



## GleasonESP® Case Studies November 2000

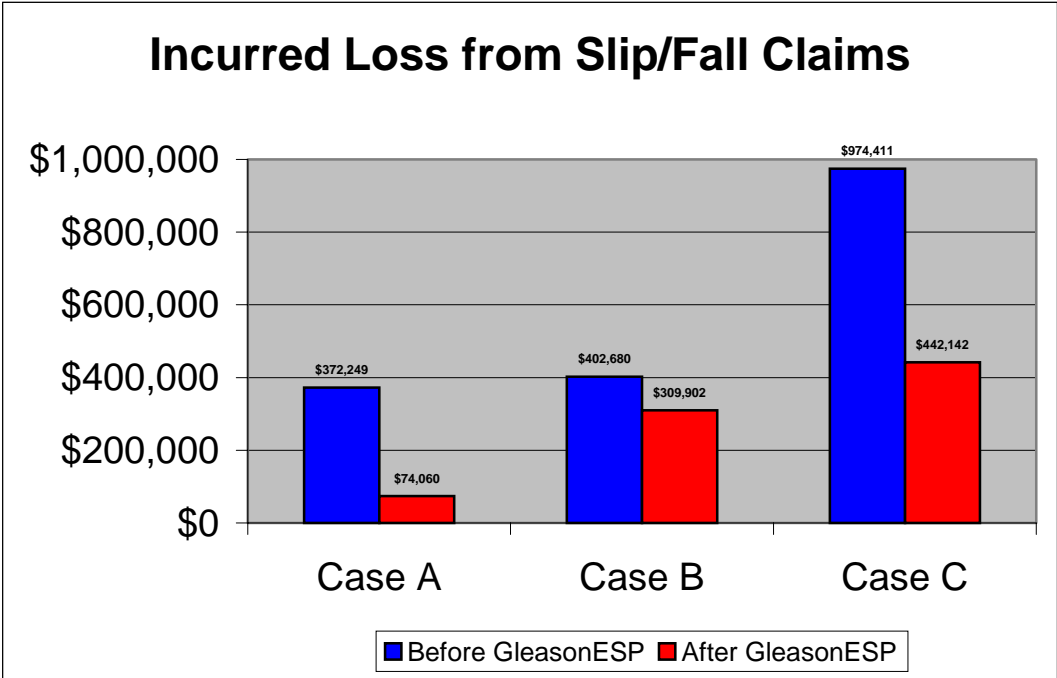
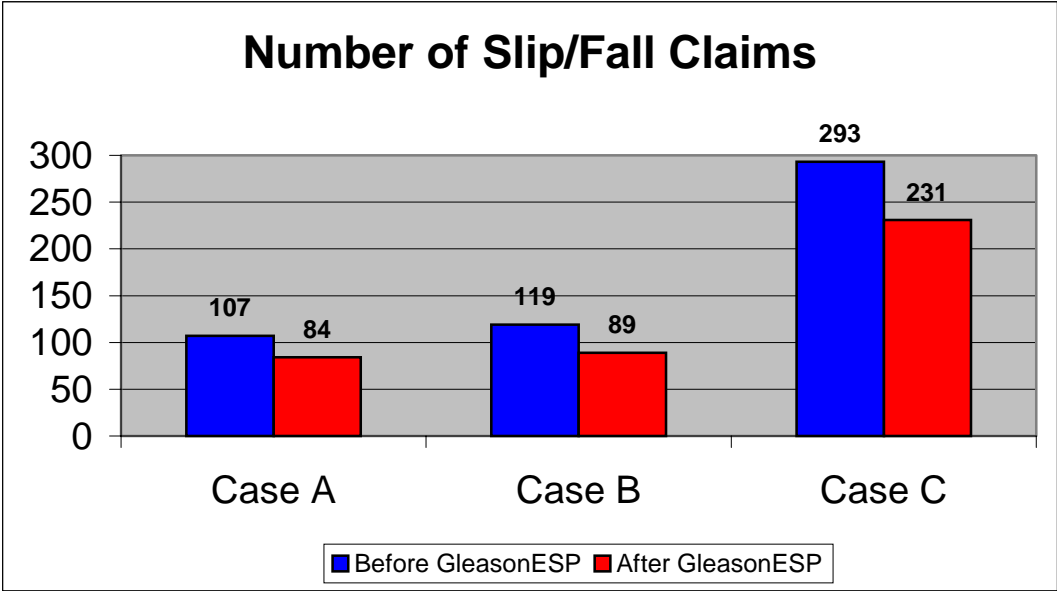
To test the initial effectiveness of the GleasonESP® electronic slip/fall prevention system, Gleason completed three case studies in November, 2000. These three case studies, attached to this summary, and identified as "A", "B", and "C", include approximately two years' experience from 54 supermarkets in the eastern United States.

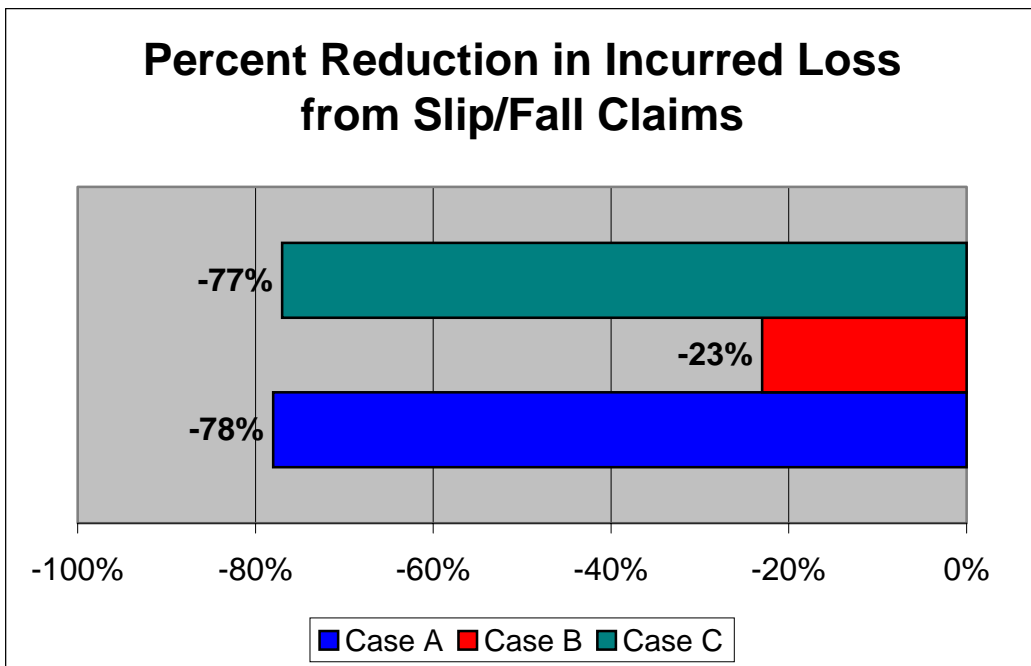
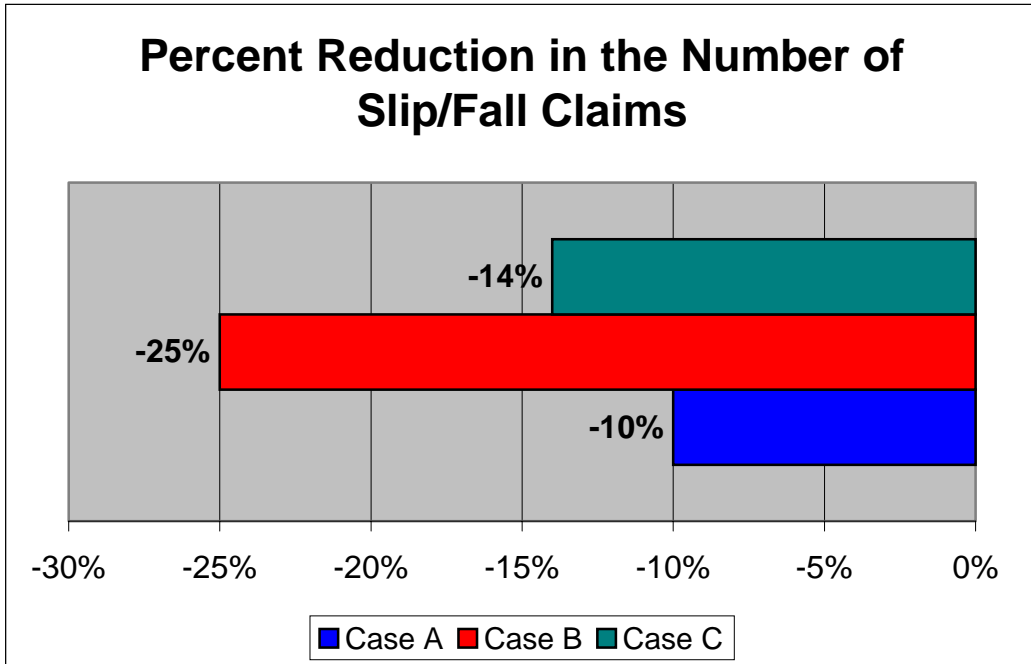
Looking at these three case studies together, we project a reduction of **18%** in the number of customer slip/fall claims inside the store, and an estimated annual savings of **\$555,379** in the cost of these claims. This represents **an estimated annual savings of over \$10,000 per store** in claim costs. (Bear in mind that this dollar savings estimate is based on incurred losses, which include claim reserves that can change up or down in the future.)

We believe that these studies significantly underestimate the potential and actual savings from GleasonESP, for the following reasons:

- These results were achieved with an average GleasonESP completion percentage of just over 70%. Increasing the completion percentage to 80% or higher will produce greater reductions in claim frequency and cost.
- This projected savings includes only the direct cost of customer slip/fall claims; that is, losses and expenses paid by the insurance company. The unmeasurable indirect costs, such as the cost of investigation, cleanup, and management, likely add an additional 50% to the direct cost, and perhaps 100% or more.
- This study does not measure the effect of GleasonESP on the reduction of employee slip and fall injuries, but it is reasonable to assume that cleaner floors and a safety culture will result in a similar reduction in workers' compensation claims.
- The implementation of GleasonESP helps foster a safety culture in the organization, encouraging employees to think and act on safety at all times.
- GleasonESP compels managers and employees to visit the sales floor and interact with customers each hour. This exposure to customers certainly results in increased customer satisfaction, sales, and return visits that cannot be quantified, but nevertheless are quite real.

For more information on the GleasonESP electronic slip/fall prevention system, contact Brian Rosen at Gleason Technology, 610/993-7558, or send e-mail to [brosen@gleasonagency.com](mailto:brosen@gleasonagency.com). You also may visit the GleasonESP Web site at [www.gleasonesp.com](http://www.gleasonesp.com).







**Gleason ESP™ Case Study "A"** is a 45-store supermarket chain in the southern United States. This retailer installed GleasonESP in 16 stores; thus, our case study compares two groups of stores: a 16-store group with GleasonESP in place for one year, and a 29-store group that has not yet installed GleasonESP.

Loss data for customer slip/fall claims inside the stores was reviewed one year after the implementation of GleasonESP. We found that the entire company improved its performance relative to slip/fall prevention. Since slip/fall prevention training was given to all store managers, not just the managers of the GleasonESP stores, there has been an increased awareness of the importance of preventing slips and falls throughout the company.

Beyond this, it is evident that the GleasonESP stores achieved a significantly greater reduction in both the number of claims and the cost of those claims. The non-ESP stores showed a 5% reduction in the claim count, whereas the GleasonESP stores showed twice the improvement, a 10% reduction in the number of claims.

The data confirmed that a higher GleasonESP completion percentage (walk rate) leads to better results. Out of the 16 stores with GleasonESP, 5 individual stores posted an increase in the number of claims during the study period. The stores with an increase in the number of claims had an average walk rate of 63%, whereas the 11 stores with no claim increase had an average walk rate of 73%. Thus, a higher walk rate correlated with a reduced claim frequency.

The cost of slip/fall claims inside the store was reduced 72% across the entire chain, with a 64% reduction in the non-ESP stores versus a 78% reduction in the GleasonESP stores. These figures are equivalent to a projected savings of \$177,421 per year, just for the 16 stores with GleasonESP installed.

These results were achieved with an average 70% walk rate for the 16 GleasonESP stores. We believe that significantly better results can be achieved in the future with a higher walk rate.



Study of GleasonESP™ Results - Case Study "A"

Number of Customer Slip/Fall Claims  
Inside the Store

Incurred Loss for Customer Slip/Fall Claims  
Inside the Store

GleasonESP™  
Percentage  
Completion  
Sep. 1, 1999 -  
Sep. 1, 2000

Store	Number of Customer Slip/Fall Claims Inside the Store			Incurred Loss for Customer Slip/Fall Claims Inside the Store			GleasonESP™ Percentage Completion Sep. 1, 1999 - Sep. 1, 2000
	Before GleasonESP™ Sep. 1, 1998 - Aug. 1, 1999	After GleasonESP™ Sep. 1, 1999 - Sep. 1, 2000	Increase or (Reduction)	Before GleasonESP™ Sep. 1, 1998 - Aug. 1, 1999	After GleasonESP™ Sep. 1, 1999 - Sep. 1, 2000	Increase or (Reduction)	
<b>Group 1: Stores with GleasonESP™ Installed</b>							
6	7	6	(1)	9,200	-	(9,200)	67%
8	6	11	5	13,480	6,072	(7,408)	86%
9	6	5	(1)	16,770	172	(16,598)	83%
11	5	4	(1)	3,000	-	(3,000)	91%
30	3	5	2	13,000	7,013	(5,987)	55%
31	12	2	(10)	58,800	1,195	(57,605)	76%
32	6	12	6	3,511	4,500	989	64%
33	3	3	-	10,600	-	(10,600)	76%
37	4	5	1	4,750	4,799	49	70%
41	6	2	(4)	11,532	1,500	(10,032)	46%
42	8	8	-	8,100	6,500	(1,600)	78%
43	5	9	4	13,400	3,253	(10,147)	39%
49	8	4	(4)	16,600	4,250	(12,350)	52%
62	5	5	-	17,900	6,300	(11,600)	93%
63	9	2	(7)	19,226	600	(18,626)	62%
71	4	4	-	6,907	3,200	(3,707)	82%
<b>Sub-Total</b>	<b>97</b>	<b>87</b>	<b>(10)</b>	<b>226,776</b>	<b>49,355</b>	<b>(177,421)</b>	
<b>Percentage</b>			<b>-10%</b>			<b>-78%</b>	

<b>Group 2: Stores without GleasonESP™</b>							
5	1	3	2		2,500	2,500	
7	3	2	(1)	7,000	-	(7,000)	
12	1	3	2		4,000	4,000	
14	5	1	(4)		-	-	
16	2	0	(2)	9,100	-	(9,100)	
18	2	1	(1)	500	-	(500)	
19	2	3	1	1,600	6,000	4,400	
20	1	1	-	75,000	-	(75,000)	
21	1	0	(1)	1,000	-	(1,000)	
22			-				
23	2	4	2	1,000	-	(1,000)	
24	5	3	(2)	530	1,500	970	
25	6	5	(1)	4,900	7,500	2,600	
26	4	1	(3)	27,750	-	(27,750)	
28	3		(3)	8,500		(8,500)	
29	2	1	(1)	1,000	-	(1,000)	
34	3	5	2	3,400	4,000	600	
35	3	2	(1)	4,000	-	(4,000)	
38	3	2	(1)	5,800	1,250	(4,550)	
39	4	1	(3)	2,200	13,410	11,210	
40	6		(6)	9,000		(9,000)	
45	5	2	(3)	6,089	-	(6,089)	
46		11	11		4,258	4,258	
47	3	4	1	1,750	3,500	1,750	
48	3	2	(1)	5,000	-	(5,000)	
64		4	4		6,500	6,500	
70	2	2	-	1,000	5,000	4,000	
72	7	8	1	5,550	6,500	950	
73		4	4		200	200	
<b>Sub-Total</b>	<b>79</b>	<b>75</b>	<b>(4)</b>	<b>181,669</b>	<b>66,118</b>	<b>(115,551)</b>	
<b>Percentage</b>			<b>-5%</b>			<b>-64%</b>	

<b>Grand Total</b>	<b>176</b>	<b>162</b>	<b>-14</b>	<b>408,445</b>	<b>115,473</b>	<b>(292,972)</b>	
			<b>-8%</b>			<b>-72%</b>	



**GleasonESP Case Study "B"** is a 33-store supermarket chain in the mid-Atlantic region. The GleasonESP system has been installed in 100% these stores.

Of the 33 stores, three stores are newly-opened, and GleasonESP was installed soon after opening. Because these new stores have no experience without GleasonESP, they were excluded from the study.

Our study compares customer slip/fall claims inside the store for nine months before and after the installation of GleasonESP in the remaining 30 stores. Two of these stores, which were early pilot stores for the GleasonESP system, were examined for a 24-month period before and after GleasonESP.

Table 1 displays the results from all 30 stores in the study. This retailer achieved a 14% reduction in the number of claims per 1 million customers. The results also showed a 6% increase in the cost of claims per 1 million customers.

The GleasonESP system is designed to facilitate and document hourly store safety walking tours. During the time period under study, four of the 30 stores piloted every-two-hour walks. Because these stores did not use the system as designed, we also examined study results with these four stores excluded. The remaining 26 stores, shown in Case Study B, Table 2, achieved a 27% reduction in the number of claims per 1 million customers, and a 25% reduction in the cost of claims per 1 million customers. Thus, results with the every-two-hour stores excluded from the study population are significantly more positive. Because the results are so much better when the every-two-hour stores are excluded, we concluded that GleasonESP walking tours must be performed every hour, as the system was designed.

We project an annual savings of \$182,709 per year due to the implementation of GleasonESP.

We also performed an applied statistical analysis of the number of claims per 1 million customers shown in Table 2. Using a two-sample z-test for the difference of means, we concluded with a 94% confidence level (z score of  $-1.57$ ) that the reduction in claim counts was due only to the implementation of the GleasonESP system.

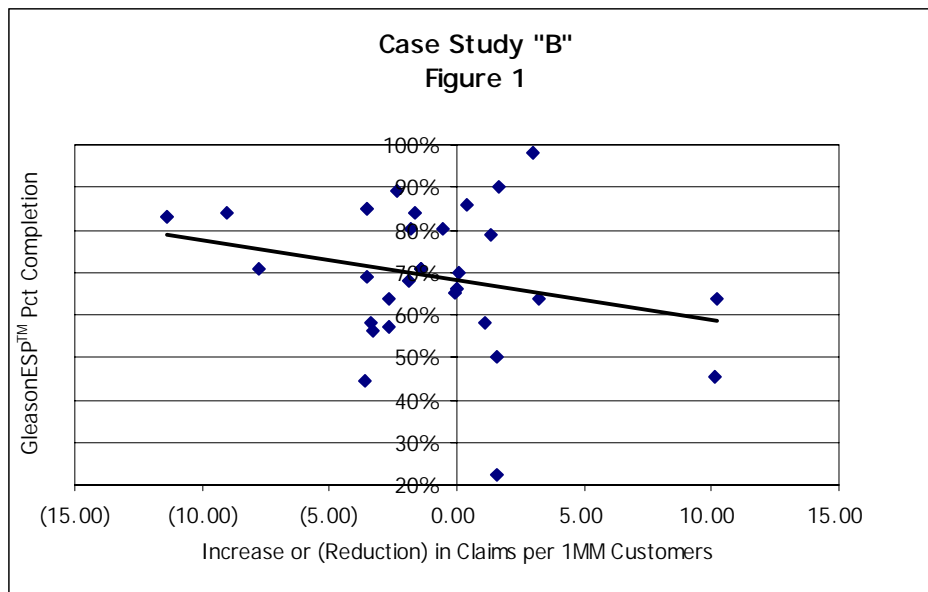
Of the 26 stores in Table 2, 18 stores (69%) showed a reduction in the number of claims per 1 million customers, and 8 stores (31%) showed an increase. Thus, the majority of stores using GleasonESP every hour exhibited a decrease in the number of claims per 1 million customers. And, the stores with a claims increase exhibited a walk rate of 66%, versus a walk rate of 71% for the stores with no increase, showing that GleasonESP walks, properly done, correlate with an improvement in claims experience.



Further, our analysis showed a graphical correlation between the reduction in the claim count and the GleasonESP walk rate. As shown in Figure 1, below, the trend line slopes upward to the left, confirming that a higher walk rate correlates with a greater reduction in the number of claims.

Table 2 shows a before-GleasonESP result of 5.37 claims per 1 million customers, and an after-GleasonESP result of 3.91 claims per 1 million customers. To validate these numbers, we consulted the Food Marketing Institute (FMI) study entitled, "Customer & Employee Accident Experience in the Supermarket Industry – 1998." Interpolation and interpretation of the FMI data shows a comparable figure of 4.74 claims per 1 million customers. We concluded that the GleasonESP system reduced the customer slip/fall claim frequency from above the FMI average to below the FMI average.

These results were achieved with an average 73% walk rate for the 26 stores listed in Table 2. We believe that significantly better results can be achieved in the future with a higher walk rate.







Study of GleasonESP™ Results - Case Study B - Table 2

Store	Customer Count Before Gleason ESP™	Customer Count After Gleason ESP™	Gleason ESP™ Install Date	Number of Claims			Number of Claims Per 1 Million Customers			Incurred Loss			Incurred Loss Per 1 Million Customers			Gleason ESP™ Cumulative Completion Percentage	
				Before Gleason ESP™	After Gleason ESP™	Inc'r or (Reduc)	Before Gleason ESP™	After Gleason ESP™	Inc'r or (Reduc)	Before Gleason ESP™	After Gleason ESP™	Inc'r or (Reduc)	Before Gleason ESP™	After Gleason ESP™	Inc'r or (Reduc)		
1	816,798	750,132	10/25/99	4	4	0	4.90	5.33	0.43	\$26,000	\$7,500	(\$18,500)	\$31,832	\$9,998	(\$21,834)	86%	
3	1,157,206	1,166,631	10/25/99	3	3	0	2.59	2.57	(0.02)		\$12,500	\$12,500	\$0	\$10,715	\$10,715		66%
4 **																	
5	688,522	647,927	10/27/99	11	3	(8)	15.98	4.63	(11.35)	\$10,582	\$2,500	(\$8,082)	\$15,369	\$3,858	(\$11,511)	83%	
7	509,688	496,237	10/28/99	2	7	5	3.92	14.11	10.19		\$41,602	\$41,602	\$0	\$83,835	\$83,835		64%
8	538,127	540,740	10/26/99	2	1	(1)	3.72	1.85	(1.87)		\$7,500	\$7,500	\$0	\$13,870	\$13,870		68%
11	548,501	545,945	10/29/99	4	3	(1)	7.29	5.50	(1.79)	\$15,265	\$2,500	(\$12,765)	\$27,830	\$4,579	(\$23,251)	80%	
12	880,417	926,739	11/15/99	6	3	(3)	6.81	3.24	(3.57)	\$90,500	\$7,560	(\$82,940)	\$102,792	\$8,158	(\$94,634)	69%	
14 **																	
15	709,399	730,132	11/19/99	1	2	1	1.41	2.74	1.33	\$308		(\$308)	\$434	\$0	(\$434)	79%	
16	803,271	872,837	11/04/99	3	2	(1)	3.73	2.29	(1.44)	\$7,625		(\$7,625)	\$9,492	\$0	(\$9,492)	71%	
19	701,936	694,492	11/10/99	2	1	(1)	2.85	1.44	(1.41)	\$15	\$5,000	\$4,985	\$21	\$7,200	\$7,179	71%	
20	813,021	788,925	11/11/99	1	1	0	1.23	1.27	0.04			\$0	\$0	\$0	\$0	70%	
21	852,989	861,625	11/03/99	4	2	(2)	4.69	2.32	(2.37)	\$50,075	\$500	(\$49,575)	\$58,705	\$580	(\$58,125)	89%	
22	862,695	845,123	11/03/99	6	3	(3)	6.95	3.55	(3.40)	\$65,000		(\$65,000)	\$75,345	\$0	(\$75,345)	58%	
23	631,569	627,621	11/10/99	1	3	2	1.58	4.78	3.20		\$17,500	\$17,500	\$0	\$27,883	\$27,883	64%	
24	610,833	612,704	10/29/99	4	3	(1)	6.55	4.90	(1.65)	\$27,023		(\$27,023)	\$44,240	\$0	(\$44,240)	84%	
25	452,855	487,151	11/17/99	4	3	(1)	8.83	6.16	(2.67)	\$5,000	\$388	(\$4,612)	\$11,041	\$796	(\$10,245)	64%	
26	714,483	642,303	10/28/99	3	1	(2)	4.20	1.56	(2.64)			\$0	\$0	\$0	\$0	57%	
27*	2,917,441	2,807,820	09/17/98	19	18	(1)	6.51	6.41	(0.10)	\$25,977	\$82,105	\$56,128	\$8,904	\$29,242	\$20,338	65%	
28 **																	
29*	2,147,241	2,379,681	11/04/98	12	16	4	5.59	6.72	1.13	\$64,500	\$42,247	(\$22,253)	\$30,039	\$17,753	(\$12,286)	58%	
30	855,495	906,479	12/10/99	3		(3)	3.51	0.00	(3.51)			\$0	\$0	\$0	\$0	85%	
31	657,171	676,824	12/10/99		2	2	0.00	2.95	2.95		\$1,000	\$1,000	\$0	\$1,477	\$1,477	98%	
32	963,901	896,104	11/15/99	13	4	(9)	13.49	4.46	(9.03)	\$2,903	\$12,500	\$9,597	\$3,012	\$13,949	\$10,937	84%	
33	644,441	689,269	11/12/99	5		(5)	7.76	0.00	(7.76)	\$8,000		(\$8,000)	\$12,414	\$0	(\$12,414)	71%	
34 **																	
35	942,721	997,171	11/08/99	5	2	(3)	5.30	2.01	(3.29)	\$3,907	\$66,000	\$62,093	\$4,144	\$66,187	\$62,043	56%	
36	420,156	549,712	11/08/99	1	1	0	2.38	1.82	(0.56)			\$0	\$0	\$0	\$0	80%	
40	323,006	607,380	11/10/99		1	1	0.00	1.65	1.65		\$1,000	\$1,000	\$0	\$1,646	\$1,646	90%	
Total	22,163,883	22,747,704		119	89	(30)	5.37	3.91	(1.46)	\$402,680	\$309,902	(\$92,778)	\$18,168	\$13,623	(\$4,545)		
Percentage																	

Before = 9 months before GleasonESP™ installation

After = 9 months after GleasonESP™ installation

\* For Store 27 and Store 29, test period is plus and minus 21 months

\*\* Test store for every-two-hour walks. GleasonESP™ cumulative completion percentage figures are divided by two.

Store 37, Store 39, and Store 41 were excluded from the study because of insufficient "before GleasonESP™" experience.

Gleason Technology  
US Patent #6,098,255



**GleasonESP Case Study "C"** is a 12-store supermarket chain in New England. This firm installed GleasonESP in all 12 stores. Our case study compares customer slip and fall claims inside the store for the first nine months of 1999 to the same period in calendar year 2000.

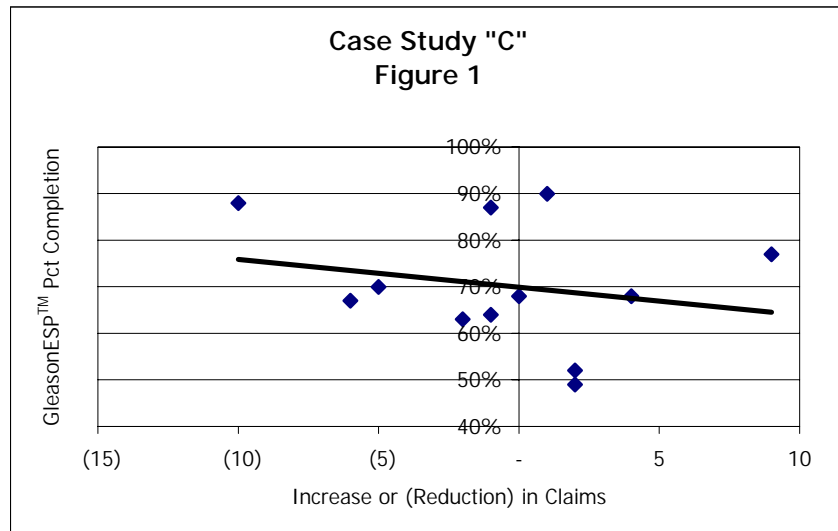
After GleasonESP was implemented, this retailer achieved a 14% reduction in the number of claims, and a 77% reduction in the cost of those claims.

As in Case Studies "A" and "B", the data confirmed that a higher GleasonESP completion percentage (walk rate) leads to better results. Five individual stores exhibited an increase in the number of claims during the study period, and these stores had an average walk rate of 67%. In contrast, the seven stores with no claim increase had an average walk rate of 73%. Thus, a higher walk rate correlates with a reduced claim frequency.

Further, our analysis showed a graphical correlation between the reduction in the claim count and the GleasonESP walk rate. The trend line slopes upward to the left, confirming that a higher walk rate correlates with a greater reduction in the number of claims.

We project an annual savings of \$195,249 from the implementation of GleasonESP.

These results were achieved with an average 70% walk rate. We believe that significantly better results can be achieved in the future with a higher walk rate.





Study of GleasonESP™ Results - Case Study "C"

Store	Number of Customer Slip/Fall Claims Inside the Store			Incurred Loss for Customer Slip/Fall Claims Inside the Store			GleasonESP™ Percentage Completion Jan.1 thru Sep.30,2000
	Before GleasonESP™	After GleasonESP™	Increase or (Reduction)	Before GleasonESP™	After GleasonESP™	Increase or (Reduction)	
	Jan.1 thru Sep.30,1999	Jan.1 thru Sep.30,2000		Jan.1 thru Sep.30,1999	Jan.1 thru Sep.30,2000		
1	0	0	-	0	0	-	68%
2	3	1	(2)	8,080	-	(8,080)	63%
3	2	11	9	5	13,400	13,395	77%
5	1	3	2	1,270	750	(520)	49%
6	3	4	1	23,543	1,500	(22,043)	90%
7	6	5	(1)	2,725	3,000	275	87%
8	11	6	(5)	54,083	5,130	(48,953)	70%
9	16	6	(10)	79,646	2,250	(77,396)	88%
11	3	2	(1)	11,500	3,250	(8,250)	64%
12	4	6	2	4,770	11,450	6,680	52%
13		4	4		3,000	3,000	68%
14	6		(6)	917		(917)	67%
Uncoded	1		(1)	3,628		(3,628)	
<b>Total</b>	<b>56</b>	<b>48</b>	<b>(8)</b>	<b>190,167</b>	<b>43,730</b>	<b>(146,437)</b>	
<b>Percentage</b>			<b>-14%</b>			<b>-77%</b>	