,546,900	2,062
<b>Total</b>		<b>0.004%</b>	<b>304,059,724</b>	<b>11,199</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	57
18-44	M	0.000%	57,523,012	280
45-64	M	0.003%	38,103,272	1,161
65-74	M	0.009%	9,264,928	864
Over 75	M	0.017%	7,199,875	1,228
0-17	F	0.000%	36,108,331	29
18-44	F	0.001%	55,666,902	451
45-64	F	0.002%	39,954,974	964
65-74	F	0.007%	10,858,013	777
Over 75	F	0.013%	11,546,900	1,503
<b>Total</b>		<b>0.002%</b>	<b>304,059,724</b>	<b>7,315</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	18,514	\$ 8,023	\$ 149
Mortality cost	18,514	\$ -	\$ -
Disability cost	18,514	\$ -	\$ -
<b>Total</b>	<b>18,514</b>	<b>\$ 8,023</b>	<b>\$ 149</b>

**Measurable Medical Costs**  
**Hypotension - Iatrogenic**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	6,389	24,674	\$ 40,329	\$ 32,011	\$ 8,317	0.000	\$ 8,317
Next 9 months	5,411	21,167	\$ 22,977	\$ 19,875	\$ 3,101	0.000	\$ 3,101
Year 2	3,268	13,450	\$ 23,171	\$ 23,109	\$ 62	0.474	\$ -
Year 3	1,952	7,945	\$ 21,848	\$ 20,113	\$ 1,735	0.073	\$ -
Year 4	1,208	4,931	\$ 19,274	\$ 19,019	\$ 255	0.420	\$ -
Year 5	710	2,690	\$ 18,517	\$ 18,330	\$ 188	0.455	\$ -
<b>All Periods (present value)</b>							\$ 11,331

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	4,275	17,012	\$ 13,256	\$ 12,741	\$ 515	0.136	\$ -
Next 9 months	3,764	14,980	\$ 21,988	\$ 18,975	\$ 3,013	0.001	\$ 3,013
<b>All Periods</b>							\$ 2,958

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	11,199	\$ 11,331	\$ 127
<b>Outpatient</b>	7,315	\$ 2,958	\$ 22
<b>Total</b>	<b>18,514</b>	<b>\$ 8,023</b>	<b>\$ 149</b>

**In Hospital Mortality Costs**  
Hypotension - Iatrogenic

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	6,389	24,674	133	471	0.169%	0.3824
Next 9 months	5,411	21,167	75	274	0.091%	0.6009

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	4,275	17,012	74	285	0.054%	0.8071
Next 9 months	3,764	14,980	21	63	0.137%	0.2675

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	11,199	0	\$ -	\$ -	\$ -
Outpatient	7,315	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>18,514</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

**Hypotension - Iatrogenic**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	99	357	63	56	7.11	0.2358
Outpatient	79	315	39	34	5.38	0.2735

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	11,199	\$ -	\$ -
<b>Outpatient</b>	7,315	\$ -	\$ -
<b>Total</b>	<b>18,514</b>	<b>\$ -</b>	<b>\$ -</b>



**Cost Development****Iatrogenic cerebrovascular infarction or hemorrhage**

Frequency with which injury is associated with error: &gt;90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	73
18-44	M	0.000%	57,523,012	143
45-64	M	0.001%	38,103,272	522
65-74	M	0.004%	9,264,928	333
Over 75	M	0.007%	7,199,875	491
0-17	F	0.000%	36,108,331	54
18-44	F	0.001%	55,666,902	304
45-64	F	0.001%	39,954,974	555
65-74	F	0.004%	10,858,013	438
Over 75	F	0.004%	11,546,900	496
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>3,409</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	-
18-44	M	0.000%	57,523,012	82
45-64	M	0.001%	38,103,272	239
65-74	M	0.001%	9,264,928	67
Over 75	M	0.005%	7,199,875	327
0-17	F	0.000%	36,108,331	18
18-44	F	0.000%	55,666,902	143
45-64	F	0.000%	39,954,974	194
65-74	F	0.001%	10,858,013	92
Over 75	F	0.003%	11,546,900	378
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>1,540</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	4,949	\$ 29,739	\$ 147
Mortality cost	4,949	\$ 10,942	\$ 54
Disability cost	4,949	\$ -	\$ -
<b>Total</b>	<b>4,949</b>	<b>\$ 40,681</b>	<b>\$ 201</b>

**Measurable Medical Costs**

**Iatrogenic cerebrovascular infarction or hemorrhage**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,798	6,767	\$ 91,620	\$ 56,860	\$ 34,760	0.000	\$ 34,760
Next 9 months	1,446	5,657	\$ 31,640	\$ 24,801	\$ 6,839	0.000	\$ 6,839
Year 2	922	3,716	\$ 27,702	\$ 25,914	\$ 1,789	0.226	\$ -
Year 3	582	2,353	\$ 21,336	\$ 21,066	\$ 271	0.445	\$ -
Year 4	382	1,509	\$ 20,260	\$ 19,762	\$ 498	0.408	\$ -
Year 5	224	914	\$ 17,833	\$ 17,758	\$ 74	0.487	\$ -
<b>All Periods (present value)</b>							<b>\$ 41,345</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	711	2,809	\$ 17,496	\$ 15,507	\$ 1,989	0.100	\$ -
Next 9 months	617	2,489	\$ 21,813	\$ 17,694	\$ 4,119	0.034	\$ 4,119
<b>All Periods</b>							<b>\$ 4,044</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	3,409	\$ 41,345	\$ 141
<b>Outpatient</b>	1,540	\$ 4,044	\$ 6
<b>Total</b>	<b>4,949</b>	<b>\$ 29,739</b>	<b>\$ 147</b>

**In Hospital Mortality Costs**

iatrogenic cerebrovascular infarction or hemorrhage

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,798	6,767	127	321	2.319%	0.0001
Next 9 months	1,446	5,657	43	120	0.851%	0.0537

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	2.319%	79	\$ 538,496	\$ 42,569,643
Next 9 months	0.95	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	711	2,809	27	64	1.524%	0.0221
Next 9 months	617	2,489	6	11	0.560%	0.1224

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	1.524%	23	\$ 493,389	\$ 11,578,046
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	2%	0%
Male, 18-44	4%	5%
Male, 45-64	15%	15%
Male, 65-74	10%	4%
Male, Over 75	14%	21%
Female, 0-17	2%	1%
Female, 18-44	9%	9%
Female, 45-64	16%	13%
Female, 65-74	13%	6%
Female, Over 75	15%	25%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	3,409	79	\$ 538,496	\$ 12,488	\$ 43
Outpatient	1,540	23	\$ 493,389	\$ 7,520	\$ 12
<b>Total</b>	<b>4,949</b>	<b>103</b>	<b>\$ 528,171</b>	<b>\$ 10,942</b>	<b>\$ 54</b>

**Short-Term Disability Costs**

iatrogenic cerebrovascular infarction or hemorrhage

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	27	103	122	74	47.64	0.0603
Outpatient	17	64	22	37	0.00	0.8174

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	3,409	\$ -	\$ -
Outpatient	1,540	\$ -	\$ -
<b>Total</b>	<b>4,949</b>	<b>\$ -</b>	<b>\$ -</b>

### Cost Development

#### Infection and inflammatory reaction due to internal prosthetic device, implant, and graft

Frequency with which injury is associated with error: <10 %

#### Inpatient Errors Prevalence Rates

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	69
18-44	M	0.000%	57,523,012	206
45-64	M	0.001%	38,103,272	568
65-74	M	0.004%	9,264,928	349
Over 75	M	0.005%	7,199,875	376
0-17	F	0.000%	36,108,331	47
18-44	F	0.000%	55,666,902	202
45-64	F	0.001%	39,954,974	516
65-74	F	0.003%	10,858,013	311
Over 75	F	0.003%	11,546,900	333
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>2,977</b>

#### Outpatient Errors Prevalence Rates

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	88
18-44	M	0.000%	57,523,012	247
45-64	M	0.002%	38,103,272	576
65-74	M	0.004%	9,264,928	338
Over 75	M	0.006%	7,199,875	434
0-17	F	0.000%	36,108,331	74
18-44	F	0.001%	55,666,902	401
45-64	F	0.002%	39,954,974	753
65-74	F	0.004%	10,858,013	427
Over 75	F	0.004%	11,546,900	455
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>3,794</b>

#### Summary of Measurable Costs

	Number of errors	Cost per error	Total cost (millions)
Medical cost	6,771	\$ 58,746	\$ 398
Mortality cost	6,771	\$ 2,862	\$ 19
Disability cost	6,771	\$ 657	\$ 4
<b>Total</b>	<b>6,771</b>	<b>\$ 62,265</b>	<b>\$ 422</b>

**Measurable Medical Costs**

**Infection and inflammatory reaction due to internal prosthetic device, implant, and graft**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	24,456	81,715	\$ 79,992	\$ 48,726	\$ 31,266	0.000	\$ 31,266
Next 9 months	20,845	66,169	\$ 65,186	\$ 38,196	\$ 26,990	0.000	\$ 26,990
Year 2	12,762	41,871	\$ 60,490	\$ 37,205	\$ 23,285	0.000	\$ 23,285
Year 3	7,674	26,059	\$ 46,417	\$ 31,875	\$ 14,543	0.000	\$ 14,543
Year 4	4,713	15,957	\$ 40,388	\$ 27,301	\$ 13,088	0.000	\$ 13,088
Year 5	2,709	9,401	\$ 37,647	\$ 26,170	\$ 11,477	0.000	\$ 11,477
<b>All Periods (present value)</b>							<b>\$ 115,277</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	27,413	100,539	\$ 20,919	\$ 15,667	\$ 5,252	0.000	\$ 5,252
Next 9 months	24,557	88,546	\$ 35,024	\$ 25,692	\$ 9,333	0.000	\$ 9,333
<b>All Periods</b>							<b>\$ 14,394</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	2,977	\$ 115,277	\$ 343
<b>Outpatient</b>	3,794	\$ 14,394	\$ 55
<b>Total</b>	<b>6,771</b>	<b>\$ 58,746</b>	<b>\$ 398</b>

**In Hospital Mortality Costs**

**Infection and inflammatory reaction due to internal prosthetic device, implant, and graft**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	24,456	81,715	1,021	4,371	-1.180%	0.0000
Next 9 months	20,845	66,169	815	2,033	0.840%	0.0000

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-1.180%	0	\$ -	\$ -
Next 9 months	0.95	0.840%	24	\$ 577,547	\$ 13,661,300

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	27,413	100,539	539	1,726	0.245%	0.0063
Next 9 months	24,557	88,546	145	452	0.082%	0.1209

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.245%	9	\$ 614,732	\$ 5,715,880
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	2%	2%
Male, 18-44	7%	7%
Male, 45-64	19%	15%
Male, 65-74	12%	9%
Male, Over 75	13%	11%
Female, 0-17	2%	2%
Female, 18-44	7%	11%
Female, 45-64	17%	20%
Female, 65-74	10%	11%
Female, Over 75	11%	12%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	2,977	24	\$ 577,547	\$ 4,589	\$ 14
Outpatient	3,794	9	\$ 614,732	\$ 1,506	\$ 6
<b>Total</b>	<b>6,771</b>	<b>33</b>	<b>\$ 588,040</b>	<b>\$ 2,862</b>	<b>\$ 19</b>

**Short-Term Disability Costs**

Infection and inflammatory reaction due to internal prosthetic device, implant, and graft

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	515	1,597	73	58	14.60	0.0015
Outpatient	633	2,183	32	31	1.07	0.3569

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 1	\$ -	\$ 1
Male, 45-64	\$ 183.86	\$ 2	\$ -	\$ 2
Male, 65-74	\$ 74.13	\$ 0	\$ -	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ -	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 0	\$ -	\$ 0
Female, 45-64	\$ 114.58	\$ 1	\$ -	\$ 1
Female, 65-74	\$ 64.53	\$ 0	\$ -	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ -	\$ 0
<b>Total</b>		<b>\$ 4</b>	<b>\$ -</b>	<b>\$ 4</b>

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	2,977	\$ 1,495	\$ 4
Outpatient	3,794	\$ -	\$ -
<b>Total</b>	<b>6,771</b>	<b>\$ 657</b>	<b>\$ 4</b>



**Cost Development****Infection due to central venous catheter**

Frequency with which injury is associated with error: &gt;90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	182
18-44	M	0.000%	57,523,012	205
45-64	M	0.002%	38,103,272	701
65-74	M	0.002%	9,264,928	200
Over 75	M	0.002%	7,199,875	164
0-17	F	0.000%	36,108,331	163
18-44	F	0.001%	55,666,902	482
45-64	F	0.002%	39,954,974	652
65-74	F	0.003%	10,858,013	346
Over 75	F	0.003%	11,546,900	401
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>3,495</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	55
18-44	M	0.000%	57,523,012	123
45-64	M	0.001%	38,103,272	507
65-74	M	0.004%	9,264,928	355
Over 75	M	0.003%	7,199,875	225
0-17	F	0.000%	36,108,331	127
18-44	F	0.001%	55,666,902	357
45-64	F	0.002%	39,954,974	791
65-74	F	0.004%	10,858,013	485
Over 75	F	0.005%	11,546,900	543
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>3,567</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	7,062	\$ 83,365	\$ 589
Mortality cost	7,062	\$ -	\$ -
Disability cost	7,062	#N/A	#N/A
<b>Total</b>	<b>7,062</b>	<b>#N/A</b>	<b>#N/A</b>

**Measurable Medical Costs**

**Infection due to central venous catheter**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	270	969	\$ 131,251	\$ 67,322	\$ 63,929	0.000	\$ 63,929
Next 9 months	177	591	\$ 84,058	\$ 36,418	\$ 47,640	0.000	\$ 47,640
Year 2	3	64	\$ 440	\$ 48,686	\$ (48,246)	1.000	\$ -
Year 3	-	-	\$ -	\$ -	\$ -	-	\$ -
Year 4	-	-	\$ -	\$ -	\$ -	-	\$ -
Year 5	-	-	\$ -	\$ -	\$ -	-	\$ -
<b>All Periods (present value)</b>							\$ 110,462

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	234	919	\$ 44,074	\$ 27,129	\$ 16,945	0.000	\$ 16,945
Next 9 months	163	647	\$ 85,174	\$ 44,502	\$ 40,672	0.001	\$ 40,672
<b>All Periods</b>							\$ 56,810

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	3,495	\$ 110,462	\$ 386
<b>Outpatient</b>	3,567	\$ 56,810	\$ 203
<b>Total</b>	<b>7,062</b>	<b>\$ 83,365</b>	<b>\$ 589</b>

**In Hospital Mortality Costs**

**Infection due to central venous catheter**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	270	969	13	75	-2.910%	0.0994
Next 9 months	177	591	8	20	1.065%	0.5101

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.92	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	234	919	3	9	0.265%	0.7176
Next 9 months	163	647	0	3	-0.490%	1.0000

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	3,495	0	\$ -	\$ -	\$ -
Outpatient	3,567	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>7,062</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

**Infection due to central venous catheter**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	3	10	166	105	61.70	0.2625
Outpatient	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	#N/A	#N/A
Male, 18-44	\$ 172.81	\$ -	#N/A	#N/A
Male, 45-64	\$ 183.86	\$ -	#N/A	#N/A
Male, 65-74	\$ 74.13	\$ -	#N/A	#N/A
Male, Over 75	\$ 44.91	\$ -	#N/A	#N/A
Female, 0-17	\$ -	\$ -	#N/A	#N/A
Female, 18-44	\$ 139.06	\$ -	#N/A	#N/A
Female, 45-64	\$ 114.58	\$ -	#N/A	#N/A
Female, 65-74	\$ 64.53	\$ -	#N/A	#N/A
Female, Over 75	\$ 44.33	\$ -	#N/A	#N/A
<b>Total</b>		\$ -	<b>#N/A</b>	<b>#N/A</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	3,495	\$ -	\$ -
<b>Outpatient</b>	3,567	#N/A	#N/A
<b>Total</b>	<b>7,062</b>	<b>#N/A</b>	<b>#N/A</b>

**Cost Development****Infection following infusion, injection, transfusion, vaccination****Frequency with which injury is associated with error: >90 %****Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	563
18-44	M	0.002%	57,523,012	902
45-64	M	0.004%	38,103,272	1,387
65-74	M	0.007%	9,264,928	687
Over 75	M	0.006%	7,199,875	409
0-17	F	0.002%	36,108,331	634
18-44	F	0.002%	55,666,902	1,215
45-64	F	0.004%	39,954,974	1,679
65-74	F	0.004%	10,858,013	438
Over 75	F	0.004%	11,546,900	472
<b>Total</b>		<b>0.003%</b>	<b>304,059,724</b>	<b>8,386</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	55
18-44	M	0.000%	57,523,012	82
45-64	M	0.000%	38,103,272	15
65-74	M	0.000%	9,264,928	-
Over 75	M	0.000%	7,199,875	-
0-17	F	0.000%	36,108,331	163
18-44	F	0.000%	55,666,902	54
45-64	F	0.000%	39,954,974	55
65-74	F	0.000%	10,858,013	46
Over 75	F	0.000%	11,546,900	-
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>470</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	8,855	\$ 63,911	\$ 566
Mortality cost	8,855	\$ 14,172	\$ 125
Disability cost	8,855	\$ -	\$ -
<b>Total</b>	<b>8,855</b>	<b>\$ 78,083</b>	<b>\$ 691</b>

**Measurable Medical Costs**  
**Infection following infusion, injection, transfusion, vaccination**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,905	6,993	\$ 68,411	\$ 41,167	\$ 27,243	0.000	\$ 27,243
Next 9 months	1,534	5,382	\$ 60,896	\$ 36,891	\$ 24,005	0.000	\$ 24,005
Year 2	838	3,003	\$ 53,717	\$ 36,294	\$ 17,423	0.000	\$ 17,423
Year 3	487	1,882	\$ 35,875	\$ 31,730	\$ 4,145	0.163	\$ -
Year 4	301	1,204	\$ 31,477	\$ 25,536	\$ 5,941	0.086	\$ -
Year 5	184	710	\$ 22,919	\$ 24,824	\$ (1,906)	0.685	\$ -
<b>All Periods (present value)</b>							\$ 67,375

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,717	6,798	\$ 10,024	\$ 7,977	\$ 2,047	0.004	\$ 2,047
Next 9 months	1,554	6,159	\$ 14,252	\$ 12,379	\$ 1,873	0.073	\$ -
<b>All Periods</b>							\$ 2,040

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	8,386	\$ 67,375	\$ 565
<b>Outpatient</b>	470	\$ 2,040	\$ 1
<b>Total</b>	<b>8,855</b>	<b>\$ 63,911</b>	<b>\$ 566</b>

**In Hospital Mortality Costs**

**Infection following infusion, injection, transfusion, vaccination**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,905	6,993	79	281	0.124%	0.8082
Next 9 months	1,534	5,382	62	117	1.870%	0.0000

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.96	1.870%	151	\$ 833,773	\$ 125,496,960

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,717	6,798	20	78	0.020%	0.9452
Next 9 months	1,554	6,159	3	20	-0.129%	0.6017

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	7%	N/A
Male, 18-44	11%	N/A
Male, 45-64	17%	N/A
Male, 65-74	8%	N/A
Male, Over 75	5%	N/A
Female, 0-17	8%	N/A
Female, 18-44	14%	N/A
Female, 45-64	20%	N/A
Female, 65-74	5%	N/A
Female, Over 75	6%	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	8,386	151	\$ 833,773	\$ 14,965	\$ 125
Outpatient	470	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>8,855</b>	<b>151</b>	<b>\$ 833,773</b>	<b>\$ 14,172</b>	<b>\$ 125</b>

**Short-Term Disability Costs**

Infection following infusion, injection, transfusion, vaccination

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	47	174	49	31	17.73	0.0750
Outpatient	50	186	27	25	1.69	0.4412

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	8,386	\$ -	\$ -
Outpatient	470	\$ -	\$ -
<b>Total</b>	<b>8,855</b>	<b>\$ -</b>	<b>\$ -</b>



**Cost Development****Infection following other infusion, injection, transfusion, or vaccination**

Frequency with which injury is associated with error: &gt;90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	36
18-44	M	0.000%	57,523,012	20
45-64	M	0.000%	38,103,272	119
65-74	M	0.001%	9,264,928	133
Over 75	M	0.003%	7,199,875	184
0-17	F	0.000%	36,108,331	-
18-44	F	0.000%	55,666,902	143
45-64	F	0.000%	39,954,974	111
65-74	F	0.000%	10,858,013	23
Over 75	F	0.002%	11,546,900	189
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>959</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.002%	37,833,517	745
18-44	M	0.000%	57,523,012	205
45-64	M	0.000%	38,103,272	104
65-74	M	0.001%	9,264,928	89
Over 75	M	0.001%	7,199,875	61
0-17	F	0.002%	36,108,331	598
18-44	F	0.001%	55,666,902	393
45-64	F	0.001%	39,954,974	277
65-74	F	0.000%	10,858,013	23
Over 75	F	0.001%	11,546,900	94
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>2,590</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	3,549	\$ 13,289	\$ 47
Mortality cost	3,549	\$ -	\$ -
Disability cost	3,549	\$ -	\$ -
<b>Total</b>	<b>3,549</b>	<b>\$ 13,289</b>	<b>\$ 47</b>

**Measurable Medical Costs**

**Infection following other infusion, injection, transfusion, or vaccination**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	76	282	\$ 49,272	\$ 35,365	\$ 13,907	0.035	\$ 13,907
Next 9 months	47	195	\$ 59,055	\$ 23,081	\$ 35,974	0.034	\$ 35,974
Year 2	3	37	\$ 45,345	\$ 20,405	\$ 24,940	0.230	\$ -
Year 3	-	-	\$ -	\$ -	\$ -	-	\$ -
Year 4	-	-	\$ -	\$ -	\$ -	-	\$ -
Year 5	-	-	\$ -	\$ -	\$ -	-	\$ -
<b>All Periods (present value)</b>							<b>\$ 49,171</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	216	863	\$ 7,207	\$ 4,940	\$ 2,267	0.101	\$ -
Next 9 months	142	646	\$ 10,924	\$ 8,380	\$ 2,544	0.157	\$ -
<b>All Periods</b>							<b>\$ -</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	959	\$ 49,171	\$ 47
<b>Outpatient</b>	2,590	\$ -	\$ -
<b>Total</b>	<b>3,549</b>	<b>\$ 13,289</b>	<b>\$ 47</b>

**In Hospital Mortality Costs**

**Infection following other infusion, injection, transfusion, or vaccination**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	76	282	2	13	-1.919%	0.7465
Next 9 months	47	195	2	3	2.776%	0.2500

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.95	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	216	863	1	0	0.463%	0.2002
Next 9 months	142	646	0	0	0.000%	N/A

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	1.00	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	959	0	\$ -	\$ -	\$ -
Outpatient	2,590	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>3,549</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

Infection following other infusion, injection, transfusion, or vaccination

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	1	4	43	94	0.00	NA
Outpatient	3	12	-	6	0.00	0.9135

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	959	\$ -	\$ -
Outpatient	2,590	\$ -	\$ -
<b>Total</b>	<b>3,549</b>	<b>\$ -</b>	<b>\$ -</b>

**Cost Development****Infection of amputation stump**

Frequency with which injury is associated with error: &gt;90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	18
18-44	M	0.001%	57,523,012	389
45-64	M	0.003%	38,103,272	999
65-74	M	0.006%	9,264,928	510
Over 75	M	0.006%	7,199,875	409
0-17	F	0.000%	36,108,331	-
18-44	F	0.000%	55,666,902	107
45-64	F	0.001%	39,954,974	430
65-74	F	0.002%	10,858,013	185
Over 75	F	0.002%	11,546,900	236
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>3,284</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	55
18-44	M	0.001%	57,523,012	307
45-64	M	0.001%	38,103,272	537
65-74	M	0.005%	9,264,928	421
Over 75	M	0.007%	7,199,875	512
0-17	F	0.000%	36,108,331	54
18-44	F	0.000%	55,666,902	143
45-64	F	0.001%	39,954,974	236
65-74	F	0.001%	10,858,013	115
Over 75	F	0.003%	11,546,900	330
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>2,711</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	5,994	\$ 40,609	\$ 243
Mortality cost	5,994	\$ 5,338	\$ 32
Disability cost	5,994	\$ -	\$ -
<b>Total</b>	<b>5,994</b>	<b>\$ 45,947</b>	<b>\$ 275</b>

**Measurable Medical Costs**  
**Infection of amputation stump**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,381	4,409	\$ 67,014	\$ 42,323	\$ 24,691	0.000	\$ 24,691
Next 9 months	1,186	3,721	\$ 52,820	\$ 35,165	\$ 17,655	0.000	\$ 17,655
Year 2	718	2,430	\$ 46,289	\$ 38,758	\$ 7,531	0.009	\$ 7,531
Year 3	436	1,555	\$ 46,047	\$ 36,909	\$ 9,139	0.035	\$ 9,139
Year 4	251	981	\$ 39,925	\$ 36,036	\$ 3,889	0.261	\$ -
Year 5	130	599	\$ 36,787	\$ 37,545	\$ (757)	0.547	\$ -
<b>All Periods (present value)</b>							\$ 57,623

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,139	4,474	\$ 21,508	\$ 14,445	\$ 7,063	0.000	\$ 7,063
Next 9 months	1,011	3,900	\$ 35,966	\$ 22,765	\$ 13,201	0.000	\$ 13,201
<b>All Periods</b>							\$ 19,997

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	3,284	\$ 57,623	\$ 189
<b>Outpatient</b>	2,711	\$ 19,997	\$ 54
<b>Total</b>	<b>5,994</b>	<b>\$ 40,609</b>	<b>\$ 243</b>

**In Hospital Mortality Costs**  
Infection of amputation stump

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,381	4,409	41	109	0.501%	0.3056
Next 9 months	1,186	3,721	44	78	1.613%	0.0019

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	1.613%	52	\$ 619,387	\$ 31,997,196

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,139	4,474	29	105	0.197%	0.6968
Next 9 months	1,011	3,900	9	20	0.392%	0.1560

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	1%	N/A
Male, 18-44	12%	N/A
Male, 45-64	30%	N/A
Male, 65-74	16%	N/A
Male, Over 75	12%	N/A
Female, 0-17	0%	N/A
Female, 18-44	3%	N/A
Female, 45-64	13%	N/A
Female, 65-74	6%	N/A
Female, Over 75	7%	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	3,284	52	\$ 619,387	\$ 9,744	\$ 32
Outpatient	2,711	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>5,994</b>	<b>52</b>	<b>\$ 619,387</b>	<b>\$ 5,338</b>	<b>\$ 32</b>

**Short-Term Disability Costs**  
Infection of amputation stump

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	23	70	89	80	8.98	0.3810
Outpatient	26	92	23	17	6.53	0.2660

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	3,284	\$ -	\$ -
Outpatient	2,711	\$ -	\$ -
<b>Total</b>	<b>5,994</b>	<b>\$ -</b>	<b>\$ -</b>



**Cost Development****Infusion or transfusion reaction**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	73
18-44	M	0.000%	57,523,012	78
45-64	M	0.001%	38,103,272	208
65-74	M	0.001%	9,264,928	131
Over 75	M	0.003%	7,199,875	213
0-17	F	0.000%	36,108,331	56
18-44	F	0.000%	55,666,902	169
45-64	F	0.001%	39,954,974	204
65-74	F	0.002%	10,858,013	175
Over 75	F	0.003%	11,546,900	313
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>1,620</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	43
18-44	M	0.000%	57,523,012	49
45-64	M	0.000%	38,103,272	92
65-74	M	0.001%	9,264,928	121
Over 75	M	0.003%	7,199,875	189
0-17	F	0.000%	36,108,331	60
18-44	F	0.000%	55,666,902	148
45-64	F	0.000%	39,954,974	112
65-74	F	0.001%	10,858,013	115
Over 75	F	0.001%	11,546,900	134
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>1,062</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	2,682	\$ 41,082	\$ 110
Mortality cost	2,682	\$ 10,603	\$ 28
Disability cost	2,682	\$ -	\$ -
<b>Total</b>	<b>2,682</b>	<b>\$ 51,686</b>	<b>\$ 139</b>

**Measurable Medical Costs**  
**Infusion or transfusion reaction**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	2,276	8,629	\$ 81,967	\$ 50,792	\$ 31,175	0.000	\$ 31,175
Next 9 months	1,818	6,901	\$ 53,426	\$ 39,427	\$ 13,999	0.000	\$ 13,999
Year 2	1,093	3,976	\$ 39,425	\$ 32,223	\$ 7,203	0.014	\$ 7,203
Year 3	656	2,411	\$ 32,495	\$ 25,705	\$ 6,789	0.049	\$ 6,789
Year 4	381	1,427	\$ 26,737	\$ 23,546	\$ 3,191	0.174	\$ -
Year 5	211	885	\$ 30,986	\$ 22,397	\$ 8,590	0.040	\$ 8,590
<b>All Periods (present value)</b>							\$ 65,518

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	2,318	9,193	\$ 20,927	\$ 17,115	\$ 3,812	0.007	\$ 3,812
Next 9 months	2,030	8,056	\$ 24,521	\$ 22,901	\$ 1,620	0.153	\$ -
<b>All Periods</b>							\$ 3,798

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	1,620	\$ 65,518	\$ 106
<b>Outpatient</b>	1,062	\$ 3,798	\$ 4
<b>Total</b>	<b>2,682</b>	<b>\$ 41,082</b>	<b>\$ 110</b>

**In Hospital Mortality Costs**  
**Infusion or transfusion reaction**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	2,276	8,629	140	402	1.481%	0.0038
Next 9 months	1,818	6,901	88	220	1.653%	0.0007

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	1.481%	24	\$ 578,569	\$ 13,879,817
Next 9 months	0.95	1.653%	26	\$ 570,080	\$ 14,561,942

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	2,318	9,193	52	182	0.259%	0.4294
Next 9 months	2,030	8,056	21	64	0.238%	0.3026

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	5%	N/A
Male, 18-44	5%	N/A
Male, 45-64	13%	N/A
Male, 65-74	8%	N/A
Male, Over 75	13%	N/A
Female, 0-17	3%	N/A
Female, 18-44	10%	N/A
Female, 45-64	13%	N/A
Female, 65-74	11%	N/A
Female, Over 75	19%	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	1,620	50	\$ 574,191	\$ 17,552	\$ 28
Outpatient	1,062	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>2,682</b>	<b>50</b>	<b>\$ 574,191</b>	<b>\$ 10,603</b>	<b>\$ 28</b>

**Short-Term Disability Costs**  
**Infusion or transfusion reaction**

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	55	201	67	67	0.04	0.4989
Outpatient	765	3,050	8	12	0.00	0.9931

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	1,620	\$ -	\$ -
<b>Outpatient</b>	1,062	\$ -	\$ -
<b>Total</b>	<b>2,682</b>	<b>\$ -</b>	<b>\$ -</b>

**Cost Development**

Late effects of other and unspecified external causes

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	3
18-44	M	0.000%	57,523,012	9
45-64	M	0.000%	38,103,272	20
65-74	M	0.000%	9,264,928	16
Over 75	M	0.000%	7,199,875	10
0-17	F	0.000%	36,108,331	4
18-44	F	0.000%	55,666,902	16
45-64	F	0.000%	39,954,974	22
65-74	F	0.000%	10,858,013	18
Over 75	F	0.000%	11,546,900	19
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>136</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	43
18-44	M	0.000%	57,523,012	90
45-64	M	0.000%	38,103,272	133
65-74	M	0.001%	9,264,928	63
Over 75	M	0.001%	7,199,875	58
0-17	F	0.000%	36,108,331	37
18-44	F	0.000%	55,666,902	167
45-64	F	0.000%	39,954,974	183
65-74	F	0.001%	10,858,013	84
Over 75	F	0.001%	11,546,900	78
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>936</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	1,072	\$ 10,231	\$ 11
Mortality cost	1,072	\$ 2,212	\$ 2
Disability cost	1,072	\$ 639	\$ 1
<b>Total</b>	<b>1,072</b>	<b>\$ 13,081</b>	<b>\$ 14</b>

**Measurable Medical Costs**

Late effects of other and unspecified external causes

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	737	2,860	\$ 52,967	\$ 36,803	\$ 16,163	0.000	\$ 16,163
Next 9 months	638	2,398	\$ 35,401	\$ 25,906	\$ 9,495	0.002	\$ 9,495
Year 2	375	1,472	\$ 37,300	\$ 22,632	\$ 14,668	0.003	\$ 14,668
Year 3	206	806	\$ 28,449	\$ 19,699	\$ 8,751	0.029	\$ 8,751
Year 4	120	479	\$ 27,098	\$ 18,016	\$ 9,082	0.063	\$ -
Year 5	59	265	\$ 27,726	\$ 15,120	\$ 12,606	0.131	\$ -
<b>All Periods (present value)</b>							\$ 47,584

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	6,101	24,214	\$ 10,104	\$ 8,951	\$ 1,153	0.002	\$ 1,153
Next 9 months	5,425	21,561	\$ 16,670	\$ 12,933	\$ 3,737	0.000	\$ 3,737
<b>All Periods</b>							\$ 4,817

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	136	\$ 47,584	\$ 6
<b>Outpatient</b>	936	\$ 4,817	\$ 5
<b>Total</b>	<b>1,072</b>	<b>\$ 10,231</b>	<b>\$ 11</b>

**In Hospital Mortality Costs**

Late effects of other and unspecified external causes

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	737	2,860	13	54	-0.140%	0.8024
Next 9 months	638	2,398	9	29	0.201%	0.6850

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	6,101	24,214	71	203	0.322%	0.0177
Next 9 months	5,425	21,561	8	52	-0.093%	0.1959

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.322%	3	\$ 787,238	\$ 2,370,727
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	5%
Male, 18-44	N/A	10%
Male, 45-64	N/A	14%
Male, 65-74	N/A	7%
Male, Over 75	N/A	6%
Female, 0-17	N/A	4%
Female, 18-44	N/A	18%
Female, 45-64	N/A	19%
Female, 65-74	N/A	9%
Female, Over 75	N/A	8%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	136	0	\$ -	\$ -	\$ -
Outpatient	936	3	\$ 787,238	\$ 2,532	\$ 2
<b>Total</b>	<b>1,072</b>	<b>3</b>	<b>\$ 787,238</b>	<b>\$ 2,212</b>	<b>\$ 2</b>

**Short-Term Disability Costs**

Late effects of other and unspecified external causes

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	34	121	102	51	50.82	0.0007
Outpatient	181	701	25	18	7.06	0.0877

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 0	\$ -	\$ 0
Male, 45-64	\$ 183.86	\$ 0	\$ -	\$ 0
Male, 65-74	\$ 74.13	\$ 0	\$ -	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ -	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 0	\$ -	\$ 0
Female, 45-64	\$ 114.58	\$ 0	\$ -	\$ 0
Female, 65-74	\$ 64.53	\$ 0	\$ -	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ -	\$ 0
<b>Total</b>		<b>\$ 1</b>	<b>\$ -</b>	<b>\$ 1</b>

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	136	\$ 5,048	\$ 1
Outpatient	936	\$ -	\$ -
<b>Total</b>	<b>1,072</b>	<b>\$ 639</b>	<b>\$ 1</b>



**Cost Development**

**Mechanical complication of cardiac device, implant, and graft**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	90
18-44	M	0.000%	57,523,012	228
45-64	M	0.003%	38,103,272	1,172
65-74	M	0.016%	9,264,928	1,465
Over 75	M	0.030%	7,199,875	2,147
0-17	F	0.000%	36,108,331	69
18-44	F	0.000%	55,666,902	216
45-64	F	0.002%	39,954,974	614
65-74	F	0.005%	10,858,013	525
Over 75	F	0.016%	11,546,900	1,878
<b>Total</b>		<b>0.003%</b>	<b>304,059,724</b>	<b>8,406</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	82
18-44	M	0.001%	57,523,012	412
45-64	M	0.007%	38,103,272	2,822
65-74	M	0.038%	9,264,928	3,530
Over 75	M	0.096%	7,199,875	6,879
0-17	F	0.000%	36,108,331	107
18-44	F	0.001%	55,666,902	461
45-64	F	0.003%	39,954,974	1,318
65-74	F	0.014%	10,858,013	1,574
Over 75	F	0.047%	11,546,900	5,384
<b>Total</b>		<b>0.007%</b>	<b>304,059,724</b>	<b>22,568</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	30,973	\$ 5,946	\$ 184
Mortality cost	30,973	\$ -	\$ -
Disability cost	30,973	\$ -	\$ -
<b>Total</b>	<b>30,973</b>	<b>\$ 5,946</b>	<b>\$ 184</b>

**Measurable Medical Costs**

**Mechanical complication of cardiac device, implant, and graft**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	13,279	44,478	\$ 47,908	\$ 40,160	\$ 7,748	0.000	\$ 7,748
Next 9 months	11,626	38,153	\$ 23,021	\$ 20,920	\$ 2,101	0.000	\$ 2,101
Year 2	7,745	25,717	\$ 25,408	\$ 24,634	\$ 773	0.154	\$ -
Year 3	5,017	16,599	\$ 23,877	\$ 22,168	\$ 1,709	0.017	\$ 1,709
Year 4	3,172	10,253	\$ 24,681	\$ 21,004	\$ 3,677	0.002	\$ 3,677
Year 5	1,856	5,774	\$ 23,383	\$ 20,699	\$ 2,684	0.041	\$ 2,684
<b>All Periods (present value)</b>							\$ 17,034

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	30,646	96,425	\$ 18,187	\$ 16,365	\$ 1,822	0.000	\$ 1,822
Next 9 months	27,642	85,634	\$ 17,219	\$ 18,039	\$ (821)	0.997	\$ -
<b>All Periods</b>							\$ 1,815

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	8,406	\$ 17,034	\$ 143
<b>Outpatient</b>	22,568	\$ 1,815	\$ 41
<b>Total</b>	<b>30,973</b>	<b>\$ 5,946</b>	<b>\$ 184</b>

**In Hospital Mortality Costs**

**Mechanical complication of cardiac device, implant, and graft**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	13,279	44,478	234	1,180	-0.894%	0.0000
Next 9 months	11,626	38,153	205	727	-0.142%	0.3214

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.894%	0	\$ -	\$ -
Next 9 months	0.97	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	30,646	96,425	607	1,803	0.106%	0.2374
Next 9 months	27,642	85,634	112	388	-0.047%	0.3093

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	8,406	0	\$ -	\$ -	\$ -
Outpatient	22,568	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>30,973</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

**Mechanical complication of cardiac device, implant, and graft**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	162	517	56	61	0.00	0.7349
Outpatient	291	928	23	22	1.58	0.3532

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	8,406	\$ -	\$ -
<b>Outpatient</b>	22,568	\$ -	\$ -
<b>Total</b>	<b>30,973</b>	<b>\$ -</b>	<b>\$ -</b>

**Cost Development****Mechanical complication of device, implant, or graft**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.002%	37,833,517	891
18-44	M	0.002%	57,523,012	1,160
45-64	M	0.006%	38,103,272	2,373
65-74	M	0.014%	9,264,928	1,339
Over 75	M	0.019%	7,199,875	1,372
0-17	F	0.002%	36,108,331	703
18-44	F	0.002%	55,666,902	1,320
45-64	F	0.006%	39,954,974	2,474
65-74	F	0.013%	10,858,013	1,410
Over 75	F	0.017%	11,546,900	1,923
<b>Total</b>		<b>0.005%</b>	<b>304,059,724</b>	<b>14,965</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.006%	37,833,517	2,156
18-44	M	0.009%	57,523,012	5,105
45-64	M	0.016%	38,103,272	6,106
65-74	M	0.034%	9,264,928	3,109
Over 75	M	0.047%	7,199,875	3,418
0-17	F	0.004%	36,108,331	1,424
18-44	F	0.009%	55,666,902	4,882
45-64	F	0.024%	39,954,974	9,614
65-74	F	0.044%	10,858,013	4,798
Over 75	F	0.042%	11,546,900	4,802
<b>Total</b>		<b>0.015%</b>	<b>304,059,724</b>	<b>45,414</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	60,380	\$ 17,709	\$ 1,069
Mortality cost	60,380	\$ 426	\$ 26
Disability cost	60,380	\$ 636	\$ 38
<b>Total</b>	<b>60,380</b>	<b>\$ 18,771</b>	<b>\$ 1,133</b>

**Measurable Medical Costs**

**Mechanical complication of device, implant, or graft**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	29,393	100,896	\$ 58,813	\$ 42,543	\$ 16,271	0.000	\$ 16,271
Next 9 months	25,754	86,703	\$ 34,471	\$ 25,002	\$ 9,469	0.000	\$ 9,469
Year 2	17,308	59,380	\$ 32,472	\$ 25,780	\$ 6,693	0.000	\$ 6,693
Year 3	11,824	40,319	\$ 26,914	\$ 22,035	\$ 4,878	0.000	\$ 4,878
Year 4	8,022	27,196	\$ 24,161	\$ 19,728	\$ 4,434	0.000	\$ 4,434
Year 5	5,027	17,059	\$ 24,574	\$ 18,490	\$ 6,084	0.000	\$ 6,084
<b>All Periods (present value)</b>							<b>\$ 45,764</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	81,232	275,962	\$ 17,441	\$ 14,359	\$ 3,083	0.000	\$ 3,083
Next 9 months	73,370	244,211	\$ 26,021	\$ 20,528	\$ 5,494	0.000	\$ 5,494
<b>All Periods</b>							<b>\$ 8,464</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	14,965	\$ 45,764	\$ 685
<b>Outpatient</b>	45,414	\$ 8,464	\$ 384
<b>Total</b>	<b>60,380</b>	<b>\$ 17,709</b>	<b>\$ 1,069</b>

**In Hospital Mortality Costs**

**Mechanical complication of device, implant, or graft**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	29,393	100,896	656	2,604	-0.353%	0.0006
Next 9 months	25,754	86,703	466	1,341	0.265%	0.0030

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.353%	0	\$ -	\$ -
Next 9 months	0.97	0.265%	39	\$ 666,472	\$ 25,717,608

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	81,232	275,962	1,012	3,506	-0.028%	0.5364
Next 9 months	73,370	244,211	245	875	-0.025%	0.3256

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	6%	N/A
Male, 18-44	8%	N/A
Male, 45-64	16%	N/A
Male, 65-74	9%	N/A
Male, Over 75	9%	N/A
Female, 0-17	5%	N/A
Female, 18-44	9%	N/A
Female, 45-64	17%	N/A
Female, 65-74	9%	N/A
Female, Over 75	13%	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	14,965	39	\$ 666,472	\$ 1,718	\$ 26
Outpatient	45,414	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>60,380</b>	<b>39</b>	<b>\$ 666,472</b>	<b>\$ 426</b>	<b>\$ 26</b>

**Short-Term Disability Costs**

**Mechanical complication of device, implant, or graft**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	589	1,961	77	70	7.08	0.0492
Outpatient	1,923	6,170	38	32	6.01	0.0007

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 1	\$ 5	\$ 7
Male, 45-64	\$ 183.86	\$ 3	\$ 7	\$ 10
Male, 65-74	\$ 74.13	\$ 1	\$ 1	\$ 2
Male, Over 75	\$ 44.91	\$ 0	\$ 1	\$ 1
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 1	\$ 4	\$ 5
Female, 45-64	\$ 114.58	\$ 2	\$ 7	\$ 9
Female, 65-74	\$ 64.53	\$ 1	\$ 2	\$ 3
Female, Over 75	\$ 44.33	\$ 1	\$ 1	\$ 2
<b>Total</b>		<b>\$ 10</b>	<b>\$ 28</b>	<b>\$ 38</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	14,965	\$ 682	\$ 10
<b>Outpatient</b>	45,414	\$ 621	\$ 28
<b>Total</b>	<b>60,380</b>	<b>\$ 636</b>	<b>\$ 38</b>



**Cost Development**

**Mechanical complication of genitourinary device, implant, and graft**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	26
18-44	M	0.000%	57,523,012	78
45-64	M	0.001%	38,103,272	413
65-74	M	0.005%	9,264,928	436
Over 75	M	0.012%	7,199,875	892
0-17	F	0.000%	36,108,331	13
18-44	F	0.000%	55,666,902	220
45-64	F	0.001%	39,954,974	210
65-74	F	0.001%	10,858,013	148
Over 75	F	0.002%	11,546,900	224
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>2,659</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	86
18-44	M	0.000%	57,523,012	218
45-64	M	0.003%	38,103,272	1,109
65-74	M	0.014%	9,264,928	1,261
Over 75	M	0.036%	7,199,875	2,584
0-17	F	0.000%	36,108,331	90
18-44	F	0.008%	55,666,902	4,294
45-64	F	0.003%	39,954,974	1,301
65-74	F	0.005%	10,858,013	497
Over 75	F	0.006%	11,546,900	682
<b>Total</b>		<b>0.004%</b>	<b>304,059,724</b>	<b>12,122</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	14,781	\$ 4,490	\$ 66
Mortality cost	14,781	\$ 850	\$ 13
Disability cost	14,781	\$ 1,044	\$ 15
<b>Total</b>	<b>14,781</b>	<b>\$ 6,384</b>	<b>\$ 94</b>

**Measurable Medical Costs**

**Mechanical complication of genitourinary device, implant, and graft**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	3,766	14,239	\$ 33,995	\$ 27,693	\$ 6,302	0.000	\$ 6,302
Next 9 months	3,234	12,019	\$ 23,880	\$ 19,418	\$ 4,462	0.000	\$ 4,462
Year 2	1,994	7,779	\$ 24,064	\$ 21,019	\$ 3,045	0.009	\$ 3,045
Year 3	1,266	5,034	\$ 19,259	\$ 18,266	\$ 994	0.245	\$ -
Year 4	789	3,114	\$ 17,331	\$ 16,009	\$ 1,322	0.189	\$ -
Year 5	468	1,843	\$ 18,361	\$ 15,657	\$ 2,705	0.110	\$ -
<b>All Periods (present value)</b>							\$ 13,572

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	15,340	56,178	\$ 11,469	\$ 10,147	\$ 1,322	0.000	\$ 1,322
Next 9 months	13,356	48,690	\$ 15,460	\$ 14,257	\$ 1,203	0.001	\$ 1,203
<b>All Periods</b>							\$ 2,498

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	2,659	\$ 13,572	\$ 36
<b>Outpatient</b>	12,122	\$ 2,498	\$ 30
<b>Total</b>	<b>14,781</b>	<b>\$ 4,490</b>	<b>\$ 66</b>

**In Hospital Mortality Costs**

**Mechanical complication of genitourinary device, implant, and graft**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	3,766	14,239	65	291	-0.317%	0.2142
Next 9 months	3,234	12,019	58	189	0.217%	0.3851

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	15,340	56,178	197	740	-0.036%	0.7285
Next 9 months	13,356	48,690	64	161	0.151%	0.0112

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.151%	18	\$ 696,800	\$ 12,558,963

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	1%
Male, 18-44	N/A	2%
Male, 45-64	N/A	9%
Male, 65-74	N/A	10%
Male, Over 75	N/A	21%
Female, 0-17	N/A	1%
Female, 18-44	N/A	35%
Female, 45-64	N/A	11%
Female, 65-74	N/A	4%
Female, Over 75	N/A	6%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	2,659	0	\$ -	\$ -	\$ -
Outpatient	12,122	18	\$ 696,800	\$ 1,036	\$ 13
<b>Total</b>	<b>14,781</b>	<b>18</b>	<b>\$ 696,800</b>	<b>\$ 850</b>	<b>\$ 13</b>

**Short-Term Disability Costs**

**Mechanical complication of genitourinary device, implant, and graft**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	71	246	62	41	21.29	0.0313
Outpatient	320	1,165	23	15	8.27	0.0064

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 0	\$ 0	\$ 1
Male, 45-64	\$ 183.86	\$ 2	\$ 2	\$ 3
Male, 65-74	\$ 74.13	\$ 1	\$ 1	\$ 1
Male, Over 75	\$ 44.91	\$ 1	\$ 1	\$ 2
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 1	\$ 5	\$ 6
Female, 45-64	\$ 114.58	\$ 1	\$ 1	\$ 2
Female, 65-74	\$ 64.53	\$ 0	\$ 0	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ 0	\$ 0
<b>Total</b>		<b>\$ 5</b>	<b>\$ 10</b>	<b>\$ 15</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	2,659	\$ 1,889	\$ 5
<b>Outpatient</b>	12,122	\$ 859	\$ 10
<b>Total</b>	<b>14,781</b>	<b>\$ 1,044</b>	<b>\$ 15</b>

**Cost Development**

**Mechanical complication of other specified prosthetic device, implant, and graft**

Frequency with which injury is associated with error: <10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	47
18-44	M	0.000%	57,523,012	78
45-64	M	0.000%	38,103,272	165
65-74	M	0.001%	9,264,928	81
Over 75	M	0.001%	7,199,875	104
0-17	F	0.000%	36,108,331	50
18-44	F	0.000%	55,666,902	105
45-64	F	0.001%	39,954,974	221
65-74	F	0.001%	10,858,013	72
Over 75	F	0.001%	11,546,900	138
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>1,060</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	479
18-44	M	0.001%	57,523,012	359
45-64	M	0.002%	38,103,272	732
65-74	M	0.005%	9,264,928	439
Over 75	M	0.008%	7,199,875	578
0-17	F	0.001%	36,108,331	328
18-44	F	0.002%	55,666,902	869
45-64	F	0.005%	39,954,974	1,952
65-74	F	0.007%	10,858,013	753
Over 75	F	0.007%	11,546,900	801
<b>Total</b>		<b>0.002%</b>	<b>304,059,724</b>	<b>7,290</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	8,350	\$ 10,330	\$ 86
Mortality cost	8,350	\$ 683	\$ 6
Disability cost	8,350	\$ 242	\$ 2
<b>Total</b>	<b>8,350</b>	<b>\$ 11,256</b>	<b>\$ 94</b>

**Measurable Medical Costs**

**Mechanical complication of other specified prosthetic device, implant, and graft**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	7,575	27,907	\$ 71,880	\$ 43,619	\$ 28,262	0.000	\$ 28,262
Next 9 months	6,311	22,885	\$ 41,373	\$ 28,019	\$ 13,354	0.000	\$ 13,354
Year 2	3,598	14,134	\$ 38,369	\$ 27,142	\$ 11,228	0.000	\$ 11,228
Year 3	2,152	8,604	\$ 28,140	\$ 23,367	\$ 4,772	0.001	\$ 4,772
Year 4	1,327	5,377	\$ 25,786	\$ 19,837	\$ 5,949	0.001	\$ 5,949
Year 5	765	3,164	\$ 22,096	\$ 18,933	\$ 3,163	0.052	\$ -
<b>All Periods (present value)</b>							<b>\$ 61,804</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	54,543	199,253	\$ 10,940	\$ 9,968	\$ 973	0.000	\$ 973
Next 9 months	49,054	177,832	\$ 15,547	\$ 13,635	\$ 1,912	0.000	\$ 1,912
<b>All Periods</b>							<b>\$ 2,846</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	1,060	\$ 61,804	\$ 66
<b>Outpatient</b>	7,290	\$ 2,846	\$ 21
<b>Total</b>	<b>8,350</b>	<b>\$ 10,330</b>	<b>\$ 86</b>

**In Hospital Mortality Costs**

**Mechanical complication of other specified prosthetic device, implant, and graft**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	7,575	27,907	286	1,037	0.054%	0.8271
Next 9 months	6,311	22,885	186	483	0.838%	0.0001

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.96	0.838%	9	\$ 666,984	\$ 5,707,170

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	54,543	199,253	516	1,805	0.038%	0.4093
Next 9 months	49,054	177,832	90	336	-0.005%	0.8123

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	4%	N/A
Male, 18-44	7%	N/A
Male, 45-64	16%	N/A
Male, 65-74	8%	N/A
Male, Over 75	10%	N/A
Female, 0-17	5%	N/A
Female, 18-44	10%	N/A
Female, 45-64	21%	N/A
Female, 65-74	7%	N/A
Female, Over 75	13%	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	1,060	9	\$ 666,984	\$ 5,384	\$ 6
Outpatient	7,290	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>8,350</b>	<b>9</b>	<b>\$ 666,984</b>	<b>\$ 683</b>	<b>\$ 6</b>

**Short-Term Disability Costs**

**Mechanical complication of other specified prosthetic device, implant, and graft**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	205	667	75	56	19.26	0.0047
Outpatient	1,284	4,418	20	19	0.36	0.4137

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 0	\$ -	\$ 0
Male, 45-64	\$ 183.86	\$ 1	\$ -	\$ 1
Male, 65-74	\$ 74.13	\$ 0	\$ -	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ -	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 0	\$ -	\$ 0
Female, 45-64	\$ 114.58	\$ 0	\$ -	\$ 0
Female, 65-74	\$ 64.53	\$ 0	\$ -	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ -	\$ 0
<b>Total</b>		<b>\$ 2</b>	<b>\$ -</b>	<b>\$ 2</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	1,060	\$ 1,910	\$ 2
<b>Outpatient</b>	7,290	\$ -	\$ -
<b>Total</b>	<b>8,350</b>	<b>\$ 242</b>	<b>\$ 2</b>



**Cost Development****Non-healing surgical wound**

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	35
18-44	M	0.000%	57,523,012	193
45-64	M	0.001%	38,103,272	375
65-74	M	0.001%	9,264,928	79
Over 75	M	0.001%	7,199,875	86
0-17	F	0.000%	36,108,331	19
18-44	F	0.001%	55,666,902	289
45-64	F	0.001%	39,954,974	361
65-74	F	0.001%	10,858,013	89
Over 75	F	0.001%	11,546,900	108
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>1,635</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	120
18-44	M	0.001%	57,523,012	467
45-64	M	0.002%	38,103,272	643
65-74	M	0.003%	9,264,928	280
Over 75	M	0.004%	7,199,875	309
0-17	F	0.000%	36,108,331	61
18-44	F	0.001%	55,666,902	590
45-64	F	0.002%	39,954,974	786
65-74	F	0.003%	10,858,013	351
Over 75	F	0.004%	11,546,900	473
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>4,081</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	5,715	\$ 16,253	\$ 93
Mortality cost	5,715	\$ 2,114	\$ 12
Disability cost	5,715	\$ 1,789	\$ 10
<b>Total</b>	<b>5,715</b>	<b>\$ 20,156</b>	<b>\$ 115</b>

**Measurable Medical Costs**  
**Non-healing surgical wound**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	9,462	34,886	\$ 52,987	\$ 35,992	\$ 16,995	0.000	\$ 16,995
Next 9 months	8,341	28,727	\$ 30,381	\$ 20,849	\$ 9,532	0.000	\$ 9,532
Year 2	4,826	15,960	\$ 27,791	\$ 21,939	\$ 5,852	0.000	\$ 5,852
Year 3	2,733	9,354	\$ 22,822	\$ 19,496	\$ 3,326	0.002	\$ 3,326
Year 4	1,508	5,219	\$ 21,691	\$ 18,681	\$ 3,010	0.021	\$ 3,010
Year 5	807	2,839	\$ 19,093	\$ 16,987	\$ 2,107	0.114	\$ -
<b>All Periods (present value)</b>							\$ 37,692

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	23,970	94,423	\$ 12,963	\$ 10,215	\$ 2,748	0.000	\$ 2,748
Next 9 months	21,483	82,614	\$ 20,769	\$ 15,752	\$ 5,017	0.000	\$ 5,017
<b>All Periods</b>							\$ 7,663

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	1,635	\$ 37,692	\$ 62
<b>Outpatient</b>	4,081	\$ 7,663	\$ 31
<b>Total</b>	<b>5,715</b>	<b>\$ 16,253</b>	<b>\$ 93</b>

**In Hospital Mortality Costs**  
**Non-healing surgical wound**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	9,462	34,886	74	540	-0.766%	0.0000
Next 9 months	8,341	28,727	106	269	0.334%	0.0074

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.766%	0	\$ -	\$ -
Next 9 months	0.98	0.334%	5	\$ 805,859	\$ 4,328,676

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	23,970	94,423	275	918	0.173%	0.0167
Next 9 months	21,483	82,614	69	194	0.088%	0.0239

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.173%	7	\$ 735,558	\$ 5,185,558
Next 9 months	0.99	0.088%	4	\$ 724,767	\$ 2,568,804

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	2%	3%
Male, 18-44	12%	11%
Male, 45-64	23%	16%
Male, 65-74	5%	7%
Male, Over 75	5%	8%
Female, 0-17	1%	1%
Female, 18-44	18%	14%
Female, 45-64	22%	19%
Female, 65-74	5%	9%
Female, Over 75	7%	12%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	1,635	5	\$ 805,859	\$ 2,648	\$ 4
Outpatient	4,081	11	\$ 731,948	\$ 1,900	\$ 8
<b>Total</b>	<b>5,715</b>	<b>16</b>	<b>\$ 756,814</b>	<b>\$ 2,114</b>	<b>\$ 12</b>

**Short-Term Disability Costs**

**Non-healing surgical wound**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	272	948	89	63	25.09	0.0000
Outpatient	592	2,305	33	22	11.35	0.0001

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 1	\$ 1	\$ 2
Male, 45-64	\$ 183.86	\$ 2	\$ 1	\$ 3
Male, 65-74	\$ 74.13	\$ 0	\$ 0	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ 0	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 1	\$ 1	\$ 2
Female, 45-64	\$ 114.58	\$ 1	\$ 1	\$ 2
Female, 65-74	\$ 64.53	\$ 0	\$ 0	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ 0	\$ 0
<b>Total</b>		<b>\$ 5</b>	<b>\$ 5</b>	<b>\$ 10</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	1,635	\$ 3,133	\$ 5
<b>Outpatient</b>	4,081	\$ 1,250	\$ 5
<b>Total</b>	<b>5,715</b>	<b>\$ 1,789</b>	<b>\$ 10</b>

**Cost Development****Object left in body (Medicare Never Event)**

Frequency with which injury is associated with error: &gt;90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	55
18-44	M	0.001%	57,523,012	328
45-64	M	0.002%	38,103,272	939
65-74	M	0.006%	9,264,928	532
Over 75	M	0.007%	7,199,875	471
0-17	F	0.000%	36,108,331	-
18-44	F	0.002%	55,666,902	1,357
45-64	F	0.003%	39,954,974	1,151
65-74	F	0.004%	10,858,013	438
Over 75	F	0.004%	11,546,900	496
<b>Total</b>		<b>0.002%</b>	<b>304,059,724</b>	<b>5,768</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	236
18-44	M	0.001%	57,523,012	533
45-64	M	0.002%	38,103,272	880
65-74	M	0.005%	9,264,928	444
Over 75	M	0.005%	7,199,875	348
0-17	F	0.001%	36,108,331	181
18-44	F	0.002%	55,666,902	1,286
45-64	F	0.003%	39,954,974	1,179
65-74	F	0.006%	10,858,013	600
Over 75	F	0.002%	11,546,900	236
<b>Total</b>		<b>0.002%</b>	<b>304,059,724</b>	<b>5,922</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	11,690	\$ 8,031	\$ 94
Mortality cost	11,690	\$ -	\$ -
Disability cost	11,690	\$ -	\$ -
<b>Total</b>	<b>11,690</b>	<b>\$ 8,031</b>	<b>\$ 94</b>

**Measurable Medical Costs**

**Object left in body (Medicare Never Event)**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	2,073	7,929	\$ 49,179	\$ 38,450	\$ 10,729	0.000	\$ 10,729
Next 9 months	1,814	6,724	\$ 22,045	\$ 17,369	\$ 4,676	0.004	\$ 4,676
Year 2	1,191	4,221	\$ 18,343	\$ 18,919	\$ (575)	0.635	\$ -
Year 3	787	2,790	\$ 16,443	\$ 16,095	\$ 348	0.417	\$ -
Year 4	513	1,790	\$ 12,984	\$ 14,020	\$ (1,036)	0.774	\$ -
Year 5	329	1,180	\$ 11,973	\$ 14,174	\$ (2,202)	0.901	\$ -
<b>All Periods (present value)</b>							\$ 15,280

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	2,410	9,405	\$ 11,090	\$ 10,115	\$ 975	0.026	\$ 975
Next 9 months	2,123	8,247	\$ 11,985	\$ 11,475	\$ 510	0.251	\$ -
<b>All Periods</b>							\$ 971

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	5,768	\$ 15,280	\$ 88
<b>Outpatient</b>	5,922	\$ 971	\$ 6
<b>Total</b>	<b>11,690</b>	<b>\$ 8,031</b>	<b>\$ 94</b>

**In Hospital Mortality Costs**  
Object left in body (Medicare Never Event)

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	2,073	7,929	33	141	-0.188%	0.5603
Next 9 months	1,814	6,724	20	58	0.244%	0.3308

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	2,410	9,405	14	53	0.016%	0.9268
Next 9 months	2,123	8,247	2	13	-0.066%	0.7499

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	5,768	0	\$ -	\$ -	\$ -
Outpatient	5,922	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>11,690</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

Object left in body (Medicare Never Event)

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	86	320	66	56	9.16	0.1446
Outpatient	58	222	26	22	3.99	0.3170

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	5,768	\$ -	\$ -
Outpatient	5,922	\$ -	\$ -
<b>Total</b>	<b>11,690</b>	<b>\$ -</b>	<b>\$ -</b>



**Cost Development****Other and unspecified disorders of the nervous system**

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	24
18-44	M	0.000%	57,523,012	104
45-64	M	0.000%	38,103,272	42
65-74	M	0.000%	9,264,928	18
Over 75	M	0.000%	7,199,875	6
0-17	F	0.000%	36,108,331	39
18-44	F	0.001%	55,666,902	757
45-64	F	0.000%	39,954,974	80
65-74	F	0.000%	10,858,013	15
Over 75	F	0.000%	11,546,900	6
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>1,090</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	57
18-44	M	0.001%	57,523,012	354
45-64	M	0.000%	38,103,272	159
65-74	M	0.000%	9,264,928	21
Over 75	M	0.000%	7,199,875	16
0-17	F	0.000%	36,108,331	75
18-44	F	0.002%	55,666,902	893
45-64	F	0.001%	39,954,974	345
65-74	F	0.000%	10,858,013	27
Over 75	F	0.000%	11,546,900	21
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>1,968</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	3,058	\$ 4,837	\$ 15
Mortality cost	3,058	\$ -	\$ -
Disability cost	3,058	\$ 566	\$ 2
<b>Total</b>	<b>3,058</b>	<b>\$ 5,402</b>	<b>\$ 17</b>

**Measurable Medical Costs**

**Other and unspecified disorders of the nervous system**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	8,501	33,761	\$ 20,304	\$ 17,434	\$ 2,870	0.000	\$ 2,870
Next 9 months	7,359	29,744	\$ 10,131	\$ 7,930	\$ 2,201	0.000	\$ 2,201
Year 2	4,388	20,049	\$ 13,066	\$ 10,354	\$ 2,712	0.000	\$ 2,712
Year 3	2,668	11,994	\$ 11,149	\$ 9,908	\$ 1,242	0.103	\$ -
Year 4	1,677	7,790	\$ 9,686	\$ 9,086	\$ 600	0.206	\$ -
Year 5	1,022	4,678	\$ 9,221	\$ 8,844	\$ 376	0.326	\$ -
<b>All Periods (present value)</b>							\$ 7,615

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	16,530	63,316	\$ 11,050	\$ 9,840	\$ 1,210	0.000	\$ 1,210
Next 9 months	14,687	55,525	\$ 12,997	\$ 10,865	\$ 2,132	0.000	\$ 2,132
<b>All Periods</b>							\$ 3,298

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	1,090	\$ 7,615	\$ 8
<b>Outpatient</b>	1,968	\$ 3,298	\$ 6
<b>Total</b>	<b>3,058</b>	<b>\$ 4,837</b>	<b>\$ 15</b>

**In Hospital Mortality Costs**

**Other and unspecified disorders of the nervous system**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	8,501	33,761	18	128	-0.168%	0.0180
Next 9 months	7,359	29,744	11	72	-0.094%	0.1287

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.168%	0	\$ -	\$ -
Next 9 months	1.00	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	16,530	63,316	39	158	-0.015%	0.7361
Next 9 months	14,687	55,525	9	35	-0.001%	0.9548

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	1.00	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	1,090	0	\$ -	\$ -	\$ -
Outpatient	1,968	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>3,058</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

**Other and unspecified disorders of the nervous system**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	274	1,065	52	53	0.00	0.6283
Outpatient	724	2,682	36	29	6.68	0.0127

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ 0	\$ 0
Male, 45-64	\$ 183.86	\$ -	\$ 0	\$ 0
Male, 65-74	\$ 74.13	\$ -	\$ 0	\$ 0
Male, Over 75	\$ 44.91	\$ -	\$ 0	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ 1	\$ 1
Female, 45-64	\$ 114.58	\$ -	\$ 0	\$ 0
Female, 65-74	\$ 64.53	\$ -	\$ 0	\$ 0
Female, Over 75	\$ 44.33	\$ -	\$ 0	\$ 0
<b>Total</b>		<b>\$ -</b>	<b>\$ 2</b>	<b>\$ 2</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	1,090	\$ -	\$ -
<b>Outpatient</b>	1,968	\$ 879	\$ 2
<b>Total</b>	<b>3,058</b>	<b>\$ 566</b>	<b>\$ 2</b>

**Cost Development****Other and unspecified noninfectious gastroenteritis and colitis**

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	7
18-44	M	0.000%	57,523,012	8
45-64	M	0.000%	38,103,272	16
65-74	M	0.000%	9,264,928	18
Over 75	M	0.000%	7,199,875	30
0-17	F	0.000%	36,108,331	3
18-44	F	0.000%	55,666,902	15
45-64	F	0.000%	39,954,974	31
65-74	F	0.000%	10,858,013	17
Over 75	F	0.000%	11,546,900	55
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>199</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	62
18-44	M	0.000%	57,523,012	114
45-64	M	0.000%	38,103,272	117
65-74	M	0.001%	9,264,928	135
Over 75	M	0.002%	7,199,875	150
0-17	F	0.000%	36,108,331	55
18-44	F	0.000%	55,666,902	144
45-64	F	0.000%	39,954,974	145
65-74	F	0.001%	10,858,013	77
Over 75	F	0.001%	11,546,900	77
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>1,076</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	1,274	\$ 5,741	\$ 7
Mortality cost	1,274	\$ 2,072	\$ 3
Disability cost	1,274	\$ -	\$ -
<b>Total</b>	<b>1,274</b>	<b>\$ 7,813</b>	<b>\$ 10</b>

**Measurable Medical Costs**

**Other and unspecified noninfectious gastroenteritis and colitis**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,564	6,091	\$ 37,282	\$ 30,277	\$ 7,006	0.000	\$ 7,006
Next 9 months	1,354	4,985	\$ 38,603	\$ 29,779	\$ 8,824	0.000	\$ 8,824
Year 2	841	3,186	\$ 36,358	\$ 26,093	\$ 10,265	0.000	\$ 10,265
Year 3	525	1,985	\$ 28,229	\$ 21,311	\$ 6,918	0.007	\$ 6,918
Year 4	329	1,326	\$ 22,496	\$ 19,758	\$ 2,739	0.247	\$ -
Year 5	197	811	\$ 18,892	\$ 19,405	\$ (513)	0.558	\$ -
<b>All Periods (present value)</b>							<b>\$ 31,888</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	8,783	35,065	\$ 5,725	\$ 6,701	\$ (976)	1.000	\$ -
Next 9 months	7,979	31,754	\$ 12,153	\$ 11,222	\$ 931	0.018	\$ 931
<b>All Periods</b>							<b>\$ 914</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	199	\$ 31,888	\$ 6
<b>Outpatient</b>	1,076	\$ 914	\$ 1
<b>Total</b>	<b>1,274</b>	<b>\$ 5,741</b>	<b>\$ 7</b>

**In Hospital Mortality Costs**

Other and unspecified noninfectious gastroenteritis and colitis

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,564	6,091	34	207	-1.220%	0.0136
Next 9 months	1,354	4,985	34	127	-0.031%	0.9495

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-1.220%	0	\$ -	\$ -
Next 9 months	0.97	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	8,783	35,065	102	288	0.336%	0.0027
Next 9 months	7,979	31,754	16	53	0.034%	0.5238

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.336%	4	\$ 730,909	\$ 2,639,919
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	6%
Male, 18-44	N/A	11%
Male, 45-64	N/A	11%
Male, 65-74	N/A	13%
Male, Over 75	N/A	14%
Female, 0-17	N/A	5%
Female, 18-44	N/A	13%
Female, 45-64	N/A	13%
Female, 65-74	N/A	7%
Female, Over 75	N/A	7%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	199	0	\$ -	\$ -	\$ -
Outpatient	1,076	4	\$ 730,909	\$ 2,454	\$ 3
<b>Total</b>	<b>1,274</b>	<b>4</b>	<b>\$ 730,909</b>	<b>\$ 2,072</b>	<b>\$ 3</b>

**Short-Term Disability Costs**

Other and unspecified noninfectious gastroenteritis and colitis

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	28	111	42	46	0.00	0.6101
Outpatient	271	1,085	15	10	4.46	0.0950

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	199	\$ -	\$ -
Outpatient	1,076	\$ -	\$ -
<b>Total</b>	<b>1,274</b>	<b>\$ -</b>	<b>\$ -</b>



**Cost Development****Other complications of internal (biological) (synthetic) prosthetic device, implant, and graft**

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	105
18-44	M	0.001%	57,523,012	315
45-64	M	0.003%	38,103,272	1,275
65-74	M	0.008%	9,264,928	741
Over 75	M	0.012%	7,199,875	841
0-17	F	0.000%	36,108,331	118
18-44	F	0.001%	55,666,902	345
45-64	F	0.002%	39,954,974	999
65-74	F	0.006%	10,858,013	672
Over 75	F	0.007%	11,546,900	839
<b>Total</b>		<b>0.002%</b>	<b>304,059,724</b>	<b>6,250</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.002%	37,833,517	625
18-44	M	0.003%	57,523,012	1,565
45-64	M	0.007%	38,103,272	2,845
65-74	M	0.022%	9,264,928	2,057
Over 75	M	0.031%	7,199,875	2,234
0-17	F	0.001%	36,108,331	406
18-44	F	0.004%	55,666,902	2,152
45-64	F	0.010%	39,954,974	3,918
65-74	F	0.022%	10,858,013	2,344
Over 75	F	0.021%	11,546,900	2,388
<b>Total</b>		<b>0.007%</b>	<b>304,059,724</b>	<b>20,533</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	26,783	\$ 14,851	\$ 398
Mortality cost	26,783	\$ 1,768	\$ 47
Disability cost	26,783	\$ 614	\$ 16
<b>Total</b>	<b>26,783</b>	<b>\$ 17,233</b>	<b>\$ 462</b>

**Measurable Medical Costs**

**Other complications of internal (biological) (synthetic) prosthetic device, implant, and graft**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	47,544	167,046	\$ 52,517	\$ 39,982	\$ 12,535	0.000	\$ 12,535
Next 9 months	41,574	142,389	\$ 39,214	\$ 27,843	\$ 11,371	0.000	\$ 11,371
Year 2	27,435	95,475	\$ 39,186	\$ 29,458	\$ 9,728	0.000	\$ 9,728
Year 3	17,798	62,324	\$ 32,946	\$ 25,753	\$ 7,192	0.000	\$ 7,192
Year 4	11,594	40,498	\$ 29,059	\$ 23,044	\$ 6,015	0.000	\$ 6,015
Year 5	7,212	26,157	\$ 26,645	\$ 21,718	\$ 4,928	0.000	\$ 4,928
<b>All Periods (present value)</b>							<b>\$ 49,376</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	138,122	440,379	\$ 19,250	\$ 18,941	\$ 309	0.007	\$ 309
Next 9 months	123,992	386,668	\$ 34,526	\$ 30,417	\$ 4,109	0.000	\$ 4,109
<b>All Periods</b>							<b>\$ 4,341</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	6,250	\$ 49,376	\$ 309
<b>Outpatient</b>	20,533	\$ 4,341	\$ 89
<b>Total</b>	<b>26,783</b>	<b>\$ 14,851</b>	<b>\$ 398</b>

**In Hospital Mortality Costs**

Other complications of internal (biological) (synthetic) prosthetic device, implant, and graft

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	47,544	167,046	996	4,153	-0.394%	0.0000
Next 9 months	41,574	142,389	853	2,443	0.337%	0.0000

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.394%	0	\$ -	\$ -
Next 9 months	0.98	0.337%	21	\$ 530,905	\$ 10,911,355

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	138,122	440,379	2,603	7,029	0.282%	0.0000
Next 9 months	123,992	386,668	599	1,801	0.019%	0.4151

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.282%	58	\$ 630,218	\$ 36,452,727
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	2%	3%
Male, 18-44	5%	8%
Male, 45-64	20%	14%
Male, 65-74	12%	10%
Male, Over 75	13%	11%
Female, 0-17	2%	2%
Female, 18-44	6%	10%
Female, 45-64	16%	19%
Female, 65-74	11%	11%
Female, Over 75	13%	12%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	6,250	21	\$ 530,905	\$ 1,746	\$ 11
Outpatient	20,533	58	\$ 630,218	\$ 1,775	\$ 36
<b>Total</b>	<b>26,783</b>	<b>78</b>	<b>\$ 604,181</b>	<b>\$ 1,768</b>	<b>\$ 47</b>

**Short-Term Disability Costs**

Other complications of internal (biological) (synthetic) prosthetic device, implant, and graft

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	1,075	3,761	67	56	11.25	0.0002
Outpatient	3,017	9,106	34	30	4.59	0.0007

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 1	\$ 1	\$ 2
Male, 45-64	\$ 183.86	\$ 3	\$ 2	\$ 5
Male, 65-74	\$ 74.13	\$ 1	\$ 1	\$ 1
Male, Over 75	\$ 44.91	\$ 0	\$ 0	\$ 1
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 1	\$ 1	\$ 2
Female, 45-64	\$ 114.58	\$ 1	\$ 2	\$ 3
Female, 65-74	\$ 64.53	\$ 0	\$ 1	\$ 1
Female, Over 75	\$ 44.33	\$ 0	\$ 0	\$ 1
<b>Total</b>		<b>\$ 7</b>	<b>\$ 9</b>	<b>\$ 16</b>

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	6,250	\$ 1,124	\$ 7
<b>Outpatient</b>	20,533	\$ 458	\$ 9
<b>Total</b>	<b>26,783</b>	<b>\$ 614</b>	<b>\$ 16</b>

**Cost Development**

Other complications or adverse effects not elsewhere classified

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	72
18-44	M	0.000%	57,523,012	174
45-64	M	0.001%	38,103,272	303
65-74	M	0.001%	9,264,928	135
Over 75	M	0.002%	7,199,875	123
0-17	F	0.000%	36,108,331	43
18-44	F	0.001%	55,666,902	431
45-64	F	0.001%	39,954,974	331
65-74	F	0.001%	10,858,013	155
Over 75	F	0.002%	11,546,900	176
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>1,944</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	211
18-44	M	0.001%	57,523,012	422
45-64	M	0.001%	38,103,272	454
65-74	M	0.002%	9,264,928	200
Over 75	M	0.003%	7,199,875	205
0-17	F	0.000%	36,108,331	133
18-44	F	0.001%	55,666,902	706
45-64	F	0.002%	39,954,974	666
65-74	F	0.002%	10,858,013	233
Over 75	F	0.002%	11,546,900	258
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>3,488</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	5,432	\$ 7,530	\$ 41
Mortality cost	5,432	\$ 651	\$ 4
Disability cost	5,432	\$ 932	\$ 5
<b>Total</b>	<b>5,432</b>	<b>\$ 9,113</b>	<b>\$ 50</b>

**Measurable Medical Costs**

**Other complications or adverse effects not elsewhere classified**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	17,603	67,451	\$ 41,755	\$ 31,917	\$ 9,838	0.000	\$ 9,838
Next 9 months	15,726	57,479	\$ 18,251	\$ 15,824	\$ 2,428	0.000	\$ 2,428
Year 2	10,800	36,231	\$ 18,854	\$ 17,226	\$ 1,628	0.001	\$ 1,628
Year 3	6,954	24,139	\$ 16,594	\$ 15,958	\$ 637	0.131	\$ -
Year 4	4,559	15,379	\$ 15,561	\$ 15,093	\$ 469	0.240	\$ -
Year 5	2,845	9,957	\$ 14,315	\$ 14,522	\$ (207)	0.604	\$ -
<b>All Periods (present value)</b>							\$ 13,742

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	27,985	110,106	\$ 11,611	\$ 9,682	\$ 1,929	0.000	\$ 1,929
Next 9 months	25,007	97,833	\$ 13,051	\$ 10,865	\$ 2,186	0.000	\$ 2,186
<b>All Periods</b>							\$ 4,068

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	1,944	\$ 13,742	\$ 27
<b>Outpatient</b>	3,488	\$ 4,068	\$ 14
<b>Total</b>	<b>5,432</b>	<b>\$ 7,530</b>	<b>\$ 41</b>

**In Hospital Mortality Costs**

Other complications or adverse effects not elsewhere classified

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	17,603	67,451	168	733	-0.133%	0.1233
Next 9 months	15,726	57,479	122	407	0.068%	0.3727

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	27,985	110,106	207	683	0.118%	0.0274
Next 9 months	25,007	97,833	48	142	0.047%	0.0916

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.118%	4	\$ 858,470	\$ 3,534,397
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	6%
Male, 18-44	N/A	12%
Male, 45-64	N/A	13%
Male, 65-74	N/A	6%
Male, Over 75	N/A	6%
Female, 0-17	N/A	4%
Female, 18-44	N/A	20%
Female, 45-64	N/A	19%
Female, 65-74	N/A	7%
Female, Over 75	N/A	7%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	1,944	0	\$ -	\$ -	\$ -
Outpatient	3,488	4	\$ 858,470	\$ 1,013	\$ 4
<b>Total</b>	<b>5,432</b>	<b>4</b>	<b>\$ 858,470</b>	<b>\$ 651</b>	<b>\$ 4</b>

**Short-Term Disability Costs**

Other complications or adverse effects not elsewhere classified

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	611	2,256	66	55	11.17	0.0004
Outpatient	871	3,339	30	23	6.92	0.0011

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 0	\$ 1	\$ 1
Male, 45-64	\$ 183.86	\$ 1	\$ 1	\$ 1
Male, 65-74	\$ 74.13	\$ 0	\$ 0	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ 0	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 1	\$ 1	\$ 1
Female, 45-64	\$ 114.58	\$ 0	\$ 1	\$ 1
Female, 65-74	\$ 64.53	\$ 0	\$ 0	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ 0	\$ 0
<b>Total</b>		<b>\$ 2</b>	<b>\$ 3</b>	<b>\$ 5</b>

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	1,944	\$ 1,248	\$ 2
<b>Outpatient</b>	3,488	\$ 756	\$ 3
<b>Total</b>	<b>5,432</b>	<b>\$ 932</b>	<b>\$ 5</b>



**Cost Development****Persistent postoperative fistula, NEC**

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	7
18-44	M	0.000%	57,523,012	12
45-64	M	0.000%	38,103,272	32
65-74	M	0.000%	9,264,928	25
Over 75	M	0.000%	7,199,875	11
0-17	F	0.000%	36,108,331	1
18-44	F	0.000%	55,666,902	36
45-64	F	0.000%	39,954,974	46
65-74	F	0.000%	10,858,013	12
Over 75	F	0.000%	11,546,900	11
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>192</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	40
18-44	M	0.000%	57,523,012	35
45-64	M	0.000%	38,103,272	36
65-74	M	0.000%	9,264,928	15
Over 75	M	0.000%	7,199,875	19
0-17	F	0.000%	36,108,331	5
18-44	F	0.000%	55,666,902	34
45-64	F	0.000%	39,954,974	36
65-74	F	0.000%	10,858,013	12
Over 75	F	0.000%	11,546,900	14
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>246</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	438	\$ 30,929	\$ 14
Mortality cost	438	\$ -	\$ -
Disability cost	438	\$ 2,628	\$ 1
<b>Total</b>	<b>438</b>	<b>\$ 33,558</b>	<b>\$ 15</b>

**Measurable Medical Costs**  
**Persistent postoperative fistula, NEC**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,465	5,057	\$ 74,855	\$ 39,158	\$ 35,697	0.000	\$ 35,697
Next 9 months	1,295	4,226	\$ 42,336	\$ 23,445	\$ 18,891	0.000	\$ 18,891
Year 2	811	2,644	\$ 28,566	\$ 23,026	\$ 5,540	0.010	\$ 5,540
Year 3	504	1,701	\$ 24,707	\$ 20,795	\$ 3,912	0.066	\$ -
Year 4	324	1,099	\$ 22,239	\$ 18,006	\$ 4,233	0.092	\$ -
Year 5	202	708	\$ 20,418	\$ 14,899	\$ 5,519	0.166	\$ -
<b>All Periods (present value)</b>							\$ 59,410

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	2,076	7,735	\$ 14,495	\$ 11,041	\$ 3,454	0.000	\$ 3,454
Next 9 months	1,871	6,852	\$ 17,982	\$ 12,670	\$ 5,312	0.000	\$ 5,312
<b>All Periods</b>							\$ 8,656

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	192	\$ 59,410	\$ 11
<b>Outpatient</b>	246	\$ 8,656	\$ 2
<b>Total</b>	<b>438</b>	<b>\$ 30,929</b>	<b>\$ 14</b>

**In Hospital Mortality Costs**  
**Persistent postoperative fistula, NEC**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,465	5,057	30	140	-0.731%	0.1214
Next 9 months	1,295	4,226	38	90	0.794%	0.0973

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.97	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	2,076	7,735	14	61	-0.112%	0.6025
Next 9 months	1,871	6,852	10	19	0.259%	0.0861

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	192	0	\$ -	\$ -	\$ -
Outpatient	246	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>438</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

**Persistent postoperative fistula, NEC**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	39	133	85	55	30.18	0.0274
Outpatient	65	232	35	15	19.87	0.0076

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 0	\$ 0	\$ 0
Male, 45-64	\$ 183.86	\$ 0	\$ 0	\$ 0
Male, 65-74	\$ 74.13	\$ 0	\$ 0	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ 0	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 0	\$ 0	\$ 0
Female, 45-64	\$ 114.58	\$ 0	\$ 0	\$ 0
Female, 65-74	\$ 64.53	\$ 0	\$ 0	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ 0	\$ 0
<b>Total</b>		<b>\$ 1</b>	<b>\$ 0</b>	<b>\$ 1</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	192	\$ 3,423	\$ 1
<b>Outpatient</b>	246	\$ 2,006	\$ 0
<b>Total</b>	<b>438</b>	<b>\$ 2,628</b>	<b>\$ 1</b>

**Cost Development**

**Pneumothorax**

Frequency with which injury is associated with error: 35-65 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	526
18-44	M	0.002%	57,523,012	1,068
45-64	M	0.008%	38,103,272	3,170
65-74	M	0.021%	9,264,928	1,914
Over 75	M	0.035%	7,199,875	2,510
0-17	F	0.001%	36,108,331	286
18-44	F	0.002%	55,666,902	1,166
45-64	F	0.007%	39,954,974	2,636
65-74	F	0.018%	10,858,013	1,919
Over 75	F	0.023%	11,546,900	2,683
<b>Total</b>		<b>0.006%</b>	<b>304,059,724</b>	<b>17,878</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	86
18-44	M	0.001%	57,523,012	345
45-64	M	0.003%	38,103,272	1,075
65-74	M	0.012%	9,264,928	1,156
Over 75	M	0.018%	7,199,875	1,303
0-17	F	0.000%	36,108,331	57
18-44	F	0.001%	55,666,902	348
45-64	F	0.002%	39,954,974	949
65-74	F	0.009%	10,858,013	1,020
Over 75	F	0.012%	11,546,900	1,342
<b>Total</b>		<b>0.003%</b>	<b>304,059,724</b>	<b>7,681</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	25,559	\$ 22,256	\$ 569
Mortality cost	25,559	\$ -	\$ -
Disability cost	25,559	\$ 1,876	\$ 48
<b>Total</b>	<b>25,559</b>	<b>\$ 24,132</b>	<b>\$ 617</b>

**Measurable Medical Costs**

**Pneumothorax**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	10,935	41,872	\$ 64,278	\$ 48,623	\$ 15,655	0.000	\$ 15,655
Next 9 months	9,005	33,134	\$ 32,446	\$ 27,262	\$ 5,184	0.000	\$ 5,184
Year 2	5,349	19,752	\$ 30,704	\$ 26,923	\$ 3,782	0.000	\$ 3,782
Year 3	3,104	11,557	\$ 26,135	\$ 22,619	\$ 3,516	0.004	\$ 3,516
Year 4	1,855	6,967	\$ 21,666	\$ 20,672	\$ 994	0.210	\$ -
Year 5	1,092	3,982	\$ 19,292	\$ 19,118	\$ 174	0.451	\$ -
<b>All Periods (present value)</b>							\$ 27,570

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	5,109	20,340	\$ 29,320	\$ 23,490	\$ 5,830	0.000	\$ 5,830
Next 9 months	4,363	17,064	\$ 35,939	\$ 31,783	\$ 4,156	0.000	\$ 4,156
<b>All Periods</b>							\$ 9,889

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	17,878	\$ 27,570	\$ 493
<b>Outpatient</b>	7,681	\$ 9,889	\$ 76
<b>Total</b>	<b>25,559</b>	<b>\$ 22,256</b>	<b>\$ 569</b>

**In Hospital Mortality Costs  
Pneumothorax**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	10,935	41,872	464	1,988	-0.510%	0.0240
Next 9 months	9,005	33,134	264	950	0.065%	0.7434

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.510%	0	\$ -	\$ -
Next 9 months	0.95	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	5,109	20,340	175	729	-0.170%	0.5564
Next 9 months	4,363	17,064	61	188	0.300%	0.1084

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.96	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	17,878	0	\$ -	\$ -	\$ -
Outpatient	7,681	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>25,559</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

**Pneumothorax**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	260	907	88	71	17.31	0.0058
Outpatient	96	367	70	43	26.33	0.0171

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 3	\$ 2	\$ 5
Male, 45-64	\$ 183.86	\$ 10	\$ 5	\$ 15
Male, 65-74	\$ 74.13	\$ 2	\$ 2	\$ 5
Male, Over 75	\$ 44.91	\$ 2	\$ 2	\$ 3
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 3	\$ 1	\$ 4
Female, 45-64	\$ 114.58	\$ 5	\$ 3	\$ 8
Female, 65-74	\$ 64.53	\$ 2	\$ 2	\$ 4
Female, Over 75	\$ 44.33	\$ 2	\$ 2	\$ 4
<b>Total</b>		<b>\$ 30</b>	<b>\$ 18</b>	<b>\$ 48</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	17,878	\$ 1,674	\$ 30
<b>Outpatient</b>	7,681	\$ 2,345	\$ 18
<b>Total</b>	<b>25,559</b>	<b>\$ 1,876</b>	<b>\$ 48</b>



**Cost Development****Poisoning**

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	336
18-44	M	0.002%	57,523,012	1,238
45-64	M	0.002%	38,103,272	717
65-74	M	0.002%	9,264,928	219
Over 75	M	0.004%	7,199,875	322
0-17	F	0.002%	36,108,331	575
18-44	F	0.003%	55,666,902	1,749
45-64	F	0.003%	39,954,974	1,097
65-74	F	0.003%	10,858,013	349
Over 75	F	0.005%	11,546,900	598
<b>Total</b>		<b>0.002%</b>	<b>304,059,724</b>	<b>7,199</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.007%	37,833,517	2,478
18-44	M	0.004%	57,523,012	2,416
45-64	M	0.004%	38,103,272	1,463
65-74	M	0.005%	9,264,928	500
Over 75	M	0.008%	7,199,875	547
0-17	F	0.007%	36,108,331	2,693
18-44	F	0.007%	55,666,902	3,714
45-64	F	0.005%	39,954,974	2,150
65-74	F	0.006%	10,858,013	676
Over 75	F	0.010%	11,546,900	1,137
<b>Total</b>		<b>0.006%</b>	<b>304,059,724</b>	<b>17,774</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	24,974	\$ 3,265	\$ 82
Mortality cost	24,974	\$ -	\$ -
Disability cost	24,974	\$ 382	\$ 10
<b>Total</b>	<b>24,974</b>	<b>\$ 3,647</b>	<b>\$ 91</b>

**Measurable Medical Costs**

**Poisoning**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	49,244	188,574	\$ 23,767	\$ 20,606	\$ 3,160	0.000	\$ 3,160
Next 9 months	41,420	158,713	\$ 18,818	\$ 17,093	\$ 1,725	0.000	\$ 1,725
Year 2	24,438	97,286	\$ 21,403	\$ 19,812	\$ 1,591	0.000	\$ 1,591
Year 3	14,061	57,024	\$ 19,287	\$ 18,356	\$ 932	0.022	\$ 932
Year 4	8,183	34,280	\$ 18,333	\$ 17,154	\$ 1,178	0.011	\$ 1,178
Year 5	4,712	19,654	\$ 17,724	\$ 16,920	\$ 804	0.155	\$ -
<b>All Periods (present value)</b>							<b>\$ 8,292</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	130,808	521,051	\$ 7,741	\$ 7,746	\$ (6)	0.534	\$ -
Next 9 months	114,018	458,319	\$ 11,401	\$ 10,149	\$ 1,252	0.000	\$ 1,252
<b>All Periods</b>							<b>\$ 1,229</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	7,199	\$ 8,292	\$ 60
<b>Outpatient</b>	17,774	\$ 1,229	\$ 22
<b>Total</b>	<b>24,974</b>	<b>\$ 3,265</b>	<b>\$ 82</b>

**In Hospital Mortality Costs  
Poisoning**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	49,244	188,574	545	2,748	-0.352%	0.0000
Next 9 months	41,420	158,713	345	1,413	-0.057%	0.2689

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.352%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	130,808	521,051	812	3,152	0.014%	0.5535
Next 9 months	114,018	458,319	192	707	0.014%	0.2773

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	7,199	0	\$ -	\$ -	\$ -
Outpatient	17,774	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>24,974</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

**Poisoning**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	1,253	4,580	57	52	5.15	0.0379
Outpatient	2,857	11,315	24	21	3.39	0.0035

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 1	\$ 1	\$ 3
Male, 45-64	\$ 183.86	\$ 1	\$ 1	\$ 2
Male, 65-74	\$ 74.13	\$ 0	\$ 0	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ 0	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 1	\$ 2	\$ 3
Female, 45-64	\$ 114.58	\$ 1	\$ 1	\$ 1
Female, 65-74	\$ 64.53	\$ 0	\$ 0	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ 0	\$ 0
<b>Total</b>		<b>\$ 4</b>	<b>\$ 5</b>	<b>\$ 10</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	7,199	\$ 569	\$ 4
<b>Outpatient</b>	17,774	\$ 306	\$ 5
<b>Total</b>	<b>24,974</b>	<b>\$ 382</b>	<b>\$ 10</b>

### Cost Development

#### Postgastric surgery syndrome

Frequency with which injury is associated with error: 10-35 %

#### Inpatient Errors Prevalence Rates

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	9
18-44	M	0.000%	57,523,012	39
45-64	M	0.000%	38,103,272	32
65-74	M	0.000%	9,264,928	11
Over 75	M	0.000%	7,199,875	34
0-17	F	0.000%	36,108,331	13
18-44	F	0.000%	55,666,902	127
45-64	F	0.000%	39,954,974	164
65-74	F	0.000%	10,858,013	33
Over 75	F	0.000%	11,546,900	34
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>494</b>

#### Outpatient Errors Prevalence Rates

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	26
18-44	M	0.000%	57,523,012	252
45-64	M	0.001%	38,103,272	427
65-74	M	0.001%	9,264,928	126
Over 75	M	0.001%	7,199,875	92
0-17	F	0.000%	36,108,331	30
18-44	F	0.002%	55,666,902	1,375
45-64	F	0.003%	39,954,974	1,360
65-74	F	0.002%	10,858,013	202
Over 75	F	0.001%	11,546,900	140
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>4,031</b>

#### Summary of Measurable Costs

	Number of errors	Cost per error	Total cost (millions)
Medical cost	4,525	\$ 8,357	\$ 38
Mortality cost	4,525	\$ -	\$ -
Disability cost	4,525	\$ 281	\$ 1
<b>Total</b>	<b>4,525</b>	<b>\$ 8,638</b>	<b>\$ 39</b>

**Measurable Medical Costs**  
**Postgastric surgery syndrome**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	1,043	4,079	\$ 44,819	\$ 29,801	\$ 15,017	0.000	\$ 15,017
Next 9 months	934	3,657	\$ 23,212	\$ 12,897	\$ 10,316	0.000	\$ 10,316
Year 2	631	2,655	\$ 23,371	\$ 17,322	\$ 6,049	0.003	\$ 6,049
Year 3	447	1,855	\$ 23,758	\$ 15,137	\$ 8,622	0.002	\$ 8,622
Year 4	324	1,365	\$ 18,816	\$ 14,073	\$ 4,743	0.026	\$ 4,743
Year 5	222	914	\$ 17,269	\$ 13,990	\$ 3,279	0.125	\$ -
<b>All Periods (present value)</b>							\$ 43,160

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	5,606	22,265	\$ 6,833	\$ 6,145	\$ 688	0.012	\$ 688
Next 9 months	5,000	19,792	\$ 13,618	\$ 10,149	\$ 3,469	0.000	\$ 3,469
<b>All Periods</b>							\$ 4,091

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	494	\$ 43,160	\$ 21
<b>Outpatient</b>	4,031	\$ 4,091	\$ 16
<b>Total</b>	<b>4,525</b>	<b>\$ 8,357</b>	<b>\$ 38</b>

**In Hospital Mortality Costs**  
**Postgastric surgery syndrome**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	1,043	4,079	6	25	-0.048%	0.8604
Next 9 months	934	3,657	8	16	0.414%	0.1261

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	5,606	22,265	25	115	-0.070%	0.5091
Next 9 months	5,000	19,792	4	15	0.006%	1.0000

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	494	0	\$ -	\$ -	\$ -
Outpatient	4,031	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>4,525</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**  
**Postgastric surgery syndrome**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	40	154	67	44	23.19	0.0268
Outpatient	236	930	21	17	4.80	0.1255

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 0	\$ -	\$ 0
Male, 45-64	\$ 183.86	\$ 0	\$ -	\$ 0
Male, 65-74	\$ 74.13	\$ 0	\$ -	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ -	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 0	\$ -	\$ 0
Female, 45-64	\$ 114.58	\$ 0	\$ -	\$ 0
Female, 65-74	\$ 64.53	\$ 0	\$ -	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ -	\$ 0
<b>Total</b>		<b>\$ 1</b>	<b>\$ -</b>	<b>\$ 1</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	494	\$ 2,578	\$ 1
<b>Outpatient</b>	4,031	\$ -	\$ -
<b>Total</b>	<b>4,525</b>	<b>\$ 281</b>	<b>\$ 1</b>



**Cost Development****Postlaminectomy syndrome**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	22
18-44	M	0.001%	57,523,012	694
45-64	M	0.004%	38,103,272	1,374
65-74	M	0.006%	9,264,928	583
Over 75	M	0.008%	7,199,875	553
0-17	F	0.000%	36,108,331	4
18-44	F	0.001%	55,666,902	681
45-64	F	0.004%	39,954,974	1,469
65-74	F	0.007%	10,858,013	721
Over 75	F	0.006%	11,546,900	693
<b>Total</b>		<b>0.002%</b>	<b>304,059,724</b>	<b>6,794</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	82
18-44	M	0.020%	57,523,012	11,467
45-64	M	0.062%	38,103,272	23,735
65-74	M	0.084%	9,264,928	7,742
Over 75	M	0.076%	7,199,875	5,458
0-17	F	0.000%	36,108,331	47
18-44	F	0.019%	55,666,902	10,787
45-64	F	0.068%	39,954,974	27,176
65-74	F	0.103%	10,858,013	11,182
Over 75	F	0.081%	11,546,900	9,353
<b>Total</b>		<b>0.035%</b>	<b>304,059,724</b>	<b>107,030</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	113,823	\$ 8,739	\$ 995
Mortality cost	113,823	\$ -	\$ -
Disability cost	113,823	\$ 1,124	\$ 128
<b>Total</b>	<b>113,823</b>	<b>\$ 9,863</b>	<b>\$ 1,123</b>

**Measurable Medical Costs**  
**Postlaminectomy syndrome**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	11,158	43,420	\$ 41,764	\$ 34,676	\$ 7,088	0.000	\$ 7,088
Next 9 months	10,094	38,389	\$ 21,652	\$ 15,846	\$ 5,806	0.000	\$ 5,806
Year 2	6,579	26,265	\$ 25,363	\$ 19,423	\$ 5,939	0.000	\$ 5,939
Year 3	4,172	16,546	\$ 24,371	\$ 18,261	\$ 6,110	0.000	\$ 6,110
Year 4	2,688	10,604	\$ 22,558	\$ 17,536	\$ 5,021	0.000	\$ 5,021
Year 5	1,616	6,368	\$ 21,945	\$ 17,749	\$ 4,196	0.000	\$ 4,196
<b>All Periods (present value)</b>							<b>\$ 32,319</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	145,923	576,503	\$ 9,385	\$ 8,059	\$ 1,326	0.000	\$ 1,326
Next 9 months	134,145	515,882	\$ 19,438	\$ 13,406	\$ 6,032	-	\$ 6,032
<b>All Periods</b>							<b>\$ 7,243</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	6,794	\$ 32,319	\$ 220
<b>Outpatient</b>	107,030	\$ 7,243	\$ 775
<b>Total</b>	<b>113,823</b>	<b>\$ 8,739</b>	<b>\$ 995</b>

**In Hospital Mortality Costs**  
Postlaminectomy syndrome

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	11,158	43,420	39	261	-0.251%	0.0013
Next 9 months	10,094	38,389	44	202	-0.090%	0.2569

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.251%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	145,923	576,503	656	2,656	-0.012%	0.5305
Next 9 months	134,145	515,882	97	485	-0.022%	0.0176

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	1.00	-0.022%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	6,794	0	\$ -	\$ -	\$ -
Outpatient	107,030	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>113,823</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**  
**Postlaminectomy syndrome**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	335	1,288	72	71	0.77	0.4456
Outpatient	3,902	15,426	35	25	9.91	0.0000

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ 20	\$ 20
Male, 45-64	\$ 183.86	\$ -	\$ 43	\$ 43
Male, 65-74	\$ 74.13	\$ -	\$ 6	\$ 6
Male, Over 75	\$ 44.91	\$ -	\$ 2	\$ 2
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ 15	\$ 15
Female, 45-64	\$ 114.58	\$ -	\$ 31	\$ 31
Female, 65-74	\$ 64.53	\$ -	\$ 7	\$ 7
Female, Over 75	\$ 44.33	\$ -	\$ 4	\$ 4
<b>Total</b>		<b>\$ -</b>	<b>\$ 128</b>	<b>\$ 128</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	6,794	\$ -	\$ -
<b>Outpatient</b>	107,030	\$ 1,195	\$ 128
<b>Total</b>	<b>113,823</b>	<b>\$ 1,124</b>	<b>\$ 128</b>

**Cost Development****Postoperative infection**

Frequency with which injury is associated with error: &gt;90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.010%	37,833,517	3,761
18-44	M	0.021%	57,523,012	12,089
45-64	M	0.055%	38,103,272	20,890
65-74	M	0.087%	9,264,928	8,072
Over 75	M	0.104%	7,199,875	7,471
0-17	F	0.006%	36,108,331	2,318
18-44	F	0.048%	55,666,902	26,989
45-64	F	0.064%	39,954,974	25,429
65-74	F	0.084%	10,858,013	9,161
Over 75	F	0.075%	11,546,900	8,686
<b>Total</b>		<b>0.041%</b>	<b>304,059,724</b>	<b>124,866</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.011%	37,833,517	4,197
18-44	M	0.026%	57,523,012	14,691
45-64	M	0.050%	38,103,272	18,951
65-74	M	0.088%	9,264,928	8,183
Over 75	M	0.110%	7,199,875	7,900
0-17	F	0.009%	36,108,331	3,223
18-44	F	0.047%	55,666,902	26,042
45-64	F	0.062%	39,954,974	24,639
65-74	F	0.091%	10,858,013	9,853
Over 75	F	0.088%	11,546,900	10,150
<b>Total</b>		<b>0.042%</b>	<b>304,059,724</b>	<b>127,830</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	252,695	\$ 13,312	\$ 3,364
Mortality cost	252,695	\$ -	\$ -
Disability cost	252,695	\$ 1,236	\$ 312
<b>Total</b>	<b>252,695</b>	<b>\$ 14,548</b>	<b>\$ 3,676</b>

**Measurable Medical Costs**

**Postoperative infection**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	49,719	176,700	\$ 45,613	\$ 31,998	\$ 13,615	0.000	\$ 13,615
Next 9 months	43,886	149,544	\$ 23,112	\$ 18,369	\$ 4,743	0.000	\$ 4,743
Year 2	28,415	93,659	\$ 22,352	\$ 19,771	\$ 2,581	0.000	\$ 2,581
Year 3	17,845	59,436	\$ 19,063	\$ 17,639	\$ 1,424	0.000	\$ 1,424
Year 4	10,915	36,634	\$ 16,735	\$ 16,632	\$ 103	0.407	\$ -
Year 5	6,573	22,398	\$ 17,090	\$ 16,145	\$ 945	0.058	\$ -
<b>All Periods (present value)</b>							\$ 22,012

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	52,283	206,467	\$ 11,945	\$ 9,931	\$ 2,014	0.000	\$ 2,014
Next 9 months	46,971	182,624	\$ 15,409	\$ 12,549	\$ 2,860	0.000	\$ 2,860
<b>All Periods</b>							\$ 4,814

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	124,866	\$ 22,012	\$ 2,749
<b>Outpatient</b>	127,830	\$ 4,814	\$ 615
<b>Total</b>	<b>252,695</b>	<b>\$ 13,312</b>	<b>\$ 3,364</b>

**In Hospital Mortality Costs**  
**Postoperative infection**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	49,719	176,700	490	2,641	-0.511%	0.0000
Next 9 months	43,886	149,544	406	1,432	-0.031%	0.5589

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.511%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	52,283	206,467	390	1,555	-0.009%	0.8316
Next 9 months	46,971	182,624	103	361	0.022%	0.3539

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	124,866	0	\$ -	\$ -	\$ -
Outpatient	127,830	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>252,695</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

**Postoperative infection**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	1,671	5,777	67	53	14.23	0.0000
Outpatient	1,598	6,213	31	24	7.30	0.0000

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 30	\$ 19	\$ 48
Male, 45-64	\$ 183.86	\$ 55	\$ 25	\$ 80
Male, 65-74	\$ 74.13	\$ 9	\$ 4	\$ 13
Male, Over 75	\$ 44.91	\$ 5	\$ 3	\$ 7
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 53	\$ 26	\$ 80
Female, 45-64	\$ 114.58	\$ 41	\$ 21	\$ 62
Female, 65-74	\$ 64.53	\$ 8	\$ 5	\$ 13
Female, Over 75	\$ 44.33	\$ 5	\$ 3	\$ 9
<b>Total</b>		<b>\$ 206</b>	<b>\$ 106</b>	<b>\$ 312</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	124,866	\$ 1,654	\$ 206
<b>Outpatient</b>	127,830	\$ 829	\$ 106
<b>Total</b>	<b>252,695</b>	<b>\$ 1,236</b>	<b>\$ 312</b>



**Cost Development**

**Postoperative Shock**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	17
18-44	M	0.000%	57,523,012	24
45-64	M	0.000%	38,103,272	85
65-74	M	0.001%	9,264,928	58
Over 75	M	0.001%	7,199,875	73
0-17	F	0.000%	36,108,331	9
18-44	F	0.000%	55,666,902	68
45-64	F	0.000%	39,954,974	59
65-74	F	0.000%	10,858,013	49
Over 75	F	0.001%	11,546,900	84
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>525</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	26
18-44	M	0.000%	57,523,012	5
45-64	M	0.000%	38,103,272	28
65-74	M	0.000%	9,264,928	21
Over 75	M	0.000%	7,199,875	10
0-17	F	0.000%	36,108,331	-
18-44	F	0.000%	55,666,902	63
45-64	F	0.000%	39,954,974	53
65-74	F	0.000%	10,858,013	-
Over 75	F	0.000%	11,546,900	17
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>222</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	748	\$ 47,099	\$ 35
Mortality cost	748	\$ 46,584	\$ 35
Disability cost	748	\$ -	\$ -
<b>Total</b>	<b>748</b>	<b>\$ 93,682</b>	<b>\$ 70</b>

**Measurable Medical Costs**

**Postoperative Shock**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	828	2,979	\$ 105,214	\$ 52,041	\$ 53,174	0.000	\$ 53,174
Next 9 months	621	2,490	\$ 33,571	\$ 21,700	\$ 11,871	0.001	\$ 11,871
Year 2	395	1,655	\$ 34,373	\$ 22,896	\$ 11,478	0.069	\$ -
Year 3	242	1,070	\$ 20,372	\$ 21,266	\$ (894)	0.581	\$ -
Year 4	162	697	\$ 15,735	\$ 21,897	\$ (6,162)	0.952	\$ -
Year 5	101	411	\$ 17,047	\$ 17,950	\$ (903)	0.607	\$ -
<b>All Periods (present value)</b>							\$ 64,631

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	392	1,538	\$ 18,637	\$ 12,912	\$ 5,725	0.020	\$ 5,725
Next 9 months	314	1,354	\$ 16,884	\$ 15,277	\$ 1,607	0.294	\$ -
<b>All Periods</b>							\$ 5,704

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	525	\$ 64,631	\$ 34
<b>Outpatient</b>	222	\$ 5,704	\$ 1
<b>Total</b>	<b>748</b>	<b>\$ 47,099</b>	<b>\$ 35</b>

**In Hospital Mortality Costs  
Postoperative Shock**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	828	2,979	105	116	8.787%	0.0000
Next 9 months	621	2,490	26	37	2.704%	0.0000

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	8.787%	46	\$ 584,344	\$ 26,965,541
Next 9 months	0.96	2.704%	14	\$ 575,771	\$ 7,860,123

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	392	1,538	7	17	0.701%	0.3056
Next 9 months	314	1,354	1	7	-0.238%	1.0000

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	3%	N/A
Male, 18-44	5%	N/A
Male, 45-64	16%	N/A
Male, 65-74	11%	N/A
Male, Over 75	14%	N/A
Female, 0-17	2%	N/A
Female, 18-44	13%	N/A
Female, 45-64	11%	N/A
Female, 65-74	9%	N/A
Female, Over 75	16%	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	525	60	\$ 582,387	\$ 66,313	\$ 35
Outpatient	222	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>748</b>	<b>60</b>	<b>\$ 582,387</b>	<b>\$ 46,584</b>	<b>\$ 35</b>

**Short-Term Disability Costs**

**Postoperative Shock**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	22	78	59	68	0.00	0.6941
Outpatient	9	36	7	9	0.00	0.6826

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	525	\$ -	\$ -
<b>Outpatient</b>	222	\$ -	\$ -
<b>Total</b>	<b>748</b>	<b>\$ -</b>	<b>\$ -</b>

**Cost Development****Pressure Ulcer (Medicare Never Event)**

Frequency with which injury is associated with error: &gt;90 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	472
18-44	M	0.004%	57,523,012	2,438
45-64	M	0.026%	38,103,272	9,915
65-74	M	0.095%	9,264,928	8,760
Over 75	M	0.322%	7,199,875	23,149
0-17	F	0.001%	36,108,331	435
18-44	F	0.003%	55,666,902	1,447
45-64	F	0.019%	39,954,974	7,769
65-74	F	0.078%	10,858,013	8,515
Over 75	F	0.302%	11,546,900	34,887
<b>Total</b>		<b>0.032%</b>	<b>304,059,724</b>	<b>97,786</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.005%	37,833,517	1,889
18-44	M	0.016%	57,523,012	9,487
45-64	M	0.058%	38,103,272	21,933
65-74	M	0.224%	9,264,928	20,736
Over 75	M	0.864%	7,199,875	62,200
0-17	F	0.003%	36,108,331	1,195
18-44	F	0.013%	55,666,902	7,109
45-64	F	0.048%	39,954,974	19,298
65-74	F	0.212%	10,858,013	23,006
Over 75	F	0.955%	11,546,900	110,325
<b>Total</b>		<b>0.091%</b>	<b>304,059,724</b>	<b>277,178</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	374,964	\$ 8,730	\$ 3,274
Mortality cost	374,964	\$ 1,133	\$ 425
Disability cost	374,964	\$ 425	\$ 159
<b>Total</b>	<b>374,964</b>	<b>\$ 10,288</b>	<b>\$ 3,858</b>

**Measurable Medical Costs**  
**Pressure Ulcer (Medicare Never Event)**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)	Adjusted for significant pre-period differences
1st 3 months	24,656	92,245	\$ 63,470	\$ 36,733	\$ 26,737	0.000	\$ 26,737	\$ 24,169
Next 9 months	19,146	73,309	\$ 43,514	\$ 27,336	\$ 16,178	0.000	\$ 16,178	\$ 8,474
Year 2	9,250	43,237	\$ 41,182	\$ 29,784	\$ 11,397	0.000	\$ 11,397	\$ 1,126
Year 3	4,992	25,537	\$ 34,699	\$ 26,343	\$ 8,356	0.000	\$ 8,356	\$ -
Year 4	2,685	15,047	\$ 31,340	\$ 25,481	\$ 5,859	0.000	\$ 5,859	\$ -
Year 5	1,362	7,840	\$ 31,079	\$ 25,177	\$ 5,902	0.001	\$ 5,902	\$ -
All Periods (present value)							\$ 71,634	\$ 33,476

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)	Adjusted for significant pre-period differences
1st 3 months	88,345	349,163	\$ 12,391	\$ 10,748	\$ 1,643	0.000	\$ 1,643	\$ -
Next 9 months	76,604	305,374	\$ 25,093	\$ 19,410	\$ 5,683	0.000	\$ 5,683	\$ -
All Periods							\$ 7,216	\$ -

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	97,786	\$ 33,476	\$ 3,274
Outpatient	277,178	\$ -	\$ -
<b>Total</b>	<b>374,964</b>	<b>\$ 8,730</b>	<b>\$ 3,274</b>

**In Hospital Mortality Costs**  
**Pressure Ulcer (Medicare Never Event)**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	24,656	92,245	1,258	4,355	0.374%	0.0146
Next 9 months	19,146	73,309	957	2,074	2.178%	0.0000

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Excess Deaths Adjusted for significant pre-period differences	Cost per death (PV)	Cost of excess deaths (PV)	Cost of Excess Deaths (PV) Adjusted for significant pre-period differences
1st 3 months	1.00	0.374%	366	330	\$ 308,207	\$ 112,683,993	\$ 101,861,788
Next 9 months	0.95	2.178%	2,029	1,063	\$ 303,686	\$ 616,214,584	\$ 322,786,080

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	88,345	349,163	3,048	8,659	0.960%	0.0000
Next 9 months	76,604	305,374	520	1,553	0.181%	0.0000

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Excess Deaths Adjusted for significant pre-period differences	Cost per death (PV)	Cost of excess deaths (PV)	Cost of Excess Deaths (PV) Adjusted for significant pre-period differences
1st 3 months	1.00	0.960%	2,660	0	\$ 316,926	\$ 843,063,228	\$ -
Next 9 months	0.98	0.181%	490	0	\$ 312,276	\$ 152,899,025	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	0%	1%
Male, 18-44	2%	3%
Male, 45-64	10%	8%
Male, 65-74	9%	7%
Male, Over 75	24%	22%
Female, 0-17	0%	0%
Female, 18-44	1%	3%
Female, 45-64	8%	7%
Female, 65-74	9%	8%
Female, Over 75	36%	40%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	97,786	1,393	\$ 304,758	\$ 4,343	\$ 425
Outpatient	277,178	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>374,964</b>	<b>1,393</b>	<b>\$ 304,758</b>	<b>\$ 1,133</b>	<b>\$ 425</b>

**Short-Term Disability Costs**  
**Pressure Ulcer (Medicare Never Event)**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>Excess days missed adjusted for significant pre-period differences</b>	<b>p-value</b>
Inpatient	208	719	94	65	29.39	22.39	0.0013
Outpatient	797	3,047	25	23	1.38	0.00	0.2862

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 9	\$ -	\$ 9
Male, 45-64	\$ 183.86	\$ 41	\$ -	\$ 41
Male, 65-74	\$ 74.13	\$ 15	\$ -	\$ 15
Male, Over 75	\$ 44.91	\$ 23	\$ -	\$ 23
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 5	\$ -	\$ 5
Female, 45-64	\$ 114.58	\$ 20	\$ -	\$ 20
Female, 65-74	\$ 64.53	\$ 12	\$ -	\$ 12
Female, Over 75	\$ 44.33	\$ 35	\$ -	\$ 35
<b>Total</b>		<b>\$ 159</b>	<b>\$ -</b>	<b>\$ 159</b>

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	97,786	\$ 1,631	\$ 159
<b>Outpatient</b>	277,178	\$ -	\$ -
<b>Total</b>	<b>374,964</b>	<b>\$ 425</b>	<b>\$ 159</b>



**Cost Development**

**Seroma complicating a procedure**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	43
18-44	M	0.000%	57,523,012	194
45-64	M	0.001%	38,103,272	434
65-74	M	0.002%	9,264,928	179
Over 75	M	0.002%	7,199,875	179
0-17	F	0.000%	36,108,331	21
18-44	F	0.002%	55,666,902	1,049
45-64	F	0.003%	39,954,974	1,078
65-74	F	0.004%	10,858,013	421
Over 75	F	0.004%	11,546,900	430
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>4,029</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	151
18-44	M	0.001%	57,523,012	786
45-64	M	0.003%	38,103,272	1,035
65-74	M	0.006%	9,264,928	520
Over 75	M	0.006%	7,199,875	456
0-17	F	0.000%	36,108,331	73
18-44	F	0.003%	55,666,902	1,878
45-64	F	0.009%	39,954,974	3,687
65-74	F	0.013%	10,858,013	1,372
Over 75	F	0.009%	11,546,900	990
<b>Total</b>		<b>0.004%</b>	<b>304,059,724</b>	<b>10,946</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	14,975	\$ 4,883	\$ 73
Mortality cost	14,975	\$ -	\$ -
Disability cost	14,975	\$ -	\$ -
<b>Total</b>	<b>14,975</b>	<b>\$ 4,883</b>	<b>\$ 73</b>

**Measurable Medical Costs**  
**Seroma complicating a procedure**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	5,808	22,383	\$ 36,110	\$ 30,336	\$ 5,775	0.000	\$ 5,775
Next 9 months	5,137	19,188	\$ 22,643	\$ 19,990	\$ 2,654	0.000	\$ 2,654
Year 2	3,277	12,150	\$ 21,199	\$ 18,075	\$ 3,124	0.001	\$ 3,124
Year 3	2,015	7,433	\$ 18,133	\$ 16,487	\$ 1,647	0.067	\$ -
Year 4	1,184	4,352	\$ 18,496	\$ 15,051	\$ 3,445	0.019	\$ 3,445
Year 5	686	2,492	\$ 18,617	\$ 14,395	\$ 4,223	0.018	\$ 4,223
<b>All Periods (present value)</b>							\$ 18,150

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	16,525	65,438	\$ 12,684	\$ 13,493	\$ (809)	1.000	\$ -
Next 9 months	14,945	57,846	\$ 16,994	\$ 17,391	\$ (397)	0.886	\$ -
<b>All Periods</b>							\$ -

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	4,029	\$ 18,150	\$ 73
<b>Outpatient</b>	10,946	\$ -	\$ -
<b>Total</b>	<b>14,975</b>	<b>\$ 4,883</b>	<b>\$ 73</b>

**In Hospital Mortality Costs**  
**Seroma complicating a procedure**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	5,808	22,383	22	201	-0.518%	0.0001
Next 9 months	5,137	19,188	37	151	-0.065%	0.6359

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.518%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	16,525	65,438	112	524	-0.124%	0.1033
Next 9 months	14,945	57,846	19	112	-0.067%	0.0888

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	4,029	0	\$ -	\$ -	\$ -
Outpatient	10,946	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>14,975</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**  
Seroma complicating a procedure

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	157	579	67	58	9.57	0.0824
Outpatient	500	1,938	30	27	3.50	0.1465

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	4,029	\$ -	\$ -
<b>Outpatient</b>	10,946	\$ -	\$ -
<b>Total</b>	<b>14,975</b>	<b>\$ -</b>	<b>\$ -</b>

**Cost Development****Substances causing adverse effects in therapeutic use**

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	18
18-44	M	0.000%	57,523,012	38
45-64	M	0.000%	38,103,272	103
65-74	M	0.000%	9,264,928	26
Over 75	M	0.001%	7,199,875	38
0-17	F	0.000%	36,108,331	17
18-44	F	0.000%	55,666,902	73
45-64	F	0.000%	39,954,974	105
65-74	F	0.000%	10,858,013	43
Over 75	F	0.001%	11,546,900	60
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>520</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	196
18-44	M	0.000%	57,523,012	272
45-64	M	0.001%	38,103,272	437
65-74	M	0.002%	9,264,928	172
Over 75	M	0.002%	7,199,875	152
0-17	F	0.001%	36,108,331	195
18-44	F	0.001%	55,666,902	634
45-64	F	0.002%	39,954,974	805
65-74	F	0.002%	10,858,013	244
Over 75	F	0.002%	11,546,900	198
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>3,304</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	3,824	\$ 4,708	\$ 18
Mortality cost	3,824	\$ 987	\$ 4
Disability cost	3,824	\$ -	\$ -
<b>Total</b>	<b>3,824</b>	<b>\$ 5,695</b>	<b>\$ 22</b>

**Measurable Medical Costs**

**Substances causing adverse effects in therapeutic use**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	4,365	17,051	\$ 42,751	\$ 32,836	\$ 9,915	0.000	\$ 9,915
Next 9 months	3,733	14,150	\$ 36,746	\$ 27,629	\$ 9,117	0.000	\$ 9,117
Year 2	2,253	8,417	\$ 32,548	\$ 26,222	\$ 6,326	0.000	\$ 6,326
Year 3	1,305	5,052	\$ 23,860	\$ 22,281	\$ 1,578	0.166	\$ -
Year 4	780	3,098	\$ 18,820	\$ 20,329	\$ (1,509)	0.820	\$ -
Year 5	455	1,841	\$ 16,843	\$ 18,717	\$ (1,874)	0.842	\$ -
<b>All Periods (present value)</b>							<b>\$ 24,880</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	30,118	119,982	\$ 8,033	\$ 8,404	\$ (371)	0.996	\$ -
Next 9 months	27,025	107,587	\$ 15,137	\$ 13,574	\$ 1,564	0.000	\$ 1,564
<b>All Periods</b>							<b>\$ 1,535</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	520	\$ 24,880	\$ 13
<b>Outpatient</b>	3,304	\$ 1,535	\$ 5
<b>Total</b>	<b>3,824</b>	<b>\$ 4,708</b>	<b>\$ 18</b>

**In Hospital Mortality Costs**

Substances causing adverse effects in therapeutic use

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	4,365	17,051	85	428	-0.569%	0.0282
Next 9 months	3,733	14,150	84	288	0.214%	0.4145

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.569%	0	\$ -	\$ -
Next 9 months	0.97	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	30,118	119,982	294	1,004	0.137%	0.0217
Next 9 months	27,025	107,587	48	198	-0.006%	0.8397

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.137%	5	\$ 834,869	\$ 3,773,143
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	6%
Male, 18-44	N/A	8%
Male, 45-64	N/A	13%
Male, 65-74	N/A	5%
Male, Over 75	N/A	5%
Female, 0-17	N/A	6%
Female, 18-44	N/A	19%
Female, 45-64	N/A	24%
Female, 65-74	N/A	7%
Female, Over 75	N/A	6%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	520	0	\$ -	\$ -	\$ -
Outpatient	3,304	5	\$ 834,869	\$ 1,142	\$ 4
<b>Total</b>	<b>3,824</b>	<b>5</b>	<b>\$ 834,869</b>	<b>\$ 987</b>	<b>\$ 4</b>

**Short-Term Disability Costs**

Substances causing adverse effects in therapeutic use

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	101	382	42	43	0.00	0.5206
Outpatient	613	2,443	16	16	0.00	0.5816

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	520	\$ -	\$ -
Outpatient	3,304	\$ -	\$ -
<b>Total</b>	<b>3,824</b>	<b>\$ -</b>	<b>\$ -</b>



**Cost Development**

**Surgical complication of the respiratory system**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.001%	37,833,517	194
18-44	M	0.000%	57,523,012	286
45-64	M	0.002%	38,103,272	844
65-74	M	0.005%	9,264,928	452
Over 75	M	0.009%	7,199,875	640
0-17	F	0.000%	36,108,331	112
18-44	F	0.001%	55,666,902	398
45-64	F	0.002%	39,954,974	779
65-74	F	0.004%	10,858,013	437
Over 75	F	0.007%	11,546,900	844
<b>Total</b>		<b>0.002%</b>	<b>304,059,724</b>	<b>4,985</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	125
18-44	M	0.000%	57,523,012	116
45-64	M	0.001%	38,103,272	222
65-74	M	0.001%	9,264,928	126
Over 75	M	0.004%	7,199,875	310
0-17	F	0.000%	36,108,331	103
18-44	F	0.000%	55,666,902	131
45-64	F	0.000%	39,954,974	145
65-74	F	0.001%	10,858,013	153
Over 75	F	0.004%	11,546,900	492
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>1,924</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	6,908	\$ 17,002	\$ 117
Mortality cost	6,908	\$ 2,020	\$ 14
Disability cost	6,908	\$ -	\$ -
<b>Total</b>	<b>6,908</b>	<b>\$ 19,022</b>	<b>\$ 131</b>

**Measurable Medical Costs**  
**Surgical complication of the respiratory system**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	9,020	34,165	\$ 57,911	\$ 40,533	\$ 17,379	0.000	\$ 17,379
Next 9 months	7,730	28,995	\$ 22,726	\$ 19,346	\$ 3,380	0.020	\$ 3,380
Year 2	5,181	19,645	\$ 20,192	\$ 19,885	\$ 307	0.358	\$ -
Year 3	3,463	13,314	\$ 17,961	\$ 17,507	\$ 454	0.316	\$ -
Year 4	2,392	9,255	\$ 16,884	\$ 16,541	\$ 343	0.352	\$ -
Year 5	1,534	6,011	\$ 16,408	\$ 15,686	\$ 722	0.286	\$ -
<b>All Periods (present value)</b>							\$ 20,632

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	3,459	13,727	\$ 19,668	\$ 14,289	\$ 5,379	0.000	\$ 5,379
Next 9 months	2,915	11,970	\$ 19,352	\$ 17,076	\$ 2,276	0.005	\$ 2,276
<b>All Periods</b>							\$ 7,594

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	4,985	\$ 20,632	\$ 103
<b>Outpatient</b>	1,924	\$ 7,594	\$ 15
<b>Total</b>	<b>6,908</b>	<b>\$ 17,002</b>	<b>\$ 117</b>

**In Hospital Mortality Costs**

**Surgical complication of the respiratory system**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	9,020	34,165	248	944	-0.018%	0.9257
Next 9 months	7,730	28,995	151	421	0.502%	0.0016

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.97	0.502%	24	\$ 573,899	\$ 13,953,149

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	3,459	13,727	78	297	0.083%	0.7659
Next 9 months	2,915	11,970	13	70	-0.143%	0.3626

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	4%	N/A
Male, 18-44	6%	N/A
Male, 45-64	17%	N/A
Male, 65-74	9%	N/A
Male, Over 75	13%	N/A
Female, 0-17	2%	N/A
Female, 18-44	8%	N/A
Female, 45-64	16%	N/A
Female, 65-74	9%	N/A
Female, Over 75	17%	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	4,985	24	\$ 573,899	\$ 2,799	\$ 14
Outpatient	1,924	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>6,908</b>	<b>24</b>	<b>\$ 573,899</b>	<b>\$ 2,020</b>	<b>\$ 14</b>

**Short-Term Disability Costs**  
Surgical complication of the respiratory system

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	261	946	61	59	2.34	0.3262
Outpatient	63	240	39	28	11.37	0.1266

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	4,985	\$ -	\$ -
Outpatient	1,924	\$ -	\$ -
<b>Total</b>	<b>6,908</b>	<b>\$ -</b>	<b>\$ -</b>

**Cost Development****Tracheostomy complications**

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	26
18-44	M	0.000%	57,523,012	27
45-64	M	0.000%	38,103,272	70
65-74	M	0.000%	9,264,928	34
Over 75	M	0.000%	7,199,875	25
0-17	F	0.000%	36,108,331	20
18-44	F	0.000%	55,666,902	18
45-64	F	0.000%	39,954,974	42
65-74	F	0.000%	10,858,013	33
Over 75	F	0.000%	11,546,900	24
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>317</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	100
18-44	M	0.000%	57,523,012	55
45-64	M	0.000%	38,103,272	89
65-74	M	0.001%	9,264,928	60
Over 75	M	0.001%	7,199,875	56
0-17	F	0.000%	36,108,331	68
18-44	F	0.000%	55,666,902	41
45-64	F	0.000%	39,954,974	62
65-74	F	0.000%	10,858,013	47
Over 75	F	0.000%	11,546,900	39
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>617</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	935	\$ 51,384	\$ 48
Mortality cost	935	\$ 3,200	\$ 3
Disability cost	935	\$ 1,895	\$ 2
<b>Total</b>	<b>935</b>	<b>\$ 56,479</b>	<b>\$ 53</b>

**Measurable Medical Costs**  
**Tracheostomy complications**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	2,175	7,443	\$ 141,233	\$ 91,355	\$ 49,878	0.000	\$ 49,878
Next 9 months	1,797	5,697	\$ 65,510	\$ 37,109	\$ 28,401	0.000	\$ 28,401
Year 2	946	3,311	\$ 52,423	\$ 35,215	\$ 17,208	0.000	\$ 17,208
Year 3	547	1,918	\$ 41,606	\$ 30,190	\$ 11,416	0.005	\$ 11,416
Year 4	310	1,126	\$ 32,856	\$ 23,827	\$ 9,029	0.016	\$ 9,029
Year 5	158	615	\$ 26,717	\$ 23,651	\$ 3,066	0.281	\$ -
<b>All Periods (present value)</b>							\$ 112,780

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	4,398	16,778	\$ 21,487	\$ 16,665	\$ 4,822	0.000	\$ 4,822
Next 9 months	3,900	14,587	\$ 38,588	\$ 23,266	\$ 15,322	0.000	\$ 15,322
<b>All Periods</b>							\$ 19,845

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	317	\$ 112,780	\$ 36
<b>Outpatient</b>	617	\$ 19,845	\$ 12
<b>Total</b>	<b>935</b>	<b>\$ 51,384</b>	<b>\$ 48</b>

**In Hospital Mortality Costs**  
**Tracheostomy complications**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	2,175	7,443	133	632	-2.399%	0.0003
Next 9 months	1,797	5,697	90	269	0.282%	0.6252

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-2.399%	0	\$ -	\$ -
Next 9 months	0.92	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	4,398	16,778	105	301	0.583%	0.0120
Next 9 months	3,900	14,587	20	78	-0.018%	0.8922

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.583%	4	\$ 831,052	\$ 2,990,461
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	16%
Male, 18-44	N/A	9%
Male, 45-64	N/A	14%
Male, 65-74	N/A	10%
Male, Over 75	N/A	9%
Female, 0-17	N/A	11%
Female, 18-44	N/A	7%
Female, 45-64	N/A	10%
Female, 65-74	N/A	8%
Female, Over 75	N/A	6%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	317	0	\$ -	\$ -	\$ -
Outpatient	617	4	\$ 831,052	\$ 4,844	\$ 3
<b>Total</b>	<b>935</b>	<b>4</b>	<b>\$ 831,052</b>	<b>\$ 3,200</b>	<b>\$ 3</b>

**Short-Term Disability Costs**  
Tracheostomy complications

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	30	97	149	93	56.14	0.0396
Outpatient	54	207	23	22	0.80	0.4625

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 0	\$ -	\$ 0
Male, 45-64	\$ 183.86	\$ 1	\$ -	\$ 1
Male, 65-74	\$ 74.13	\$ 0	\$ -	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ -	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 0	\$ -	\$ 0
Female, 45-64	\$ 114.58	\$ 0	\$ -	\$ 0
Female, 65-74	\$ 64.53	\$ 0	\$ -	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ -	\$ 0
<b>Total</b>		<b>\$ 2</b>	<b>\$ -</b>	<b>\$ 2</b>

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	317	\$ 5,583	\$ 2
Outpatient	617	\$ -	\$ -
<b>Total</b>	<b>935</b>	<b>\$ 1,895</b>	<b>\$ 2</b>



**Cost Development**

**Tracheostomy complications - Infection**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	9
18-44	M	0.000%	57,523,012	5
45-64	M	0.000%	38,103,272	21
65-74	M	0.000%	9,264,928	16
Over 75	M	0.000%	7,199,875	15
0-17	F	0.000%	36,108,331	9
18-44	F	0.000%	55,666,902	13
45-64	F	0.000%	39,954,974	10
65-74	F	0.000%	10,858,013	11
Over 75	F	0.000%	11,546,900	6
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>113</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	90
18-44	M	0.000%	57,523,012	39
45-64	M	0.000%	38,103,272	46
65-74	M	0.000%	9,264,928	21
Over 75	M	0.000%	7,199,875	19
0-17	F	0.000%	36,108,331	51
18-44	F	0.000%	55,666,902	34
45-64	F	0.000%	39,954,974	69
65-74	F	0.000%	10,858,013	22
Over 75	F	0.000%	11,546,900	28
<b>Total</b>		<b>0.000%</b>	<b>304,059,724</b>	<b>420</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	532	\$ 37,091	\$ 20
Mortality cost	532	\$ 4,771	\$ 3
Disability cost	532	\$ -	\$ -
<b>Total</b>	<b>532</b>	<b>\$ 41,861</b>	<b>\$ 22</b>

**Measurable Medical Costs**  
**Tracheostomy complications - Infection**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	177	593	\$ 143,424	\$ 63,136	\$ 80,288	0.000	\$ 80,288
Next 9 months	144	467	\$ 54,084	\$ 28,338	\$ 25,746	0.001	\$ 25,746
Year 2	86	281	\$ 71,247	\$ 33,960	\$ 37,287	0.008	\$ 37,287
Year 3	55	158	\$ 33,664	\$ 31,197	\$ 2,467	0.405	\$ -
Year 4	37	99	\$ 28,928	\$ 24,391	\$ 4,538	0.335	\$ -
Year 5	20	59	\$ 28,071	\$ 30,881	\$ (2,810)	0.562	\$ -
<b>All Periods (present value)</b>							\$ 140,936

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	651	2,578	\$ 8,840	\$ 7,831	\$ 1,009	0.204	\$ -
Next 9 months	591	2,289	\$ 21,147	\$ 11,750	\$ 9,398	0.015	\$ 9,398
<b>All Periods</b>							\$ 9,226

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	113	\$ 140,936	\$ 16
<b>Outpatient</b>	420	\$ 9,226	\$ 4
<b>Total</b>	<b>532</b>	<b>\$ 37,091</b>	<b>\$ 20</b>

**In Hospital Mortality Costs**

**Tracheostomy complications - Infection**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	177	593	16	42	1.987%	0.3787
Next 9 months	144	467	9	13	3.565%	0.0425

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.93	3.565%	4	\$ 680,510	\$ 2,539,082

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	651	2,578	3	20	-0.332%	0.6011
Next 9 months	591	2,289	0	1	-0.049%	1.0000

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.000%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	8%	N/A
Male, 18-44	4%	N/A
Male, 45-64	19%	N/A
Male, 65-74	14%	N/A
Male, Over 75	13%	N/A
Female, 0-17	8%	N/A
Female, 18-44	11%	N/A
Female, 45-64	9%	N/A
Female, 65-74	10%	N/A
Female, Over 75	5%	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	113	4	\$ 680,510	\$ 22,551	\$ 3
Outpatient	420	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>532</b>	<b>4</b>	<b>\$ 680,510</b>	<b>\$ 4,771</b>	<b>\$ 3</b>

**Short-Term Disability Costs**

**Tracheostomy complications - Infection**

**Significance Testing**

<b>Service Category</b>	<b>N (cases)</b>	<b>N (controls)</b>	<b>Mean Days Missed (cases)</b>	<b>Mean Days Missed (controls)</b>	<b>Excess days missed in error group</b>	<b>p-value</b>
Inpatient	3	8	86	234	0.00	0.9171
Outpatient	16	63	10	11	0.00	0.5477

**Summary of Short-Term Disability Costs**

<b>Age Group</b>	<b>Daily Productivity Value</b>	<b>Inpatient Estimated Disability Costs (\$ millions)</b>	<b>Outpatient Estimated Disability Costs (\$ millions)</b>	<b>Total Estimated Disability Costs (\$ millions)</b>
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ -	\$ -
Male, 45-64	\$ 183.86	\$ -	\$ -	\$ -
Male, 65-74	\$ 74.13	\$ -	\$ -	\$ -
Male, Over 75	\$ 44.91	\$ -	\$ -	\$ -
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ -	\$ -
Female, 45-64	\$ 114.58	\$ -	\$ -	\$ -
Female, 65-74	\$ 64.53	\$ -	\$ -	\$ -
Female, Over 75	\$ 44.33	\$ -	\$ -	\$ -
<b>Total</b>		\$ -	\$ -	\$ -

**Total Short-Term Disability Costs**

	<b>Errors</b>	<b>Cost per Error</b>	<b>Total Cost (\$ millions)</b>
<b>Inpatient</b>	113	\$ -	\$ -
<b>Outpatient</b>	420	\$ -	\$ -
<b>Total</b>	<b>532</b>	<b>\$ -</b>	<b>\$ -</b>

**Cost Development**

Unspecified adverse effect of drug medicinal and biological substance not elsewhere classified

Frequency with which injury is associated with error: &lt;10 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	58
18-44	M	0.000%	57,523,012	115
45-64	M	0.001%	38,103,272	264
65-74	M	0.002%	9,264,928	161
Over 75	M	0.002%	7,199,875	177
0-17	F	0.000%	36,108,331	60
18-44	F	0.000%	55,666,902	220
45-64	F	0.001%	39,954,974	332
65-74	F	0.002%	10,858,013	199
Over 75	F	0.003%	11,546,900	344
<b>Total</b>		<b>0.001%</b>	<b>304,059,724</b>	<b>1,931</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.007%	37,833,517	2,592
18-44	M	0.006%	57,523,012	3,336
45-64	M	0.013%	38,103,272	4,968
65-74	M	0.018%	9,264,928	1,689
Over 75	M	0.023%	7,199,875	1,636
0-17	F	0.007%	36,108,331	2,569
18-44	F	0.012%	55,666,902	6,544
45-64	F	0.019%	39,954,974	7,736
65-74	F	0.026%	10,858,013	2,803
Over 75	F	0.027%	11,546,900	3,129
<b>Total</b>		<b>0.012%</b>	<b>304,059,724</b>	<b>37,002</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	38,934	\$ 810	\$ 32
Mortality cost	38,934	\$ -	\$ -
Disability cost	38,934	\$ 50	\$ 2
<b>Total</b>	<b>38,934</b>	<b>\$ 860</b>	<b>\$ 33</b>

**Measurable Medical Costs**

Unspecified adverse effect of drug medicinal and biological substance not elsewhere classified

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	14,957	58,567	\$ 35,572	\$ 30,364	\$ 5,208	0.000	\$ 5,208
Next 9 months	13,292	50,088	\$ 26,549	\$ 22,871	\$ 3,678	0.000	\$ 3,678
Year 2	8,728	32,827	\$ 25,672	\$ 24,141	\$ 1,532	0.014	\$ 1,532
Year 3	5,680	20,686	\$ 22,942	\$ 21,061	\$ 1,880	0.008	\$ 1,880
Year 4	3,511	12,728	\$ 22,127	\$ 20,122	\$ 2,004	0.033	\$ 2,004
Year 5	2,061	7,286	\$ 20,033	\$ 19,123	\$ 910	0.202	\$ -
<b>All Periods (present value)</b>							<b>\$ 13,818</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	348,333	1,382,595	\$ 5,234	\$ 6,228	\$ (994)	1.000	\$ -
Next 9 months	318,851	1,254,991	\$ 10,490	\$ 10,357	\$ 133	0.009	\$ 133
<b>All Periods</b>							<b>\$ 131</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	1,931	\$ 13,818	\$ 27
<b>Outpatient</b>	37,002	\$ 131	\$ 5
<b>Total</b>	<b>38,934</b>	<b>\$ 810</b>	<b>\$ 32</b>

**In Hospital Mortality Costs**

Unspecified adverse effect of drug medicinal and biological substance not elsewhere classified

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	14,957	58,567	181	1,240	-0.909%	0.0000
Next 9 months	13,292	50,088	224	733	0.223%	0.0607

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.909%	0	\$ -	\$ -
Next 9 months	0.98	0.000%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	348,333	1,382,595	2,166	8,446	0.009%	0.5246
Next 9 months	318,851	1,254,991	363	1,624	-0.016%	0.0274

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	-0.016%	0	\$ -	\$ -

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	N/A
Male, 18-44	N/A	N/A
Male, 45-64	N/A	N/A
Male, 65-74	N/A	N/A
Male, Over 75	N/A	N/A
Female, 0-17	N/A	N/A
Female, 18-44	N/A	N/A
Female, 45-64	N/A	N/A
Female, 65-74	N/A	N/A
Female, Over 75	N/A	N/A

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	1,931	0	\$ -	\$ -	\$ -
Outpatient	37,002	0	\$ -	\$ -	\$ -
<b>Total</b>	<b>38,934</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Short-Term Disability Costs**

Unspecified adverse effect of drug medicinal and biological substance not elsewhere classified

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	398	1,514	60	50	10.53	0.0168
Outpatient	10,209	40,565	13	14	0.00	0.9971

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ 0	\$ -	\$ 0
Male, 45-64	\$ 183.86	\$ 1	\$ -	\$ 1
Male, 65-74	\$ 74.13	\$ 0	\$ -	\$ 0
Male, Over 75	\$ 44.91	\$ 0	\$ -	\$ 0
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ 0	\$ -	\$ 0
Female, 45-64	\$ 114.58	\$ 0	\$ -	\$ 0
Female, 65-74	\$ 64.53	\$ 0	\$ -	\$ 0
Female, Over 75	\$ 44.33	\$ 0	\$ -	\$ 0
<b>Total</b>		<b>\$ 2</b>	<b>\$ -</b>	<b>\$ 2</b>

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	1,931	\$ 1,010	\$ 2
Outpatient	37,002	\$ -	\$ -
<b>Total</b>	<b>38,934</b>	<b>\$ 50</b>	<b>\$ 2</b>



**Cost Development****Ventral hernia without mention of obstruction or gangrene**

Frequency with which injury is associated with error: 10-35 %

**Inpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	13
18-44	M	0.001%	57,523,012	417
45-64	M	0.003%	38,103,272	1,148
65-74	M	0.006%	9,264,928	557
Over 75	M	0.007%	7,199,875	490
0-17	F	0.000%	36,108,331	9
18-44	F	0.002%	55,666,902	910
45-64	F	0.004%	39,954,974	1,791
65-74	F	0.009%	10,858,013	984
Over 75	F	0.006%	11,546,900	732
<b>Total</b>		<b>0.002%</b>	<b>304,059,724</b>	<b>7,049</b>

**Outpatient Errors Prevalence Rates**

Age Group	Gender	Error Prevalence Rate in 2008 (based on Medstat)	US Population By Age/Gender	Estimated Number of Errors in US Population By Age/Gender
0-17	M	0.000%	37,833,517	151
18-44	M	0.006%	57,523,012	3,601
45-64	M	0.023%	38,103,272	8,829
65-74	M	0.045%	9,264,928	4,144
Over 75	M	0.036%	7,199,875	2,564
0-17	F	0.000%	36,108,331	129
18-44	F	0.013%	55,666,902	7,107
45-64	F	0.029%	39,954,974	11,724
65-74	F	0.043%	10,858,013	4,684
Over 75	F	0.033%	11,546,900	3,829
<b>Total</b>		<b>0.015%</b>	<b>304,059,724</b>	<b>46,761</b>

**Summary of Measurable Costs**

	Number of errors	Cost per error	Total cost (millions)
Medical cost	53,810	\$ 6,359	\$ 342
Mortality cost	53,810	\$ 260	\$ 14
Disability cost	53,810	\$ 1,559	\$ 84
<b>Total</b>	<b>53,810</b>	<b>\$ 8,178</b>	<b>\$ 440</b>

**Measurable Medical Costs**

**Ventral hernia without mention of obstruction or gangrene**

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	12,502	45,129	\$ 26,543	\$ 25,330	\$ 1,213	0.002	\$ 1,213
Next 9 months	11,255	39,814	\$ 17,161	\$ 15,728	\$ 1,433	0.001	\$ 1,433
Year 2	7,757	27,604	\$ 21,914	\$ 18,587	\$ 3,327	0.000	\$ 3,327
Year 3	5,201	18,343	\$ 19,719	\$ 17,237	\$ 2,482	0.000	\$ 2,482
Year 4	3,517	12,330	\$ 17,994	\$ 16,089	\$ 1,905	0.004	\$ 1,905
Year 5	2,246	7,702	\$ 18,434	\$ 15,736	\$ 2,698	0.006	\$ 2,698
<b>All Periods (present value)</b>							<b>\$ 12,183</b>

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Mean (cases)	Mean (controls)	Difference in Means	P-value	Significant Excess Average Costs per error (alpha = 0.05)
1st 3 months	77,203	284,747	\$ 11,472	\$ 7,702	\$ 3,770	-	\$ 3,770
Next 9 months	69,970	255,153	\$ 12,783	\$ 11,025	\$ 1,758	0.000	\$ 1,758
<b>All Periods</b>							<b>\$ 5,481</b>

**Total Measurable Medical Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
<b>Inpatient</b>	7,049	\$ 12,183	\$ 86
<b>Outpatient</b>	46,761	\$ 5,481	\$ 256
<b>Total</b>	<b>53,810</b>	<b>\$ 6,359</b>	<b>\$ 342</b>

**In Hospital Mortality Costs**

Ventral hernia without mention of obstruction or gangrene

**Significance Testing (Inpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	12,502	45,129	74	539	-0.604%	0.0000
Next 9 months	11,255	39,814	63	294	-0.179%	0.0445

**Key Values for Inpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	-0.604%	0	\$ -	\$ -
Next 9 months	0.99	-0.179%	0	\$ -	\$ -

**Significance Testing (Outpatient Errors)**

Period	N (cases)	N (controls)	Deaths (cases)	Deaths (controls)	Difference in Death Rate	P-value
1st 3 months	77,203	284,747	428	1,653	-0.027%	0.3760
Next 9 months	69,970	255,153	122	333	0.044%	0.0060

**Key Values for Outpatient Deaths**

Period	Probability of Survival to the Start of Period	Mean Significant Excess Death Rate	Excess Deaths	Cost per death (PV)	Cost of excess deaths (PV)
1st 3 months	1.00	0.000%	0	\$ -	\$ -
Next 9 months	0.99	0.044%	21	\$ 681,467	\$ 13,973,611

**Age / Gender Distribution of Excess Deaths**

	Percent of Deaths (Inpatient Error Sample)	Percent of Deaths (Outpatient Error Sample)
Male, 0-17	N/A	0%
Male, 18-44	N/A	8%
Male, 45-64	N/A	19%
Male, 65-74	N/A	9%
Male, Over 75	N/A	5%
Female, 0-17	N/A	0%
Female, 18-44	N/A	15%
Female, 45-64	N/A	25%
Female, 65-74	N/A	10%
Female, Over 75	N/A	8%

\*N/A means there are no excess deaths for this error

**Total In Hospital Mortality Costs**

	Errors	Excess Deaths	Cost per death	Cost per error	Total Cost (\$ millions)
Inpatient	7,049	0	\$ -	\$ -	\$ -
Outpatient	46,761	21	\$ 681,467	\$ 299	\$ 14
<b>Total</b>	<b>53,810</b>	<b>21</b>	<b>\$ 681,467</b>	<b>\$ 260</b>	<b>\$ 14</b>

**Short-Term Disability Costs**

Ventral hernia without mention of obstruction or gangrene

**Significance Testing**

Service Category	N (cases)	N (controls)	Mean Days Missed (cases)	Mean Days Missed (controls)	Excess days missed in error group	p-value
Inpatient	340	1,161	51	47	3.56	0.1790
Outpatient	2,288	8,452	33	18	15.34	0.0000

**Summary of Short-Term Disability Costs**

Age Group	Daily Productivity Value	Inpatient Estimated Disability Costs (\$ millions)	Outpatient Estimated Disability Costs (\$ millions)	Total Estimated Disability Costs (\$ millions)
Male, 0-17	\$ -	\$ -	\$ -	\$ -
Male, 18-44	\$ 172.81	\$ -	\$ 10	\$ 10
Male, 45-64	\$ 183.86	\$ -	\$ 25	\$ 25
Male, 65-74	\$ 74.13	\$ -	\$ 5	\$ 5
Male, Over 75	\$ 44.91	\$ -	\$ 2	\$ 2
Female, 0-17	\$ -	\$ -	\$ -	\$ -
Female, 18-44	\$ 139.06	\$ -	\$ 15	\$ 15
Female, 45-64	\$ 114.58	\$ -	\$ 21	\$ 21
Female, 65-74	\$ 64.53	\$ -	\$ 5	\$ 5
Female, Over 75	\$ 44.33	\$ -	\$ 3	\$ 3
<b>Total</b>		<b>\$ -</b>	<b>\$ 84</b>	<b>\$ 84</b>

**Total Short-Term Disability Costs**

	Errors	Cost per Error	Total Cost (\$ millions)
Inpatient	7,049	\$ -	\$ -
Outpatient	46,761	\$ 1,794	\$ 84
<b>Total</b>	<b>53,810</b>	<b>\$ 1,559</b>	<b>\$ 84</b>