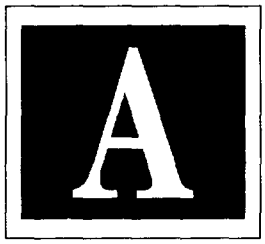
Appendix



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Appendix

B

Summary of Data Preparation and Data Issues

Tables

I. Frequency Distributions of Risk Groups for Risk Assessment Methods

Table B-1. Age and Sex Method Distribution
Table B-2. ACG Method Distribution
Table B-3. ADG Method Distribution
Table B-4. DCG Method Distribution
Table B-5. CDXG Method Distribution

II. Construction of Nonrandom Groups

Table B-6. ICD-9 Codes Used in Constructing Nonrandom Groups

III. Data Preparation

Table B-7. Assumptions Used for Imputation of Nonclaimants for Selected Pools

Imputing Nonclaimants for Selected Pools

For three of the carriers submitting data to the study, data were not reported for those enrollees without claims (nonclaimants). With the assistance of the actuarial advisors to the project, we developed an algorithm to estimate the number of nonclaimants, pool-by-pool. To do this, we examined the percentage claimants of all enrollees by age and sex group using data from other carriers with similar health plan types and complete records. Using these percentages and the number of claimants in each age and sex group, we imputed the number of nonclaimants for each of the "problem" pools. The percentages used for the indemnity and PPO pools are shown in Table B-7.

For example, we found that for indemnity pools, on average, 53% of male enrollees ages 25 to 34 were claimants in a year. We applied these assumptions to the indemnity pools with incomplete data to compute the number of nonclaimants. If an indemnity pool with incomplete data reported 1,000 male claimants for a year for ages 25 to 34, we assumed that there were a total of 1887 enrollees in that age and sex cell for the pool—1,000 claimants and 887 nonclaimants.

We found the percentages reported in Table B-7 to be quite consistent across pools within a plan type. Since we observed a greater percentage of claimants for the PPO pools analyzed, we used a higher percentage in imputing nonclaimants for those pools.

TABLE B-1
AGE AND SEX METHOD DISTRIBUTION (28 GROUPS)

Female	Percentage of Enrollees	Male	Percentage of Enrollees
< 01 years	0.7%	< 01 years	0.8%
01–04	3.0	01–04	3.1
05–09	3.9	05–09	4.1
10–14	4.0	10–14	4.2
15–19	3.4	15–19	3.6
20–24	3.0	20–24	2.7
25–29	4.4	25–29	3.9
30–34	5.6	30–34	5.2
35–39	5.6	35–39	5.2
40–44	5.4	40–44	5.0
45–49	4.0	45–49	3.9
50–54	3.0	50–54	2.9
55–59	2.5	55–59	2.4
60–64	2.2	60–64	2.1

TABLE B-2
ACG METHOD DISTRIBUTION

ACG	Description	Percentage of Enrollees	ACG	Description	Percentage of Enrollees
1	Acute Minor, Age < 1	0.3%	29	Acute Minor/Acute Major/Likely to Recur Discrete, Age < 2	0.4%
2	Acute Minor, Age 2–5	0.6	30	Acute Minor/Acute Major/Likely to Recur Discrete, Age 2–5	0.3
3	Acute Minor, Age 6+	4.8	31	Acute Minor/Acute Major/Likely to Recur Discrete, Age 6–11	0.3
4	Acute: Major	2.6	32	Acute Minor/Acute Major/Likely to Recur Discrete, Age > 5, Without Allergy	1.7
5	Likely to Recur, without Allergies	4.0	33	Acute Minor/Acute Major/Likely to Recur Discrete, Age > 5, With Allergy	0.1
6	Likely to Recur, with Allergies	0.2	34	Acute Minor/Likely to Recur Discrete/Eye & Dental	0.2
7	Asthma	0.1	35	Acute Minor/Likely to Recur Discrete/ Psychosocial	0.5
8	Chronic Medical, Unstable	0.6	36	Acute Minor/Acute Major/Likely to Recur Discrete/Eye & Dental	0.8
9	Chronic Medical, Stable	1.4	37	Acute Minor/Acute Major/Likely to Recur Discrete/Psychosocial	0.6
10	Chronic Specialty	0.1	38	2–3 Other ADG Combinations, Age < 17	1.3
11	Ophthalmological/Dental	0.7	39	2–3 Other ADG Combinations, Males Age 17–34	0.7
12	Chronic Specialty, Unstable	0.5	40	2–3 Other ADG Combinations, Females Age 17–34	1.8
13	Psychosocial, without Psychosocial Major	0.3	41	2–3 Other ADG Combinations, Age > 34	5.5
14	Psychosocial, with Psychosocial Major, without Psychosocial Minor	0.8	42	4–5 Other ADG Combinations, Age < 17	0.9
15	Psychosocial, with Psychosocial Major, with Psychosocial Minor	*	43	4–5 Other ADG Combinations, Age 17–44	3.0
16	Preventive/Administrative	2.4	44	4–5 Other ADG Combinations, Age > 44	2.2
17	Pregnancy	0.5	45	6–9 Other ADG Combinations, Age < 6	0.2
18	Acute Minor and Acute Major	2.5	46	6-9 Other ADG Combinations, Age 6–16	0.2
19	Acute Minor and Likely to Recur Discrete, Age < 1	0.6	47	6–9 Other ADG Combinations, Males Age 17–34	0.2
20	Acute Minor and Likely to Recur Discrete, Age 2–5	0.8	48	6–9 Other ADG Combinations, Females Age 17–34	0.7
21	Acute Minor and Likely to Recur Discrete, Age > 5, Without Allergy	2.8	49	6–9 Other ADG Combinations, Age > 34	2.4
22	Acute Minor and Likely to Recur Discrete, Age > 5, With Allergy	0.2	50	10+ Other ADG Combinations	0.3
23	Acute Minor and Chronic Medical: Stable	0.7	51	Visits with No ADGs Recorded	7.6
24	Acute Minor and Eye/Dental	0.3	52	No Visits, No Diagnoses Recorded	38.4
25	Acute Minor and Psychosocial Without Psychosocial Major	0.2			
26	Acute Minor and Psychosocial With Psychosocial Major, without Psychosocial Minor	0.3			
27	Acute Minor and Psychosocial with Psychosocial Major and Minor	*			
28	Acute Major and Likely to Recur Discrete	1.3			

*Less than 0.1.

TABLE B-3
ADG METHOD DISTRIBUTION

ADG	Description	Percentage of Enrollees with ADG
1	Time Limited: Minor	9.6%
2	Time Limited: Minor-Primary Infections	1.6
3	Time Limited: Major	3.8
4	Time Limited: Major-Primary Infections	3.1
5	Allergies	1.4
6	Asthma	1.5
7	Likely to Recur: Discrete	8.2
8	Likely to Recur: Discrete-Infections	13.0
9	Likely to Recur: Progressive	0.4
10	Chronic Medical: Stable	10.8
11	Chronic Medical: Unstable	4.8
12	Chronic Specialty: Stable Orthopedic	0.9
13	Chronic Specialty: Stable-Ear, Nose, Throat	0.6
14	Chronic Specialty: Stable-Eye	1.4
15	Chronic Specialty: Stable-Other	*
16	Chronic Specialty: Unstable-Orthopedic	1.2
17	Chronic Specialty: Unstable-Ear, Nose, Throat	2.3
18	Chronic Specialty: Unstable Eye	1.6
19	Chronic Specialty: Unstable-Other	0.5
20	Dermatologic	4.3
21	Injuries/Adverse Effects: Minor	4.2
22	Injuries/Adverse Effects: Major	4.5
23	Psychosocial: Major	4.8
24	Psychosocial: Other	1.4
25	Psychophysiologic	2.3
26	Signs/Symptoms: Minor	11.9
27	Signs/Symptoms: Uncertain	4.8
28	Signs/Symptoms: Major	1.3
29	Discretionary	6.9
30	See and Reassure	0.8
31	Prevention/Administrative	17.9
32	Malignancy	2.1
33	Pregnancy	2.2
34	Dental	1.8
	No ADGs	38.4

*Less than 0.1%.

TABLE B-4
DCG METHOD DISTRIBUTION

DCG#	Percentage of Enrollees		
	PIPDCGs	ADCGs	EDCGs
1	NA	78.3%	61.4%
2	96.9%	0.8	30.0
3	0.4	16.9	NA
4	0.4	0.1	6.5
5	0.7	2.7	0.2
6	0.3	0.1	0.8
7	0.3	0.4	0.1
8	0.4	0.2	0.5
10	0.3	0.3	0.2
12	0.1	0.0	0.1
14	0.1	0.1	0.1
17	*	*	*
23	*	NA	*

*Less than 0.1%

Note: Percent of enrollees with an inpatient admission and assigned to the lowest-cost PIPDCG (PIPDCG-2) was approximately 35%. These enrollees include: (a) those with hospital admissions of lower expected costs and (b) those with hospital admissions considered to be discretionary. All individuals without an admission in a year are also assigned to PIPDCG2.

TABLE B-5
CDXG METHOD DISTRIBUTION

CDXG	Description	Percentage of Enrollees With ADCGs	Percentage of Enrollees With EDCGs
1	High-Cost Infectious Diseases	0.006%	0.015%
2	Secondary and Disseminated Cancer	0.016	0.028
3	High-Cost Cancers	0.066	0.103
4	Moderate-Cost Cancers	0.269	0.193
5	Higher-Cost Diabetes	0.007	0.016
6	Lower-Cost Diabetes	0.330	0.481
7	Protein-Calorie Malnutrition	0.001	0.002
8	High-Cost Gastrointestinal Disorders	0.024	0.045
9	Liver Disease	0.023	0.009
10	Rheumatoid Arthritis	0.040	0.028
11	Drug/Alcohol Dependency/ Psychoses	0.027	0.091
12	High-Cost Mental Disorders	0.084	0.217
13	Quadriplegia/Paraplegia	*	*
14	High-Cost Nervous System Disorders	0.082	0.102
15	Cardio-Respiratory Arrest	0.051	0.082
16	Congestive Heart Failure	0.058	0.075
17	Heart Arrhythmia	0.001	0.005
18	Valvular Heart Disease	0.079	0.048
19	Coronary Artery Disease	0.315	0.217
20	Cerebrovascular Disease	0.082	0.087
21	Vascular Disease	0.085	0.129
22	Chronic Obstructive Pulmonary Disease	0.245	0.531
23	Pneumonia	0.148	0.303
24	Renal Failure	0.031	0.043
25	Chronic Ulcer of Skin	0.018	0.019
ALL	Any CDXG (one or more)	1.553	2.173

*Less than 0.001.

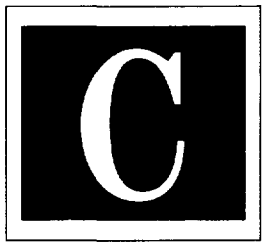
TABLE B-6
ICD-9 CODES USED IN CONSTRUCTING NONRANDOM GROUPS

Cancers	Heart Conditions
141.00–141.99	394.00–394.99
150.00–157.99	396.00–396.99
160.00-162.99	410.00–410.99
164.00–164.99	412.00–412.99
170.00–171.99	414.00-414.99
173.00–174.99	416.00–416.99
180.00–181.99	421.00–421.99
183.00–185.99	424.10–424.19
189.00–189.99	426.00–426.99
191.00-191.99	427.00–427.99
195.00–196.99	745.20–745.29
197.00–199.99	745.40–745.49
200.00–205.99	745.50–745.59
208.90–208.99	

TABLE B-7
ASSUMPTIONS USED FOR IMPUTATION OF NONCLAIMANTS FOR SELECTED POOLS

Age	Female	Male
	Indemnity Pools	
0	85%	87%
1–4	75	77
5–14	62	64
15–24	67	53
25–34	77	53
35–44	74	57
45–54	76	63
55–64	79	71
	PPO Pools	
0	88%	89%
1–4	79	81
5–14	67	69
15–24	72	58
25–34	81	58
35–44	78	62
45–54	80	68
55–64	82	75

Appendix



Detailed Results on Predictive Accuracy

Description of Study Data

Table C-1. Age and Gender Distribution of Enrollees by Pool and Year

Table C-2. Summary and Distribution of Total Expenditures by Pool and Year

Table C-3. Frequency of Total Expenditure Groups by Percentage

Table C-4. Average Expenditure by Service Group and Service Group's Percentage of Total Expenditures (Total Expenditures Truncated at $25,000)

Table C-5. Distribution by Region by Pool and Year

Summary of Predictive Accuracy

Table C-6. Summary of Predictive Accuracy—Individual Results, Retrospective Analysis (Split Half) 1991

Table C-7. Summary of Predictive Accuracy—Individual Results, Retrospective Analysis (Split Half) 1992

Table C-8. Summary of Predictive Accuracy—Individual Results, Prospective Analysis (Split Half)

Table C-9. Summary of Predictive Accuracy—Group Results, Retrospective Analysis (Split Half) 1991

Table C-10. Summary of Predictive Accuracy—Group Results, Retrospective Analysis (Split Half) 1992

Table C-11. Summary of Predictive Accuracy—Group Results, Prospective Analysis (Split Half)

Table C-12. Percentage of Absolute Errors Greater than $5,000 for All Pools and Methods, Individual Level Analysis

Table C-12a. Adjusted R2 for All Pools and Methods, Individual Level Analysis

Table C-13. Percentage of Absolute Errors within $500 for All Pools and Methods, Individual Level Analysis

Table C-13a. Mean Absolute Percentage Errors for All Pools and Methods, Group Level Analysis

Sensitivity Analysis—Truncation

Table C-14. Summary of Predictive Accuracy for Three Levels of Truncation, Individual Results, Retrospective Analysis 1992

Table C-15. Summary of Predictive Accuracy for Three Levels of Truncation, Individual Results, Prospective Analysis

Table C-16. Summary of Predictive Accuracy for Three Levels of Truncation, Group Results, Retrospective Analysis 1992

Table C-17. Summary of Predictive Accuracy for Three Levels of Truncation, Group Results, Prospective Analysis

TABLE C-1
AGE AND GENDER DISTRIBUTION OF ENROLLEES BY POOL AND YEAR

Plan Type (Pool ID)	Year	N	% Female	Age Groups							
				0	1–4	5–14	15–24	25–34	35–44	45–54	55–64
IA	1991	182,295	49.4 %	1.6	7.0	16.4	13.2	23.1	20.6	11.5	6.5
	1992	153,525	49.2	1.4	6.9	16.8	12.7	22.3	30.1	11.9	6.6
IB	1991	146,419	49.9	1.5	6.7	19.4	14.9	18.5	19.2	12.1	7.5
	1992	150,182	49.7	1.3	6.6	19.7	14.2	17.6	19.8	12.8	7.7
IC	1991	41,039	49.5	1.7	6.8	16.3	13.5	22.5	20.5	11.9	6.8
	1992	22,944	49.8	1.5	6.7	16.9	13.5	20.8	21.3	12.6	6.9
ID	1991	55,994	50.3	3.2	5.9	12.8	11.3	18.6	19.2	14.6	14.4
	1992	47,935	52.8	3.2	5.9	1.8	11.7	19.3	20.1	13.8	13.2
IE	1991	232,124	51.8	4.4	7.9	13.5	12.9	22.8	19.7	11.8	6.9
	1992	255,086	50.7	3.2	6.7	14.2	13.7	22.9	21.1	12.3	5.8
IF	1992	254,298	57.2	4.7	7.9	12.8	11.8	22.2	20.7	13.1	6.8
IG	1991	39,523	49.5	3.4	7.8	14.1	14.1	25.2	20.9	10.3	4.1
	1992	9,645	49.3	3.1	7.4	14.3	14.3	24.4	19.8	12.0	4.6
IH	1991	171,614	52.6	0.8	3.9	13.7	14.9	10.9	17.8	16.8	21.2
	1992	171,763	52.7	1.5	3.4	13.6	13.1	8.9	14.2	18.9	22.3
PA	1991	120,141	49.0	1.7	7.6	15.8	12.7	25.2	21.3	10.5	5.3
	1992	169,512	49.1	1.6	7.5	16.3	12.2	24.1	21.5	11.4	5.4
PB	1992	271,690	51.5	1.5	6.3	13.9	12.5	21.7	21.7	14.7	7.8
PC	1992	204,350	41.6	1.6	6.2	16.2	12.7	19.5	21.4	13.9	8.5
PD	1992	153,101	51.5	1.4	6.2	16.4	12.6	19.3	22.0	14.1	8.1
PE	1992	460,392	51.7	1.4	6.1	16.3	12.6	19.2	22.5	13.6	8.7
PF	1991	116,929	51.4	3.6	8.2	15.2	12.6	24.0	21.5	10.4	4.6
	1992	194,888	47.7	3.0	6.7	14.6	13.4	24.5	22.0	11.4	4.4
PG	1992	194,879	47.6	3.4	7.2	14.2	12.8	24.3	21.9	12.5	4.6
HA	1991	19,096	50.9	1.5	6.9	19.2	14.4	19.3	21.1	12.0	6.6
	1992	20,097	50.7	1.4	6.7	19.6	13.8	18.8	20.2	12.8	6.7
HB	1992	120,964	50.7	1.5	6.3	14.0	12.1	21.4	21.6	14.9	7.9
HC	1992	203,120	51.6	1.4	7.2	19.0	11.8	20.0	21.3	12.0	7.3
HD	1991	19,644	53.3	0.9	8.1	18.7	12.7	19.6	21.0	12.8	6.2
	1992	18,497	53.4	0.9	8.0	18.5	11.7	18.8	21.2	14.3	6.7

TABLE C-2
SUMMARY AND DISTRIBUTION OF TOTAL EXPENDITURES BY POOL AND YEAR

Plan Type (Pool ID)	Year	N	% 0	Q1	Median	Q3	95%	99%	Max	Mean	STD	%>25K	Mean without Truncation
IA	1991	182,295	38.2	0	113	672	5,936	18,619	25,000	1,126	3,146	0.6	1,314
	1992	153,525	38.0	0	119	717	6,597	20,616	25,000	1,223	3,365	0.7	1,451
IB	1991	146,419	37.6	0	126	701	5,417	19,132	25,000	1,101	3,128	0.7	1,302
	1992	150,182	31.3	0	195	891	6,693	22,625	25,000	1,325	3,476	0.9	1,571
IC	1991	41,039	36.3	0	132	714	5,934	19,302	25,000	1,159	3,198	0.7	1,372
	1992	22,944	31.8	0	193	942	7,316	21,332	25,000	1,373	3,480	0.8	1,629
ID	1991	55,994	34.2	0	156	920	8,212	25,000	25,000	1,514	3,963	3.3	2,031
	1992	47,935	34.6	0	165	965	8,205	25,000	25,000	1,524	3,942	3.9	2,126
IE	1991	232,124	33.2	0	137	689	5,818	18,274	25,000	1,127	3,116	1.5	1,348
IG	1991	39,523	33.5	0	124	560	5,095	13,422	25,000	932	2,625	0.3	1,052
	1992	9,645	33.6	0	132	623	5,798	18,381	25,000	1,086	3,096	0.6	1,330
PA	1991	120,141	27.5	0	200	802	6,048	17,216	25,000	1,183	3,054	0.5	1,340
	1992	169,512	28.4	0	202	846	6,526	18,619	25,000	1,260	3,226	0.6	1,407
PB	1992	271,690	34.8	0	132	626	5,392					0.5	
PC	1992	204,350	35.0	0	130	619	5,262	16,847	25,000	1,028	2,946	0.6	1,267
PD	1992	153,101	34.8	0	132	617	5,171	16,856	25,000	1,020	2,931	0.6	1,198
PE	1992	460,392	34.9	0	131	626	5,272	16,889	25,000	1,032	2,945	0.5	1,166
PF	1991	116,929	29.0	0	150	580	4,415	14,728	25,000	923	2,694	1.1	1,072
	1992	194,888	29.0	0	170	706	5,317	17,385	25,000	1,079	2,984	1.5	1,252
PG	1992	194,879	28.6	0	176	710	5,315	16,992	25,000	1,081	2,965	1.2	1,222
HA	1991	19,096	17.6	73	299	826	5,484	15,689	25,000	1,150	2,883	0.5	1,272
	1992	20,097	18.2	74	319	936	6,151	19,394	25,000	1,295	3,207	0.7	1,493
HB	1992	120,964	26.6	0	156	715	5,698	19,280	25,000	1,143	3,162	0.7	1,414
HC	1992	203,120	47.3	0	16	267	4,260	15,042	25,000	765	2,729	0.4	889
HD	1991	19,644	12.7	103	338	942	5,345	13,769	25,000	1,166	2,698	0.4	1,258
	1992	18,497	13.7	107	372	1,031	5,864	16,481	25,000	1,286	2,981	0.6	1,463

TABLE C-3
FREQUENCY OF TOTAL EXPENDITURE GROUPS BY PERCENTAGE

Plan Type (Pool ID)	Year	N	Percentage Distribution of Expenditures Truncated at $25,000								Percentage Distribution of Expenditures >$25K				
			$0	$1–100	$100–500	$500–2K	$2K–5K	$5K–10K	$10K–15K	$15K–25K	$25K–50K	$50K–100K	$100K–250K	$250K–500K	$500K+
IA	1991	182,295	38.2%	10.5%	21.9%	16.8%	6.5%	3.5%	1.2%	1.4%	66.5%	25.0%	7.3%	1.2%	0.0%
	1992	153,525	38.0	10.2	21.6	17.1	6.5	3.6	1.4	1.6	66.6	25.0	7.3	0.8	0.2
IB	1991	146,419	37.6	10.1	21.9	18.4	6.5	3.0	1.1	1.4	67.7	25.0	6.6	0.7	0.0
	1992	150,182	31.3	10.4	23.4	20.6	7.4	3.6	1.3	1.8	67.8	23.9	7.6	0.7	0.1
IC	1991	41,039	36.3	10.6	22.6	17.7	6.8	3.4	1.2	1.5	66.6	25.1	7.3	1.0	0.0
	1992	22,944	31.8	10.2	23.1	19.7	7.9	4.0	1.6	1.7	66.5	25.2	7.6	0.6	0.1
ID	1991	55,994	34.2	10.8	21.4	17.8	7.7	4.0	1.5	2.5	66.4	25.0	7.5	1.0	0.1
	1992	47,935	34.6	9.9	21.1	18.4	7.9	4.1	1.6	2.4	66.5	25.1	7.6	0.7	0.1
IE	1991	232,124	33.2	12.5	24.5	17.3	6.6	3.4	1.2	1.3	64.0	24.2	7.6	1.1	0.1
IG	1991	39,523	33.5	13.3	26.4	16.4	5.4	3.2	1.0	0.8	67.5	24.9	7.0	0.5	0.1
	1992	9,645	33.6	12.7	25.1	17.0	5.7	3.3	1.2	1.3	66.9	25.1	7.0	0.8	0.2
IH	1991	171,614	32.1	10.6	23.6	19.2	7.4	3.6	1.4	2.2	67.2	25.0	6.5	1.2	0.1
	1992	171,763	31.7	9.8	22.8	19.6	7.8	4.0	1.6	2.6	67.3	24.1	7.1	1.3	0.2
PA	1991	120,141	27.5	12.1	27.1	20.0	7.1	3.7	1.2	1.3	68.0	23.2	7.5	1.2	0.1
	1992	169,512	28.4	11.5	26.1	20.0	7.3	3.9	1.4	1.5	72.8	20.4	6.2	0.6	0.0
PB	1992	271,690	34.8	11.8	24.8	18.4	6.0	3.0	1.0	1.2	65.8	23.7	8.8	1.5	0.1
PC	1992	204,350	35.0	11.8	24.7	17.3	5.9	3.1	1.0	1.2	65.0	25.4	8.5	1.2	0
PD	1992	153,101	34.8	11.3	24.9	17.3	6.0	3.0	1.0	1.2	68.7	23.1	7.0	1.2	0
PE	1992	460,392	34.9	11.8	24.6	17.4	6.0	3.1	1.0	1.2	69.6	23.0	5.7	1.3	0.4
PF	1991	116,929	29.0	14.4	29.1	17.6	5.5	2.6	0.8	1.0					
	1992	194,888	29.0	13.0	27.1	19.3	6.3	3.0	1.1	1.3					
PG	1992	194,879	28.6	12.8	27.5	19.5	6.4	3.0	1.1	1.2					
HA	1991	19,096	17.6	11.3	34.3	24.7	6.5	3.3	1.2	1.1	69.7	24.4	5.0	0.8	0.0
	1992	20,097	18.2	10.2	32.6	25.3	7.5	3.6	1.2	1.5	64.6	26.6	8.2	0.6	0.0
HB	1992	120,964	26.0	17.0	25.4	18.2	7.5	3.1	1.2	1.5	61.6	25.4	10.6	2.0	0.5
HC	1992	203,120	47.3	15.7	19.5	9.8	3.3	2.4	1.0	1.0					
HD	1991	19,644	12.7	12.0	35.6	26.6	7.6	3.7	1.0	0.9					
	1992	18,497	13.7	10.3	33.7	27.9	8.1	3.8	1.2	1.2					

TABLE C-4
AVERAGE EXPENDITURE BY SERVICE GROUP AND SERVICE GROUP'S PERCENTAGE OF TOTAL EXPENDITURES (TOTAL EXPENDITURES TRUNCATED AT $25,000)

Plan Type (Pool ID)	Year	N	Medical		Surgical		Inpatient		Outpatient		Drug		Other	
			Avg.	% of Total	Avg.	% of Total	Avg.	% of Total	Avg.	% of Total	Avg.	% of Total	Avg.	% of Total
IA	1991	182,295	117	10.4%	220	19.6%	312	27.7%	193	17.1%	66	5.8%	219	19.5%
	1992	153,525	127	10.4	240	19.7	326	26.6	228	18.6	71	5.8	230	18.8
IB	1991	146,419	135	12.3	189	17.2	267	24.3	204	18.6	81	7.4	224	20.3
	1992	150,182	164	12.4	233	17.6	303	22.9	256	19.3	99	7.5	271	20.4
IC	1991	41,039	127	11.0	211	18.2	310	26.7	198	17.1	77	6.7	237	20.4
	1992	22,944	154	11.2	252	18.4	333	24.2	257	18.7	97	7.0	281	20.4
ID	1991	55,994	239	15.8	173	11.4	499	33.0	244	16.1	135	8.9	233	14.8
	1992	47,935	247	16.2	188	12.3	473	31.1	253	16.6	148	9.7	215	14.1
IE	1991	232,124	196	17.4	157	13.9	361	32.0	187	16.6	73	6.5	153	13.6
IG	1991	39,523	153	16.5	154	16.5	295	31.7	174	18.7	28	3.0	126	13.5
	1992	9,645	170	15.7	205	18.9	351	32.3	206	19.0	34	3.1	119	11.0
IH	1991	171,614	156	7.6	187	9.1	419	20.4	230	11.2	80	3.9	324	15.8
	1992	171,763	174	7.5	212	9.1	450	19.4	284	12.3	101	4.4	361	15.6
PA	1991	120,141	171	14.4	233	19.7	285	24.1	193	16.3	48	4.1	253	21.3
	1992	169,512	185	14.7	252	20.0	292	23.1	219	17.4	55	4.3	258	20.5
PB	1992	271,690	219	21.4	139	13.6	257	25.2	177	17.3	61	6.0	168	16.5
PC	1992	204,350	220	21.4	139	13.5	263	25.6	176	17.2	61	5.9	169	16.4
PD	1992	153,101	218	21.3	140	13.7	257	25.2	177	17.3	60	5.9	169	16.5
PE	1992	460,392	221	21.4	140	13.6	262	25.4	177	17.2	61	5.9	171	16.5
PF	1991	116,929	206	22.3	137	14.8	254	27.5	138	14.9	42	4.5	148	16.0
	1992	194,888	239	22.2	169	15.6	280	26.0	172	16.0	47	4.4	171	15.9
PG	1992	194,879	241	22.3	170	15.7	278	25.7	171	15.8	48	4.4	174	16.1
HA	1991	19,096	253	22.0	202	17.6	258	22.5	173	15.0	1	0.1	263	22.9
	1992	20,097	278	21.5	234	18.0	271	20.9	217	16.7	1	0.1	295	22.8
HB	1992	120,964	150	13.1	110	9.6	318	27.8	176	15.4	99	8.7	290	25.4
HC	1992	203,120	52	6.8	293	38.3	228	29.8	82	10.7	110	14.4	0	0.1
HD	1991	19,644	349	29.9	276	23.6	227	19.5	121	10.4	0	0	194	16.7
	1992	18,497	378	29.4	295	23.0	256	19.9	118	9.2	0	0	239	18.6

TABLE C-5
DISTRIBUTION BY REGION BY POOL AND YEAR

Plan Type (Pool ID)	Year	N	Percentage of Enrollees by Region										Percentage w/no Admissions
			ENC	ESC	MdAt	Mtn	NE	Pac	SAtl	WNC	WSC	Other	
IA	1991	182,295	35.8%	5.4%	4.2%	3.5%	0.8%	2.9%	23.1%	6.0%	17.0%	1.3%	94.4%
	1992	153,525	34.4	5.2	4.9	4.7	1.0	3.2	23.1	7.8	14.4	1.3	94.7
IB	1991	146,419	78.6	0.8	1.0	2.6	0.2	1.7	4.3	5.1	5.4	0.2	95.7
	1992	150,182	78.1	1.0	1.0	2.2	0.2	1.7	5.0	5.1	5.3	0.2	95.3
IC	1991	41,039	47.6	4.9	2.9	3.2	1.6	5.3	14.9	8.2	10.2	1.1	94.8
	1992	22,944	53.1	3.9	3.5	2.2	1.7	5.2	13.5	8.5	8.0	0.6	94.5
ID	1991	55,994	20.2	3.9	4.0	6.8	6.5	10.6	35.9	12.1	0.0	0.0	
	1992	47,935	26.7	4.3	4.7	5.6	0.0	6.9	10.8	28.0	13.0	0.0	
IE	1991	232,124	16.2	7.1	3.3	4.5	0.0	5.5	29.5	20.1	13.8	0.0	
IG	1991	39,523	11.5	8.2	2.2	9.3	0.0	10.6	38.3	2.6	17.5	0.0	94.0
	1992	9,645	13.8	9.4	0.2	9.2	0.0	5.8	35.0	2.7	21.5	0.0	94.4
IH	1991	171,614	19.3	8.1	3.2	7.2	0.0	10.6	11.3	27.4	12.9	0.0	94.1
	1992	171,763	21.9	8.4	3.4	7.2	0.0	10.8	11.6	24.2	12.6	0.0	94.3
PA	1991	120,141	23.0	9.2	0.6	6.1	0.1	27.7	12.4	10.7	10.0	0.2	94.7
	1992	169,512	28.2	8.5	1.3	6.3	0.2	20.9	15.1	10.0	9.3	0.4	95.0
PB	1992	271,690	15.1	1.3	20.6	2.8	3.3	0.2	17.9	8.1	30.5	0.0	95.6
PC	1992	204,350	15.4	1.3	20.6	2.9	3.4	0.2	17.9	8.3	30.3	0.0	95.4
PD	1992	153,101	15.2	1.3	20.8	2.8	3.3	0.2	17.7	8.1	30.8	0.0	95.2
PE	1992	460,392	15.1	1.3	20.7	2.8	3.1	0.4	17.9	8.1	31.1	0.0	95.0
PF	1991	116,929	13.7	1.1	0.1	10.5	0.0	37.0	12.3	18.8	6.4	0.0	94.8
	1992	194,888	14.1	3.9	0.1	10.6	0.0	44.4	11.6	9.9	5.5	0.0	94.6
PG	1992	194,879	14.1	3.8	0.1	10.6	0.0	44.1	11.7	9.9	5.6	0.0	94.7
HA	1991	19,096	97.9	0.0	0.0	0.1	0.0	0.0	0.1	1.9	0.0	0.0	95.3
	1992	20,097	98.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	95.6
HB	1992	120,964	0.6	0.4	0.7	0.5	0.2	89.9	7.0	0.2	0.5	0.0	95.0
HC	1992	203,120	0.1	0.0	14.6	0.1	0.0	0.2	0.2	0.0	84.8	0.1	95.7
HD	1991	19,644	0.1	0.0	99.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.0
	1992	18,497	0.1	0.0	99.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.0

TABLE C-6
SUMMARY OF PREDICTIVE ACCURACY—INDIVIDUAL RESULTS
RETROSPECTIVE ANALYSIS (SPLIT HALF) 1991

Plan Type/ Pool ID	Risk Assessment Method	Mean		Absolute Error		% Absolute Error				Adj. R^2
		Actual	Predicted	Mean	Standard Deviation	Within $500	Within $1000	Over $5000	Over $10,000	
IA	Age-sex	1,206	1,209	1,583	2,821	25%	55%	4.9%	2.3%	0.037
	ACGs		1,201	1,174	2,678	62	74	5.8	1.9	0.280
	ADGs		1,201	1,091	2,434	63	74	4.3	1.6	0.345
	PIPDCGs		1,214	1,175	2,035	36	74	3.7	1.4	0.497
	EDCG		1,210	1,224	2,356	47	71	4.7	1.7	0.350
	ADCG		1,220	1,312	2,539	49	68	5.7	1.9	0.248
	EDCGDX		1,206	1,201	2,316	49	70	4.7	1.6	0.373
	ADCGDX		1,214	1,283	2,477	51	70	5.4	1.8	0.283
IB	Age-sex	1,261	1,270	1,633	2,936	19	55	4.9	2.5	0.037
	ACGs		1,266	1,140	2,609	63	74	4.9	1.8	0.305
	ADGs		1,258	1,116	2,462	63	74	4.4	1.7	0.376
	PIPDCGs		1,270	1,106	1,921	41	75	3.3	1.4	0.580
	EDCG		1,273	1,191	2,362	54	71	3.8	1.8	0.405
	ADCG		1,274	1,324	2,572	47	74	4.2	2.0	0.282
	EDCGDX		1,276	1,179	2,325	49	71	4.5	1.7	0.420
	ADCGDX		1,272	1,283	2,522	51	71	5.2	1.9	0.316
IC	Age-sex	1,373	1,344	1,768	3,079	19	49	5.5	2.8	0.027
	ACGs		1,378	1,323	2,927	58	71	5.5	2.1	0.288
	ADGs		1,376	1,244	2,636	60	72	5.1	2.0	0.343
	PIPDCGs		1,355	1,290	2,171	39	66	5.5	1.8	0.508
	EDCG		1,376	1,354	2,525	46	65	5.1	2.1	0.366
	ADCG		1,363	1,470	2,734	41	69	4.6	2.3	0.240
	EDCGDX		*							
	ADCGDX		*							
ID	Age-sex	1,657	1,688	2,161	3,488	13	41	6.5	3.6	0.038
	ACGs		1,690	1,500	3,068	56	67	4.7	2.7	0.333
	ADGs		1,686	1,525	2,881	53	66	6.9	2.5	0.392
	PIPDCGs		1,686	1,760	3,091	26	52	6.5	2.9	0.276
	EDCG		1,693	1,610	2,921	441	62	7.2	3.0	0.364
	ADCG		1,697	1,682	3,011	43	62	8.4	3.0	0.320
	EDCGDX		1,679	1,558	2,857	43	62	6.7	2.7	0.394
	ADCGDX		1,688	1,633	2,945	46	65	7.9	2.9	0.351
IE	Age-sex	1241	1,235	1,606	2,866	23	54	5.0	2.4	0.030
	ACGs		1,236	1,128	2,538	62	73	4.4	1.8	0.307
	ADGs		1,242	1,128	2,360	60	73	4.2	1.6	0.385
	PIPDCGs		1,242	1,315	2,487	38	63	4.8	1.8	0.288
	EDCG		1,245	1,270	2,485	48	68	4.8	1.9	0.300
	ADCG		1,244	1,332	2,568	49	69	5.6	2.1	0.248
	EDCGDX		1,246	1,239	2,430	49	68	4.6	1.8	0.331
	ADCGDX		1,247	1,302	2,516	50	70	5.1	1.9	0.279
IG	Age-sex	1,046	1,073	1,386	2,440	28	61	4.6	1.8	0.023
	ACGs		1,052	1,074	2,297	63	76	4.1	1.4	0.201
	ADGs		1,041	1,024	2,198	64	76	4.0	1.4	0.269
	PIPDCGs		1,084	1,031	1,852	50	75	4.1	1.0	0.442
	EDCG		1,047	1,093	2,101	50	73	4.2	1.4	0.303
	ADCG		1,049	1,184	2,265	51	72	4.9	1.6	0.189
	EDCGDX		*							
	ADCGDX		*							

TABLE C-6—*Continued*
SUMMARY OF PREDICTIVE ACCURACY—INDIVIDUAL RESULTS
RETROSPECTIVE ANALYSIS (SPLIT HALF) 1991

Plan Type/ Pool ID	Risk Assessment Method	Mean		Absolute Error		% Absolute Error				Adj. R^2
		Actual	Predicted	Mean	Standard Deviation	Within $500	Within $1000	Over $5000	Over $10,000	
IH	Age-sex	1,515	1,515	1,944	3,345	18%	47%	5.8%	2.3%	0.036
	ACGs		1,509	1,591	3,171	55	65	5.2	2.8	0.189
	ADGs		1,511	1,529	3,041	53	66	6.6	2.6	0.254
	PIPDCGs		1,509	1,306	2,269	42	65	5.7	2.0	0.559
	EDCG		1,509	1,430	2,700	44	66	6.3	2.4	0.399
	ADCG		1,509	1,645	3,014	42	60	6.7	2.9	0.241
	EDCGDX		1,508	1,417	2,684	45	66	6.2	2.4	0.407
	ADCGDX		1,506	1,628	2,992	42	60	6.2	2.9	0.253
PA	Age-sex	1,252	1,254	1,551	2,693	24	58	4.9	2.2	0.039
	ACGs		1,247	1,155	2,474	59	72	4.2	1.6	0.260
	ADGs		1,249	1,113	2,359	60	73	4.2	1.5	0.323
	PIPDCGs		1,266	1,209	2,027	33	70	3.6	1.4	0.461
	EDCG		1,241	1,236	2,303	47	69	4.1	1.6	0.320
	ADCG		1,238	1,339	2,456	44	69	4.3	1.8	0.222
	EDCGDX		1,243	1,219	2,253	44	68	4.5	1.5	0.347
	ADCGDX		1,240	1,295	2,399	48	66	4.8	1.9	0.260
PF	Age-sex	1,014	1,012	1,285	2,551	33	64	3.8	1.8	0.027
	ACGs		1,016	922	2,293	66	77	3.1	2.4	0.271
	ADGs		1,014	946	2,147	64	77	2.9	1.2	0.343
	PIPDCGs		1,024	1,070	2,157	46	72	3.6	1.3	0.308
	EDCG		1,009	1,041	2,228	53	77	3.7	1.4	0.279
	ADCG		1,003	1,085	2,312	54	77	3.8	1.5	0.222
	EDCGDX		1,009	1,024	2,193	53	78	3.6	1.3	0.301
	ADCGDX		1,006	1,063	2,255	55	77	3.7	1.4	0.258
HA	Age-sex	1,261	1,279	1,495	2,677	27	58	4.7	2.1	0.025
	ACGs		1,263	1,134	2,470	59	73	4.2	1.6	0.251
	ADGs		1,231	1,092	2,311	59	74	3.9	1.6	0.320
	PIPDCGs		1,325	1,122	1,845	34	74	3.3	1.1	0.498
	EDCG		1,279	1,192	2,220	45	71	4.3	1.6	0.341
	ADCG		1,291	1,288	2,404	45	71	4.1	1.7	0.207
	EDCGDX		*							
	ADCGDX		*							
HD	Age-sex	1,237	1,275	1,439	2,520	31	59	4.6	1.7	0.042
	ACGs		1,243	1,018	2,147	59	73	3.4	1.1	0.280
	ADGs		1,237	1,030	1,969	55	73	2.9	1.0	0.368
	PIPDCGs		1,249	1,024	1,612	48	71	3.6	0.7	0.535
	EDCG		1,250	1,142	2,012	45	70	4.1	1.2	0.317
	ADCG		1,247	1,214	2,165	45	65	4.2	1.2	0.213
	EDCGDX		*							
	ADCGDX		*							

*Insufficient number of enrollees to test ADCGDX and EDCGDX models.

TABLE C-7
SUMMARY OF PREDICTIVE ACCURACY—INDIVIDUAL RESULTS
RETROSPECTIVE ANALYSIS (SPLIT HALF) 1992

Plan Type/ Pool ID	Risk Assessment Method	Mean		Absolute Error		% Absolute Error				
		Actual	Predicted	Mean	Standard Deviation	Within $500	Within $1000	Over $5000	Over $10,000	Adj. R^2
IA	Age-sex	1,219	1,230	1,614	2,858	23%	55%	5.0%	2.4%	0.037
	ACGs		1,236	1,167	2,566	61	73	6.4	1.8	0.274
	ADGs		1,235	1,123	2,435	63	74	4.6	2.7	0.357
	PIPDCGs		1,227	1,195	2,082	34	73	3.7	1.7	0.492
	EDCG		1,237	1,231	2,355	48	69	4.6	1.8	0.369
	ADCG		1,237	1,329	2,541	49	69	5.6	2.0	0.265
	EDCGDX		1,242	1,208	2,309	49	69	4.5	1.6	0.393
	ADCGDX		1,241	1,297	2,473	50	69	5.2	1.9	0.303
IB	Age-sex	1,327	1,322	1,670	2,979	21	55	5.0	2.6	0.038
	ACGs		1,317	1,203	2,676	60	72	4.8	2.0	0.299
	ADGs		1,309	1,183	2,530	60	72	4.6	1.9	0.356
	PIPDCGs		1,331	1,142	1,994	40	73	3.4	1.6	0.568
	EDCG		1,319	1,252	2,436	51	70	4.0	1.8	0.377
	ADCG		1,326	1,382	2,635	45	71	4.3	2.2	0.271
	EDCGDX		1,321	1,234	2,391	47	69	4.7	1.8	0.403
	ADCGDX		1,327	1,336	2,573	49	69	5.5	2.1	0.306
IC	Age-sex	1,378	1,380	1,744	2,968	19	54	5.5	2.8	0.036
	ACGs		1,367	1,255	2,680	59	71	5.3	2.0	0.314
	ADGs		1,368	1,217	2,542	60	71	4.9	1.8	0.352
	PIPDCGs		1,421	1,298	2,111	39	66	5.3	1.6	0.500
	EDCG		1,404	1,356	2,425	44	64	5.3	2.2	0.371
	ADCG		1,378	1,458	2,655	42	67	4.7	1.4	0.279
	EDCGDX		*							
	ADCGDX		*							
ID	Age-sex	1,590	1,570	2,034	3,389	18	42	6.2	2.3	0.040
	ACGs		1,568	1,422	2,985	57	67	6.2	2.6	0.328
	ADGs		1,545	1,431	2,764	56	68	6.0	1.4	0.404
	PIPDCGs		1,532	1,665	3,031	29	55	6.2	1.7	0.265
	EDCG		1,565	1,550	2,855	41	65	6.4	2.9	0.352
	ADCG		1,563	1,603	2,932	44	63	7.3	2.9	0.314
	EDCGDX		1,574	1,502	2,773	43	65	6.4	2.5	0.388
	ADCGDX		1,570	1,557	2,855	44	64	6.7	2.7	0.350
IE	Age-sex	1,189	1,196	1,552	2,816	24	55	4.8	2.3	0.031
	ACGs		1,187	1,064	2,459	64	75	4.3	1.6	0.327
	ADGs		1,186	1,094	2,295	62	74	6.2	1.5	0.394
	PIPDCGs		1,194	1,271	2,438	40	64	4.5	1.7	0.292
	EDCG		1,195	1,219	2,433	49	73	4.6	1.8	0.313
	ADCG		1,198	1,275	2,522	49	71	5.2	2.0	0.259
	EDCGDX		1,188	1,181	2,364	49	72	4.4	1.7	0.345
	ADCGDX		1,191	1,238	2,445	50	72	4.7	1.9	0.296
IF	Age-sex	1,196	1,194	1,552	2,820	25	55	4.8	2.3	0.032
	ACGs		1,198	1,070	2,460	64	75	4.4	1.7	0.327
	ADGs		1,203	1,098	2,293	61	73	4.0	1.5	0.396
	PIPDCGs		1,198	1,273	2,445	42	65	4.6	1.7	0.290
	EDCG		1,198	1,234	2,448	48	73	4.7	1.8	0.304
	ADCG		1,198	1,283	2,532	49	70	5.1	1.9	0.253
	EDCGDX		1,194	1,193	2,372	49	73	4.6	1.7	0.341
	ADCGDX		1,197	1,246	2,451	50	71	4.8	1.8	0.293

TABLE C-7—*Continued*
SUMMARY OF PREDICTIVE ACCURACY—INDIVIDUAL RESULTS
RETROSPECTIVE ANALYSIS (SPLIT HALF) 1992

Plan Type/ Pool ID	Risk Assessment Method	Mean		Absolute Error		% Absolute Error				Adj. R^2
		Actual	Predicted	Mean	Standard Deviation	Within $500	Within $1000	Over $5000	Over $10,000	
IG	Age-sex	1,131	1,030	1,461	2,844	31%	63%	5.6%	2.4%	0.007
	ACGs		1,034	1,166	2,661	65	76	5.2	2.0	0.178
	ADGs		1,012	1,121	2,470	64	75	4.5	1.9	0.280
	PIPDCGs		1,105	1,080	1,080	52	78	5	1.5	0.465
	EDCG		1,073	1,174	2,398	53	75	5	1.8	0.306
	ADCG		1,024	1,248	2,568	52	72	6	2.3	0.206
	EDCGDX		*							
	ADCGDX		*							
IH	Age-sex	1,573	1,594	2,036	3,405	17	43	6.1	3.5	0.037
	ACGs		1,594	1,676	3,236	54	63	5.8	2.9	0.187
	ADGs		1,601	1,608	3,091	50	64	7.2	2.8	0.257
	PIPDCGs		1,595	1,360	2,304	38	63	5.9	1.9	0.562
	EDCG		1,587	1,480	2,746	43	66	6.8	2.5	0.404
	ADCG		1,591	1,715	3,064	40	61	7.0	3.1	0.246
	EDCGDX		1,588	1,467	2,729	43	66	6.5	2.5	0.413
	ADCGDX		1,592	1,703	3,044	40	61	7.0	3.0	0.256
PA	Age-sex	1,256	1,259	1,571	2,745	23	57	4.9	2.4	0.039
	ACGs		1,264	1,164	2,505	60	72	4.4	1.7	0.266
	ADGs		1,258	1,127	2,385	60	73	4.1	1.6	0.331
	PIPDCGs		1,258	1,225	2,055	32	70	3.9	1.4	0.459
	EDCG		1,258	1,249	2,345	48	68	4.1	1.6	0.327
	ADCG		1,262	1,333	2,497	48	64	5.5	1.9	0.230
	EDCGDX		1,256	1,232	2,286	45	68	4.6	1.7	0.351
	ADCGDX		1,261	1,306	2,438	49	66	5.0	1.9	0.265
PB	Age-sex	1,016	1,025	1,330	2,541	32	61	4.0	1.8	0.029
	ACGs		1,032	948	2,318	67	77	3.3	1.4	0.260
	ADGs		1,029	928	2,189	68	77	3.3	1.3	0.332
	PIPDCGs		1,024	983	1,828	52	77	3.7	1.1	0.492
	EDCG		1,034	1,006	2,077	57	77	3.8	1.3	0.371
	ADCG		1,028	1,089	2,263	52	76	4.0	1.5	0.255
	EDCGDX		1,037	983	2,026	57	77	3.6	1.2	0.401
	ADCGDX		1,033	1,058	2,185	52	74	3.8	1.4	0.304
PC	Age-sex	1,025	1,035	1,347	2,560	32	61	4.1	1.8	0.029
	ACGs		1,037	957	2,336	66	77	3.5	1.4	0.260
	ADGs		1,036	937	2,213	68	77	3.3	1.3	0.329
	PIPDCGs		1,029	985	1,836	55	80	3.9	1.1	0.496
	EDCG		1,045	1,018	2,108	57	77	3.9	1.3	0.364
	ADCG		1,039	1,102	2,289	52	76	4.5	1.5	0.251
	EDCGDX		1,046	994	2,061	58	77	3.8	1.2	0.392
	ADCGDX		1,041	1,071	2,214	52	76	4.0	1.4	0.297
PD	Age-sex	1,028	1,017	1,337	2,576	33	63	4.0	1.8	0.028
	ACGs		1,012	947	2,351	67	76	3.3	1.4	0.259
	ADGs		1,011	922	2,246	68	78	3.3	1.3	0.320
	PIPDCGs		1,014	987	1,855	54	80	3.8	1.1	0.491
	EDCG		1,016	1,015	2,130	59	77	3.9	1.3	0.357
	ADCG		1,022	1,096	2,302	53	76	4.2	1.6	0.250
	EDCGDX		1,016	987	2,079	60	77	3.7	1.3	0.388
	ADCGDX		1,020	1,061	2,229	55	76	3.9	1.5	0.297

TABLE C-7—*Continued*
SUMMARY OF PREDICTIVE ACCURACY—INDIVIDUAL RESULTS
RETROSPECTIVE ANALYSIS (SPLIT HALF) 1992

Plan Type/ Pool ID	Risk Assessment Method	Mean		Absolute Error		% Absolute Error				
		Actual	Predicted	Mean	Standard Deviation	Within $500	Within $1000	Over $5000	Over $10,000	Adj. R^2
PE	Age-sex	1,032	1,032	1,350	2,566	32%	61%	4.1%	1.8%	0.028
	ACGs		1,031	951	2,330	67	77	3.5	1.4	0.268
	ADGs		1,030	927	2,207	68	77	3.3	1.3	0.338
	PIPDCGs		1,027	993	1,859	52	77	3.9	1.1	0.486
	EDCG		1,030	1,017	2,128	57	77	3.8	1.4	0.357
	ADCG		1,032	1,099	2,290	52	74	4.2	1.6	0.254
	EDCGDX		1,030	991	2,073	57	77	3.7	1.3	0.389
	ADCGDX		1,032	1,069	2,217	54	74	3.9	1.4	0.300
PF	Age-sex	1,085	1,107	1,361	2,568	33	61	4.0	1.9	0.036
	ACGs		1,106	967	2,278	65	76	3.7	1.4	0.301
	ADGs		1,110	997	2,122	62	75	3.2	1.3	0.373
	PIPDCGs		1,110	1,127	2,183	46	69	3.8	1.4	0.311
	EDCG		1,140	1,128	2,267	49	74	4.0	1.6	0.291
	ADCG		1,134	1,178	2,367	51	71	4.1	1.7	0.227
	EDCGDX		1,109	1,076	2,182	51	75	3.8	1.5	0.325
	ADCGDX		1,103	1,120	2,264	53	73	3.9	1.6	0.271
PG	Age-sex	1,093	1,084	1,363	2,606	29	62	4.1	1.9	0.035
	ACGs		1,082	970	2,331	65	76	3.6	1.4	0.288
	ADGs		1,078	992	2,167	62	75	3.2	1.3	0.366
	PIPDCGs		1,085	1,134	2,222	47	69	3.9	1.4	0.306
	EDCG		1,114	1,126	2,310	49	74	4.1	1.6	0.290
	ADCG		1,118	1,189	2,410	52	72	4.2	1.7	0.223
	EDCGDX		1,083	1,070	2,215	52	76	3.8	1.5	0.324
	ADCGDX		1,091	1,127	2,286	53	73	4.0	1.6	0.275
HA	Age-sex	1,265	1,304	1,511	2,698	26	56	4.4	2.1	0.035
	ACGs		1,322	1,146	2,454	57	71	4.1	1.6	0.253
	ADGs		1,293	1,096	2,310	58	73	3.9	1.4	0.338
	PIPDCGs		1,275	1,135	1,954	36	74	3.5	1.3	0.485
	EDCG		1,306	2,287	2,274	46	72	4.1	1.6	0.336
	ADCG		1,316	1,298	2,442	44	70	3.7	1.7	0.221
	EDCGDX		*							
	ADCGDX		*							
HB	Age-sex	1,153	1,131	1,467	2,775	28	58	4.5	2.2	0.029
	ACGs		1,133	1,049	2,482	64	75	4.2	1.7	0.284
	ADGs		1,133	1,047	2,341	64	75	3.8	1.6	0.351
	PIPDCGs		1,138	1,116	2,077	46	71	4.4	1.5	0.452
	EDCG		1,141	1,129	2,293	51	74	4.2	1.7	0.356
	ADCG		1,137	1,205	2,462	51	66	4.8	1.9	0.260
	EDCGDX		1,142	1,111	2,269	52	73	4.1	1.6	0.371
	ADCGDX		1,136	1,169	2,377	53	72	4.3	1.7	0.308
HC	Age-sex	743	753	1,093	2,381	49	69	3.6	1.6	0.029
	ACGs		757	706	1,966	79	85	3.0	0.9	0.381
	ADGs		758	668	1,808	78	84	2.8	0.8	0.473
	PIPDCGs		755	833	1,923	61	88	3.7	1.1	0.377
	EDCG		753	852	1,987	68	81	3.7	1.0	0.337
	ADCG		757	866	2,086	62	85	3.6	1.2	0.276
	EDCGDX		751	831	1,950	68	81	3.6	1.1	0.362
	ADCGDX		752	849	2,042	62	85	3.5	1.2	0.306
HD	Age-sex	1,276	1,293	1,411	2,522	33	58	4.0	1.7	0.046
	ACGs		1,310	1,072	2,265	59	74	3.9	1.3	0.281
	ADGs		1,277	1,098	2,027	52	72	3.0	1.1	0.390
	PIPDCGs		1,259	1,041	1,746	47	72	3.5	0.9	0.527
	EDCG		1,283	1,156	2,142	45	26	4.0	1.5	0.322
	ADCG		1,274	1,226	2,333	44	66	4.0	1.5	0.205
	EDCGDX		*							
	ADCGDX		*							

*Insufficient number of enrollees to test ADCGDX and EDCGDX models.

TABLE C-8
SUMMARY OF PREDICTIVE ACCURACY—INDIVIDUAL RESULTS
PROSPECTIVE ANALYSIS (SPLIT HALF)

Plan Type/ Pool ID	Risk Assessment Method	Mean		Absolute Error		% Absolute Error				Adj. R^2
		Actual	Predicted	Mean	Standard Deviation	Within $500	Within $1000	Over $5000	Over $10,000	
IA	Age-sex	1,272	1,269	1,660	2,943	24%	55%	5.1%	2.5%	0.034
	ACGs		1,267	1,552	2,889	18	68	4.9	2.3	0.090
	ADGs		1,269	1,523	2,870	38	64	5.0	2.3	0.107
	PIPDCGs		1,268	1,652	2,896	22	50	5.1	2.2	0.060
	EDCG		1,270	1,574	2,871	36	54	5.1	2.3	0.093
	ADCG		1,275	1,589	2,881	35	55	5.2	2.4	0.084
	EDCGDX		1,272	1,568	2,868	36	54	5.2	2.4	0.096
	ADCGDX		1,276	1,582	2,873	35	55	5.3	2.4	0.090
IB	Age-sex	1,372	1,404	1,726	3,000	19	53	5.2	2.7	0.043
	ACGs		1,396	1,628	2,946	17	68	5.2	2.5	0.095
	ADGs		1,397	1,588	2,913	33	59	5.2	2.5	0.120
	PIPDCGs		1,400	1,718	2,965	23	48	5.1	2.6	0.069
	EDCG		1,394	1,656	2,933	27	52	5.0	2.9	0.102
	ADCG		1,391	1,663	2,934	27	52	5.0	2.5	0.095
	EDCGDX		1,395	1,629	2,925	33	53	5.4	2.5	0.105
	ADCGDX		1,392	1,636	2,927	31	55	5.3	2.5	0.102
IC	Age-sex	1,404	1,427	1,793	2,984	18	52	5.6	2.7	0.035
	ACGs		1,400	1,653	2,943	20	63	5.5	2.5	0.090
	ADGs		1,395	1,609	2,907	35	60	5.6	2.4	0.118
	PIPDCGs		1,424	1,764	2,948	21	53	5.7	2.6	0.059
	EDCG		1,408	1,691	2,910	34	51	5.7	2.5	0.097
	ADCG		1,414	1,723	2,929	23	51	5.6	2.6	0.095
	EDCGDX		*							
	ADCGDX		*							
PA	Age-sex	1,313	1,360	1,650	2,802	20	54	4.9	2.4	0.039
	ACGs		1,349	1,547	2,764	20	66	5.0	2.2	0.088
	ADGs		1,345	1,511	2,746	31	62	4.8	2.2	0.106
	PIPDCGs		1,362	1,658	2,778	21	47	5.0	2.2	0.051
	EDCG		1,357	1,603	2,755	25	52	5.0	2.3	0.074
	ADCG		1,351	1,606	2,761	23	53	4.9	2.2	0.069
	EDCGDX		1,355	1,584	2,762	28	52	5.1	2.2	0.078
	ADCGDX		1,350	1,582	2,759	29	54	5.0	2.2	0.081
HA	Age-sex	1,245	1,341	1,511	2,644	25	54	4.3	2.0	0.039
	ACGs		1,337	1,428	2,616	25	67	4.1	1.8	0.078
	ADGs		1,334	1,397	2,580	38	63	4.0	1.7	0.103
	PIPDCGs		1,338	1,305	2,655	26	53	4.3	1.9	0.059
	EDCG		1,343	1,463	2,621	31	57	4.5	1.8	0.064
	ADCG		1,344	1,463	2,605	30	56	4.3	1.8	0.077
	EDCGDX		*							
	ADCGDX		*							
HD	Age-sex	1,270	1,288	1,432	2,554	35	56	4.3	1.8	0.034
	ACGs		1,267	1,331	2,516	40	66	4.0	1.7	0.086
	ADGs		1,275	1,332	2,479	41	63	3.9	1.6	0.103
	PIPDCGs		1,284	1,407	2,529	36	58	4.3	1.7	0.054
	EDCG		1,278	1,377	2,486	35	59	4.2	1.6	0.088
	ADCG		1,281	1,390	2,527	36	60	4.2	1.7	0.061
	EDCGDX		*							
	ADCGDX		*							

*Insufficient number of enrollees to test ADCGDX and EDCGDX models.

TABLE C-9
SUMMARY OF PREDICTIVE ACCURACY—GROUP RESULTS
RETROSPECTIVE ANALYSIS (SPLIT HALF) 1991

Plan Type (Pool ID)	Risk Assessment Method	Mean		Standard Deviation Absolute Error	Predictive Ratio	% Absolute Error	
		Absolute Error	Absolute % Error			Within 5%	Within 10%
IA	Age-sex	50	4.1%	35	1.00	67%	95%
	ACGs	43	4.0	34	1.00	73	97
	ADGs	43	3.6	31	1.00	73	98
	PIPDCG	36	2.9	28	1.01	80	99
	EDCG	36	3.0	30	1.01	82	99
	ADCG	45	3.7	33	1.01	73	97
	EDCGDX	34	2.8	29	1.01	82	99
	ADCGDX	40	3.3	31	1.01	77	98
IB	Age-sex	47	3.7	37	1.00	75	94
	ACGs	49	4.0	37	1.00	68	99
	ADGs	45	3.6	34	1.00	72	98
	PIPDCG	40	3.1	30	1.01	79	98
	EDCG	42	3.3	32	1.00	74	98
	ADCG	48	3.8	36	1.01	70	99
	EDCGDX	41	3.2	32	1.00	74	99
	ADCGDX	46	3.6	35	1.00	72	98
IC	Age-sex	53	4.0	38	0.99	72	96
	ACGs	81	5.8	54	0.95	46	86
	ADGs	46	3.4	33	1.01	81	100
	PIPDCG	38	2.8	26	0.99	86	100
	EDCG	43	3.1	32	1.01	78	100
	ADCG	46	3.3	35	1.00	75	98
	EDCGDX	*					
	ADCGDX	*					
ID	Age-sex	67	3.98	45	1.02	67	97
	ACGs	59	3.50	34	1.02	81	100
	ADGs	53	3.13	35	1.02	82	100
	PIPDCG	55	3.26	43	1.02	75	98
	EDCG	52	3.06	36	1.02	80	100
	ADCG	61	3.59	43	1.03	78	99
	EDCGDX	45		34	1.01	82	100
	ADCGDX	55	3.26	43	1.02	83	99
IE	Age-sex	47	3.8	41	1.00	70	93
	ACGs	42	3.4	36	.99	74	96
	ADGs	41	3.3	33	1.00	79	96
	PIPDCG	43	3.4	34	1.00	72	97
	EDCG	40	3.2	33	1.00	82	95
	ADCG	45	3.6	36	1.00	74	97
	EDCGDX	41	3.3	35	1.00	79	96
	ADCGDX	45	3.7	37	1.00	74	96
IG	Age-sex	48	4.5	37	1.03	65	93
	ACGs	33	3.2	27	1.01	81	98
	ADGs	30	2.9	24	1.00	82	100
	PIPDCG	48	4.4	36	1.04	60	93
	EDCG	33	3.1	23	1.00	81	100
	ADCG	36	3.4	29	1.01	72	96
	EDCGDX	*					
	ADCGDX	*					

TABLE C-9—*Continued*
SUMMARY OF PREDICTIVE ACCURACY—GROUP RESULTS
RETROSPECTIVE ANALYSIS (SPLIT HALF) 1991

Plan Type (Pool ID)	Risk Assessment Method	Mean		Standard Deviation Absolute Error	Predictive Ratio	% Absolute Error	
		Absolute Error	Absolute % Error			Within 5%	Within 10%
IH	Age-sex	55	3.6%	43	1.00	71%	97%
	ACGs	55	3.6	37	0.99	68	99
	ADGs	54	3.6	38	0.99	69	99
	PIPDCG	39	2.6	30	0.99	87	100
	EDCG	45	3.0	34	0.99	79	100
	ADCG	49	3.3	38	0.99	75	100
	EDCGDX	46	3.0	35	0.99	80	100
	ADCGDX	49	3.3	40	0.99	73	100
PA	Age-sex	47	3.7	36	1.00	71	95
	ACGs	35	3.0	27	1.00	83	100
	ADGs	36	2.9	26	1.00	80	100
	PIPDCG	37	2.9	31	1.01	82	98
	EDCG	39	3.2	31	0.99	81	99
	ADCG	40	3.2	31	0.99	76	99
	EDCGDX	38	3.1	31	0.99	82	98
	ADCGDX	41	3.3	33	0.99	75	99
PF	Age-sex	42	4.1	32	1.00	73	93
	ACGs	37	3.6	27	1.01	74	97
	ADGs	34	3.3	27	1.01	74	97
	PIPDCG	36	3.5	25	1.01	78	98
	EDCG	35	3.5	27	1.00	72	98
	ADCG	35	3.5	31	1.00	75	97
	EDCGDX	36	3.6	24	1.00	76	99
	ADCGDX	35	3.4	29	1.00	70	97
HA N=8808	Age-sex	32	2.6	28	1.01	89	100
	ACGs	33	3.0	22	1.00	91	100
	ADGs	43	3.5	30	0.97	76	98
	PIPDCG	44	3.3	29	1.03	79	100
	EDCG	29	2.2	21	1.01	93	100
	ADCG	31	2.5	23	1.01	89	100
	EDCGDX	*					
	ADCGDX	*					
HD	Age-sex	69	5.4	38	0.95	48	92
	ACGs	32	2.5	23	1.00	89	100
	ADGs	30	2.4	23	1.00	87	100
	PIPDCG	25	2.0	19	1.01	97	100
	EDCG	32	2.5	24	1.01	88	100
	ADCG	33	2.6	26	1.00	84	100
	EDCGDX	*					
	ADCGDX	*					

*Insufficient number of enrollees to test ADCGDX and EDCGDX models.

TABLE C-10
SUMMARY OF PREDICTIVE ACCURACY—GROUP RESULTS
RETROSPECTIVE ANALYSIS (SPLIT HALF) 1992

Plan Type (Pool ID)	Risk Assessment Method	Mean		Standard Deviation	Predictive Ratio	% Absolute Error	
		Absolute Error	Absolute % Error	Absolute Error		Within 5%	Within 10%
IA	Age-sex	46	3.7%	34	1.01	70%	97%
	ACGs	45	3.6	34	1.01	64	98
	ADGs	43	3.5	31	1.01	74	99
	PIPDCG	35	2.8	28	1.01	87	98
	EDCG	42	3.4	30	1.01	73	99
	ADCG	46	3.8	35	1.01	73	99
	EDCGDX	44	3.5	31	1.01	78	98
	ADCGDX	47	3.8	37	1.02	71	95
IB	Age-sex	58	4.4	44	0.99	57	95
	ACGs	44	3.3	37	1.01	78	98
	ADGs	44	3.4	33	0.99	78	99
	PIPDCG	37	2.8	31	1.00	85	98
	EDCG	45	3.4	33	0.99	82	97
	ADCG	47	3.5	38	1.00	68	97
	EDCGDX	44	3.3	34	.996	84	98
	ADCGDX	46	3.5	38	1.00	71	98
IC	Age-sex	54	3.9	40	1.00	64	97
	ACGs	46	3.3	36	0.99	77	96
	ADGs	41	3.0	31	0.99	82	100
	PIPDCG	50	3.6	38	1.03	74	99
	EDCG	47	3.3	33	1.02	77	100
	ADCG	48	3.5	36	1.00	70	99
	EDCGDX	*					
	ADCGDX	*					
ID	Age-sex	67	4.3	48	0.99	63	96
	ACGs	59	3.8	43	0.99	71	96
	ADGs	67	4.3	45	0.97	61	95
	PIPDCG	75	4.9	53	0.97	52	98
	EDCG	53	3.4	40	0.99	74	98
	ADCG	53	3.4	40	0.99	74	99
	EDCGDX	50	3.2	38	0.99	78	100
	ADCGDX	49	3.2	38	0.99	78	99
IE	Age-sex	54	4.5	38	1.00	63	90
	ACGs	44	3.7	34	1.00	73	94
	ADGs	43	3.6	33	1.00	68	98
	PIPDCG	42	3.6	32	1.00	73	99
	EDCG	38	3.2	29	1.01	75	99
	ADCG	42	3.5	31	1.01	74	98
	EDCGDX	43	3.6	30	1.00	74	96
	ADCGDX	45	3.8	31	1.00	69	98
IF	Age-sex	51	4.3	38	1.00	62	94
	ACGs	44	3.7	36	1.00	68	96
	ADGs	40	3.4	32	1.00	76	97
	PIPDCG	44	3.7	34	1.00	67	98
	EDCG	43	3.6	30	1.00	71	98
	ADCG	43	3.6	32	1.00	71	98
	EDCGDX	43	3.6	31	1.00	72	98
	ADCGDX	43	3.6	35	1.00	71	98

TABLE C-10—*Continued*
SUMMARY OF PREDICTIVE ACCURACY—GROUP RESULTS
RETROSPECTIVE ANALYSIS (SPLIT HALF) 1992

Plan Type (Pool ID)	Risk Assessment Method	Mean		Standard Deviation	Predictive Ratio	% Absolute Error	
		Absolute Error	Absolute % Error	Absolute Error		Within 5%	Within 10%
IG	Age-sex	96	9.3%	43	.92	16%	52%
	ACGs	94	9.1	40	.92	15	56
	ADGs	116	11.4	37	.90	5	35
	PIPDCG	31	2.8	23	.98	88	100
	EDCG	55	5.1	34	.95	53	95
	ADCG	102	3.9	40	.91	9	53
	EDCGDX	*					
	ADCGDX	*					
IH	Age-sex	67	4.2	48	1.02	65	95
	ACGs	63	4.0	47	1.02	66	96
	ADGs	62	3.9	48	1.02	65	97
	PIPDCG	43	2.7	34	1.02	87	100
	EDCG	54	3.4	38	1.02	76	100
	ADCG	62	3.9	45	1.02	67	97
	EDCGDX	55	3.5	38	1.02	74	100
	ADCGDX	64	4.0	44	1.02	66	97
PA	Age-sex	55	4.4	39	1.00	64	98
	ACGs	44	3.5	36	1.00	81	97
	ADGs	40	3.2	34	1.00	81	97
	PIPDCG	42	3.4	30	1.00	78	99
	EDCG	43	3.4	29	1.00	76	97
	ADCG	42	3.4	31	1.00	78	99
	EDCGDX	43	3.4	29	1.00	76	98
	ADCGDX	42	3.3	31	1.00	78	99
PB	Age-sex	49	4.8	38	1.02	55	91
	ACGs	43	4.1	34	1.02	74	92
	ADGs	39	3.8	32	1.01	76	94
	PIPDCG	36	3.5	25	1.01	73	99
	EDCG	42	4.1	31	1.02	63	96
	ADCG	45	4.4	33	1.01	63	94
	EDCGDX	43	4.1	30	1.02	60	96
	ADCGDX	45	4.3	31	1.02	63	95
PC	Age-sex	44	4.3	35	1.01	64	92
	ACGs	35	3.4	29	1.01	60	89
	ADGs	33	3.2	26	1.01	76	99
	PIPDCG	32	3.2	23	1.00	79	99
	EDCG	37	3.6	31	1.01	75	96
	ADCG	37	3.5	30	1.01	78	98
	EDCGDX	36	3.4	29	1.01	80	97
	ADCGDX	35	3.4	28	1.01	81	97
PD	Age-sex	52	5.1	39	0.99	56	88
	ACGs	43	4.2	34	0.98	70	96
	ADGs	41	4.1	34	0.98	67	93
	PIPDCG	34	3.4	22	0.99	78	100
	EDCG	37	3.7	28	0.99	71	98
	ADCG	40	4.0	29	0.99	71	96
	EDCGDX	36	3.6	27	0.99	70	98
	ADCGDX	38	3.7	28	0.99	20	95

TABLE C-10—*Continued*
SUMMARY OF PREDICTIVE ACCURACY—GROUP RESULTS
RETROSPECTIVE ANALYSIS (SPLIT HALF) 1992

Plan Type (Pool ID)	Risk Assessment Method	Mean		Standard Deviation	Predictive Ratio	% Absolute Error	
		Absolute Error	Absolute % Error	Absolute Error		Within 5%	Within 10%
PE	Age-sex	50	4.8%	38	1.00	58%	91%
	ACGs	38	3.7	30	1.00	72	96
	ADGs	35	3.4	28	1.00	74	98
	PIPDCG	35	3.4	26	1.00	74	99
	EDCG	38	3.7	27	1.00	68	99
	ADCG	39	3.8	30	1.00	70	98
	EDCGDX	38	3.7	28	1.00	71	98
	ADCGDX	39	3.8	31	1.00	68	96
PF	Age-sex	52	4.7	36	1.03	54	93
	ACGs	43	3.9	31	1.03	69	96
	ADGs	44	3.9	29	1.03	67	97
	PIPDCG	44	4.0	30	1.03	67	98
	EDCG	44	3.8	28	1.02	69	98
	ADCG	44	3.9	29	1.02	66	97
	EDCGDX	46	4.1	32	1.03	64	96
	ADCGDX	44	4.0	29	1.03	72	97
PG	Age-sex	54	5.0	36	1.00	52	92
	ACGs	40	3.7	33	0.99	68	95
	ADGs	40	3.7	33	0.99	74	95
	PIPDCG	42	3.8	32	1.00	73	94
	EDCG	39	3.5	28	0.99	77	99
	ADCG	42	3.8	31	1.00	70	97
	EDCGDX	40	3.7	34	0.99	72	94
	ADCGDX	46	4.2	30	1.00	64	97
HA	Age-sex	51	3.9	39	1.03	73	93
	ACGs	59	4.5	37	1.04	58	94
	ADGs	40	3.1	31	1.02	82	99
	PIPDCG	34	2.7	24	1.00	90	99
	EDCG	45	3.7	34	1.03	75	100
	ADCG	53	4.3	35	1.03	70	97
	EDCGDX	*					
	ADCGDX	*					
HB	Age-sex	55	4.8	48	0.98	64	87
	ACGs	47	4.2	36	0.98	64	93
	ADGs	46	4.1	33	0.98	67	98
	PIPDCG	35	3.1	32	0.98	78	98
	EDCG	42	3.7	32	0.98	75	97
	ADCG	47	4.1	33	0.98	70	95
	EDCGDX	42	3.7	31	0.98	71	98
	ADCGDX	46	4.0	32	0.98	67	96
HC	Age-sex	35	4.7	28	1.01	64	90
	ACGs	28	3.7	26	1.02	74	96
	ADGs	28	3.7	28	1.02	71	94
	PIPDCG	33	4.4	25	1.01	67	94
	EDCG	32	4.2	26	1.01	63	94
	ADCG	35	4.6	29	1.02	64	94
	EDCGDX	31	4.2	24	1.01	69	95
	ADCGDX	34	4.5	25	1.01	57	95
HD	Age-sex	45	3.5	33	1.02	76	98
	ACGs	50	3.8	35	1.03	66	98
	ADGs	35	2.8	26	1.00	83	100
	PIPDCG	28	2.2	20	0.99	96	100
	EDCG	36	2.8	28	1.01		100
	ADCG	37	2.9	30	1.00	82	99
	EDCGDX	*					
	ADCGDX	*					

* Insufficient number of enrollees to test ADCGDX and EDCGDX models.

TABLE C-11
SUMMARY OF PREDICTIVE ACCURACY—GROUP RESULTS
PROSPECTIVE ANALYSIS (SPLIT HALF)

Plan Type (Pool ID)	Risk Assessment Method	Mean		Standard Deviation	Predictive Ratio	% Absolute Error	
		Absolute Error	Absolute % Error	Absolute Error		Within 5%	Within 10%
IA	Age-sex	50	3.9%	42	1.00	72%	92%
	ACGs	53	4.0	38	1.00	71	95
	ADGs	53	4.2	39	1.00	67	96
	PIPDCG	53	4.2	42	1.00	68	92
	EDCG	52	4.1	39	1.00	69	93
	ADCG	52	4.1	40	1.00	68	94
	EDCGDX	51	4.0	38	1.00	69	94
	ADCGDX	52	4.1	39	1.00	68	95
IB	Age-sex	60	4.3	39	1.03	57	96
	ACGs	59	4.0	38	1.03	61	97
	ADGs	58	4.2	39	1.02	62	97
	PIPDCG	63	4.5	38	1.03	58	97
	EDCG	59	4.2	36	1.02	63	97
	ADCG	58	4.2	36	1.02	64	97
	EDCGDX	59	4.2	36	1.02	63	97
	ADCGDX	58	4.2	36	1.02	66	94
IC	Age-sex	54	3.8	38	1.02	68	98
	ACGs	45	3.2	33	1.00	83	99
	ADGs	43	3.1	32	1.00	79	99
	PIPDCG	53	3.7	37	1.02	68	99
	EDCG	48	3.4	36	1.01	75	99
	ADCG	49	3.4	37	1.01	78	99
	EDCGDX	*					
	ADCGDX	*					
PA	Age-sex	60	4.4	42	1.04	64	95
	ACGs	62	5.0	43	1.03	56	92
	ADGs	59	4.4	42	1.03	58	96
	PIPDCG	70	5.2	48	1.04	55	90
	EDCG	67	4.9	45	1.04	56	92
	ADCG	64	4.7	43	1.03	56	94
	EDCGDX	66	4.9	45	1.04	56	94
	ADCGDX	63	4.7	44	1.03	56	94
HA	Age-sex	101	7.5	52	1.08	28	74
	ACGs	94	7.0	51	1.07	33	80
	ADGs	93	6.9	50	1.07	34	66
	PIPDCG	94	7.0	52	1.08	35	75
	EDCG	103	7.6	51	1.08	26	74
	ADCG	99	7.4	50	1.08	27	73
	EDCGDX	*					
	ADCGDX	*					
HD	Age-sex	42	3.2	29	1.01	81	100
	ACGs	38	3.0	29	1.00	82	99
	ADGs	37	2.9	27	1.00	84	100
	PIPDCG	41	3.2	30	1.01	73	100
	EDCG	39	3.1	28	1.00	79	100
	ADCG	39	3.0	27	1.01	80	100
	EDCGDX	*					
	ADCGDX	*					

*Insufficient number of enrollees to test ADCGDX and EDCGDX models.

TABLE C-12
PERCENTAGE OF ABSOLUTE ERRORS GREATER THAN $5,000 FOR ALL POOLS AND METHODS
INDIVIDUAL LEVEL ANALYSIS

Pools	Age-Sex	ACGs	ADGs	PIPDCGs	EDCG	ADCG	EDCGDX	ADCGDX
				Retrospective 1992				
IA-	5.0%	6.4%	4.6%	3.7%	4.6%	5.6%	4.5%	5.2%
IB	5.0	4.8	4.6	3.4	4.0	4.3	4.7	5.5
IC	5.5	5.3	4.9	5.3	5.3	4.7	*	*
ID-	6.2	6.2	6.0	6.2	6.4	7.3	6.4	6.7
IE-	4.8	4.3	6.2	4.5	4.6	5.2	4.4	4.7
IF-	4.8	4.4	4.0	4.6	4.7	5.1	4.6	4.8
IG-	5.6	5.2	4.5	5.0	5.0	6.0	*	*
IH-	6.1	5.8	7.2	5.9	6.8	7.0	6.5	7.0
PA-	4.9	4.4	4.1	3.9	4.1	4.4	4.6	5.0
PB-	4.0	3.3	3.3	3.7	3.8	4.0	3.6	3.8
PC-	4.1	3.5	3.3	3.9	3.9	4.5	3.8	4.0
PD-	4.0	3.3	3.3	3.8	3.9	4.3	3.7	3.9
PE-	4.1	3.5	3.3	3.9	3.8	4.2	3.7	3.9
PF-	4.0	3.7	3.2	3.8	4.0	4.1	3.8	3.9
PG-	4.1	3.6	3.2	3.9	4.1	4.2	3.8	4.0
HA-	4.4	4.1	3.9	3.5	4.1	3.7	*	*
HB-	4.5	4.2	3.8	4.4	4.2	4.8	4.1	4.3
HC-	3.6	3.0	2.8	3.7	3.7	3.6	3.6	3.5
HD-	4.0	3.9	3.0	3.5	4.0	4.0	*	*
Indemnity	5.2	5.1	5.3	4.6	5.0	5.5	4.9	5.4
PPO	4.1	3.6	3.4	3.8	3.9	4.3	3.8	4.0
HMO	4.0	3.5	3.2	3.9	3.9	4.0	3.8	3.8
All Pools	4.5	4.1	4.0	4.1	4.3	4.7	4.2	4.5
				Prospective				
IA	5.1	4.9	5.0	5.1	5.1	5.2	5.2	5.3
IB	5.2	5.2	5.2	5.1	5.0	5.0	5.4	5.3
IC	5.6	5.5	5.6	5.7	5.7	5.6	*	*
PA	4.9	5.0	4.8	5.0	5.0	4.9	5.1	5.0
HA	4.3	4.1	4.0	4.3	4.5	4.3	*	*
HD	4.3	4.0	3.9	4.3	4.2	4.2	*	*
All Pools	5.1	5.0	5.0	5.0	5.0	5.0	5.3	5.2

TABLE C-12A
ADJUSTED R^2 FOR ALL POOLS AND METHODS, INDIVIDUAL LEVEL ANALYSIS

Pools	Age-Sex	ACGs	ADGs	PIPDCGs	EDCG	ADCG	EDCGDX	ADCGDX
				Retrospective 1992				
IA-	.037%	.274%	.357%	.492%	.369%	.265%	.393%	.303%
IB-	.038	.299	.356	.568	.377	.271	.403	.306
IC-	.036	.314	.352	.500	.371	.279	*	*
ID-	.040	.328	.404	.265	.352	.314	.388	.350
IE-	.031	.327	.394	.292	.313	.259	.345	.296
IF-	.032	.327	.396	.290	.304	.253	.341	.293
IG-	.007	.178	.280	.465	.306	.206	*	*
IH-	.037	.187	.257	.562	.404	.246	.413	.256
PA-	.039	.266	.331	.459	.327	.230	.351	.265
PB-	.029	.260	.332	.492	.371	.255	.401	.304
PC-	.029	.260	.329	.496	.364	.251	.392	.297
PD-	.028	.259	.320	.491	.357	.250	.388	.297
PE-	.028	.268	.338	.486	.357	.254	.389	.300
PF-	.036	.301	.373	.311	.291	.227	.325	.271
PG-	.035	.288	.366	.306	.290	.223	.324	.275
HA-	.035	.253	.338	.485	.336	.221	*	*
HB-	.029	.284	.351	.452	.356	.260	.371	.308
HC-	.029	.381	.473	.377	.337	.276	.362	.306
HD-	.046	.281	.390	.527	.322	.205	*	*
Indemnity	.034	.291	.360	.408	.346	.260	.372	.293
PPO	.031	.271	.341	.444	.341	.244	.372	.290
HMO	.030	.337	.421	.416	.343	.264	.365	.307
All Pools	.032	.286	.357	.428	.343	.252	.372	.293
				Prospective				
IA-	.034	.090	.107	.060	.093	.084	.096	.090
IB-	.043	.095	.120	.069	.102	.095	.105	.102
IC-	.035	.090	.118	.059	.097	.095	*	*
PA-	.039	.088	.106	.051	.074	.069	.078	.081
HA-	.039	.078	.103	.059	.064	.077	*	*
HD-	.034	.086	.103	.054	.088	.061	*	*
All Pools	.039	.091	.112	.061	.091	.084	.096	.093

TABLE C-13
PERCENTAGE OF ABSOLUTE ERRORS WITHIN $500 FOR ALL POOLS AND METHODS, INDIVIDUAL LEVEL ANALYSIS

Pools	Age-Sex	ACGs	ADGs	PIPDCGs	EDCG	ADCG	EDCGDX	ADCGDX
				Retrospective 1992				
IA-	23%	61%	63%	34%	48%	49%	49%	50%
IB-	21	60	60	40	51	45	47	49
IC-	19	59	60	39	44	42	*	*
ID-	18	57	56	29	41	44	43	44
IE-	24	64	62	40	49	49	49	50
IF-	25	64	61	42	48	49	49	50
IG-	31	65	54	52	53	52	*	*
IH-	17	54	50	38	43	40	43	40
PA-	23	60	60	32	48	44	45	49
PB-	32	67	68	52	57	52	57	52
PC-	32	66	68	55	57	52	58	52
PD-	33	67	68	54	59	53	60	55
PE-	32	67	68	52	57	52	57	54
PF-	33	65	62	46	49	51	51	53
PG-	29	65	62	47	49	52	52	53
HA-	26	57	58	36	46	44	*	*
HB-	28	64	64	46	51	51	52	53
HC-	49	79	78	61	68	62	68	62
HD-	33	59	52	47	45	44	*	*
Indemnity	22	61	59	39	47	47	47	48
PPO	31	66	66	49	54	52	55	53
HMO	40	72	71	54	60	56	62	59
All Pools	29	65	64	46	53	50	53	52
				Prospective				
IA-	24	18	38	22	36	35	36	35
IB-	19	17	33	23	27	27	33	31
IC-	18	20	35	21	34	23	*	*
PA-	20	20	31	21	25	23	28	29
HA-	25	25	38	26	31	30	*	*
HD-	35	40	41	36	35	36	*	*
All Pools	22	19	35	23	30	29	33	32

TABLE C-13A
MEAN ABSOLUTE PERCENTAGE ERROR FOR ALL POOLS AND METHODS, GROUP LEVEL ANALYSIS

Pools	Age-Sex	ACGs	ADGs	PIPDCGs	EDCG	ADCG	EDCGDX	ADCGDX
				Retrospective 1992				
IA-	3.7%	3.6%	3.5%	2.8%	3.4%	3.8%	3.5%	3.8%
IB-	4.4	3.3	3.4	2.8	3.4	3.5	3.3	3.5
IC-	3.9	3.3	3.0	3.6	3.3	3.5	*	*
ID-	4.3	3.8	4.3	4.9	3.4	3.4	3.2	3.2
IE-	4.5	3.7	3.6	3.6	3.2	3.5	3.6	3.8
IF-	4.3	3.7	3.4	3.7	3.6	3.6	3.6	3.6
IG-	9.3	9.1	11.4	2.8	5.1	3.9	*	*
IH-	4.2	4.0	3.9	2.7	3.4	3.9	3.5	4.0
PA-	4.4	3.5	3.2	3.4	3.4	3.4	3.4	3.3
PB-	4.8	4.1	3.8	3.5	4.1	4.4	4.1	4.3
PC-	4.3	3.4	3.2	3.2	3.6	3.5	3.4	3.4
PD-	5.1	4.2	4.1	3.4	3.7	4.0	3.6	3.7
PE-	4.8	3.7	3.4	3.4	3.7	3.8	3.7	3.8
PF-	4.7	3.9	3.9	4.0	3.8	3.9	4.1	4.0
PG-	5.0	3.7	3.7	3.8	3.5	3.8	3.7	4.2
HA-	3.9	4.5	3.1	2.7	3.7	4.3	*	*
HB-	4.8	4.2	4.1	3.1	3.7	4.1	3.7	4.0
HC-	4.7	3.7	3.7	4.4	4.2	4.6	4.2	4.5
HD-	3.5	3.8	2.8	2.2	2.8	2.9	*	*
Indemnity	4.3	3.7	3.6	3.3	3.4	3.6	3.5	3.7
PPO	4.7	3.8	3.6	3.5	3.7	3.8	3.7	3.8
HMO	4.6	3.9	3.8	3.8	3.9	4.3	4.0	4.3
All Pools	4.6	3.8	3.6	3.5	3.6	3.8	3.7	3.8
				Prospective				
IA-	3.9	4.0	4.2	4.2	4.1	4.1	4.0	4.1
IB-	4.3	4.0	4.2	4.5	4.2	4.2	4.2	4.2
IC-	3.8	3.2	3.1	3.7	3.4	3.4	*	*
PA-	4.4	5.0	4.4	5.2	4.9	4.7	4.9	4.7
HA-	7.5	7.0	6.9	7.0	7.6	7.4	*	*
HD-	3.2	3.0	2.9	3.2	3.1	3.0	*	*
All Pools	4.3	4.2	4.2	4.6	4.4	4.3	4.3	4.3

TABLE C-14
SUMMARY OF PREDICTIVE ACCURACY WITH THREE LEVELS OF TRUNCATION
RETROSPECTIVE ANALYSIS, 1992

Plan Type	Risk Assessment Method	Mean		Absolute Error	Standard Deviation Absolute Error	% Error				Adjusted R^2
		Actual	Predicted			Within $500	Within $1,000	Over $5,000	Over $10,000	
				Truncated at $25,000						
IA	Age-Sex	1,219	1,230	1,614	2,858	23%	55%	5.0%	2.4%	0.037
	ACGs		1,236	1,167	2,566	61	73	6.4	1.8	0.274
	ADGs		1,235	1,123	2,435	63	74	4.6	2.7	0.357
	PIPDCGs		1,227	1,195	2,082	34	73	3.7	1.7	0.492
	EDCG		1,237	1,231	2,355	48	69	4.6	1.8	0.369
	ADCG		1,237	1,329	2,541	49	69	5.6	2.0	0.265
	EDCGDX		1,242	1,208	2,309	49	69	4.5	1.6	0.393
	ADCGDX		1,241	1,297	2,473	50	69	5.2	1.9	0.303
				Truncated at $50,000						
IA	Age-Sex	1,324	1,341	1,789	3,824	19%	53%	4.9%	2.4%	0.029
	ACGs		1,348	1,323	3,513	61	72	5.3	1.8	0.232
	ADGs		1,346	1,314	3,340	60	72	5.4	1.7	0.298
	PIPDCGs		1,339	1,296	2,832	50	66	5.2	1.4	0.471
	EDCG		1,350	1,371	3,127	47	69	5.1	1.8	0.365
	ADCG		1,351	1,478	3,387	49	67	6.0	2.4	0.255
	EDCGDX		1,359	1,331	3,021	48	69	4.9	1.9	0.406
	ADCGDX		1,359	1,429	3,235	49	68	5.6	1.8	0.318
				No Truncation						
IA	Age-Sex	1,431	1,476	1,986	6,060	17%	48%	4.8%	2.3%	0.016
	ACGs		1,485	1,497	5,785	71	71	6.1	1.8	0.136
	ADGs		1,481	1,619	5,560	53	70	7.2	2.1	0.188
	PIPDCGs		1,482	1,453	5,034	43	69	5.3	2.4	0.336
	EDCG		1,494	1,538	5,267	48	68	5.2	2.4	0.271
	ADCG		1,495	1,647	5,571	47	66	6.1	2.4	0.183
	EDCGDX		1,498	1,500	5,112	50	68	5.1	1.9	0.313
	ADCGDX		1,508	1,602	5,384	48	69	5.3	2.6	0.236
				Truncated at $25,000						
PA	Age-Sex	1,256	1,259	1,571	2,745	23%	57%	4.9%	2.4%	0.039
	ACGs		1,264	1,164	2,505	60	72	4.4	1.7	0.266
	ADGs		1,258	1,127	2,385	60	73	4.1	1.6	0.331
	PIPDCGs		1,258	1,225	2,055	32	70	3.9	1.4	0.459
	EDCG		1,258	1,249	2,345	48	68	4.1	1.6	0.327
	ADCG		1,262	1,333	2,497	48	64	5.5	1.9	0.230
	EDCGDX		1,256	1,232	2,286	45	68	4.6	1.7	0.351
	ADCGDX		1,261	1,306	2,438	49	66	5.0	1.9	0.265
				Truncated at $50,000						
PA	Age-Sex	1,336	1,338	1,698	3,517	22%	54%	4.8%	2.2%	0.030
	ACGs		1,344	1,282	3,271	59	71	3.5	1.7	0.214
	ADGs		1,337	1,271	3,122	59	71	4.6	1.5	0.277
	PIPDCGs		1,338	1,294	2,647	43	67	5.0	1.9	0.447
	EDCG		1,337	1,360	2,953	44	67	4.8	2.0	0.327
	ADCG		1,341	1,448	3,196	47	63	5.9	2.1	0.217
	EDCGDX		1,334	1,324	2,845	45	67	4.8	1.9	0.373
	ADCGDX		1,339	1,406	3,061	48	65	5.4	1.9	0.278

TABLE C-14—*Continued*
SUMMARY OF PREDICTIVE ACCURACY WITH THREE LEVELS OF TRUNCATION
RETROSPECTIVE ANALYSIS, 1992

Plan Type	Risk Assessment Method	Mean		Absolute Error	Standard Deviation Absolute Error	% Error				Adjusted R^2
		Actual	Predicted			Within $500	Within $1,000	Over $5,000	Over $10,000	
					No Truncation					
PA	Age-Sex	1,396	1,413	1,805	4,989	21%	50%	4.8%	2.2%	0.018
	ACGs		1,420	1,382	4,785	59	71	5.4	1.7	0.134
	ADGs		1,412	1,422	4,627	57	70	5.5	1.7	0.182
	PIPDCGs		1,417	1,379	4,147	46	65	5.0	2.0	0.333
	EDCG		1,415	1,454	4,387	43	69.0	4.9	2.200	0.254
	ADCG		1,416	1,547	4,636	47	64	6.1	2.2	0.217
	EDCGDX		1,413	1,409	4,210	46	68	4.9	2.0	0.312
	ADCGDX		1,416	1,497	4,437	49	65	5.5	2.2	0.234
					Truncated at $25,000					
IB	Age-Sex	1,327	1,322	1,670	2,979	21%	55.00%	5.0%	2.6%	0.038
	ACGs		1,317	1,203	2,676	60	72	4.8	2.0	0.299
	ADGs		1,309	1,183	2,530	60	72	4.6	1.9	0.356
	PIPDCGs		1,331	1,142	1,994	40	73	3.4	1.6	0.568
	EDCG		1,319	1,252	2,436	51	70	4.0	1.8	0.377
	ADCG		1,326	1,382	2,635	45	71	4.3	2.2	0.271
	EDCGDX		1,321	1,234	2,391	47	69	4.7	1.8	0.403
	ADCGDX		1,327	1,336	2,573	49	69	5.5	2.1	0.306
					Truncated at $50,000					
IB	Age-Sex	1,447	1,447	1,866	4,009	18%	54%	4.9%	2.5%	0.030
	ACGs		1,440	1,379	3,693	60	71	5.6	2.0	0.229
	ADGs		1,433	1,408	3,504	58	71	5.7	1.9	0.292
	PIPDCGs		1,465	1,348	2,871	45	65	5.1	2.4	0.501
	EDCG		1,441	1,406	3,260	45	69	5.2	2.2	0.374
	ADCG		1,450	1,531	3,556	48	67	6.3	2.4	0.256
	EDCGDX		1,443	1,370	3,172	45	68	5.1	2.1	0.407
	ADCGDX		1,452	1,488	3,437	49	68	5.9	2.3	0.300
					No Truncation					
IB	Age-Sex	1,570	1,568	2,068	6,523	16%	49%	4.8%	2.5%	0.016
	ACGs		1,561	1,568	6,265	59	70	6.4	2.1	0.123
	ADGs		1,552	1,669	6,046	53	69	7.2	2.1	0.173
	PIPDCGs		1,592	1,513	5,422	43	65	5.1	2.5	0.334
	EDCG		1,563	1,574	5,635	45	68	5.4	2.6	0.281
	ADCG		1,570	1,708	5,978	48	67	6.5	2.5	0.188
	EDCGDX		1,563	1,529	5,465	45	68	5.3	2.4	0.323
	ADCGDX		1,568	1,658	5,842	48	70	6.2	2.5	0.225

TABLE C-15
SUMMARY OF PREDICTIVE ACCURACY WITH THREE LEVELS OF TRUNCATION
INDIVIDUAL RESULTS, PROSPECTIVE ANALYSIS

Plan Type	Risk Assessment Method	Mean			Standard Deviation	% Error				Adjusted
		Actual	Predicted	Absolute Error	Absolute Error	Within $500	Within $1,000	Over $5,000	Over $10,000	R^2
Indemnity Truncated at $25,000										
IA	Age-Sex	1,272	1,269	1,660	2,943	24.00%	55%	5.1%	2.5%	0.034
	ACGs		1,267	1,552	2,889	18	68	4.9	2.3	0.090
	ADGs		1,269	1,523	2,870	38	64	5.0	2.3	0.107
	PIPDCGs		1,268	1,652	2,896	22	50	5.1	2.2	0.060
	EDCG		1,270	1,574	2,871	36	54	5.1	2.3	0.093
	ADCG		1,275	1,589	2,881	35	55	5.2	2.4	0.084
	EDCGDX		1,272	1,568	2,868	36	54	5.2	2.7	0.096
	ADCGDX		1,276	1,582	2,873	35	55	5.3	2.4	0.090
Indemnity Truncated at $50,000										
IA	Age-Sex	1,386	1,388	1,847	3,954	21%	54%	5.0%	2.4%	0.026
	ACGs		1,384	1,735	3,893	16	65	5.2	2.3	0.070
	ADGs		1,389	1,709	3,873	35	62	5.4	2.3	0.082
	PIPDCGs		1,391	1,809	3,873	24	55	5.4	2.4	0.065
	EDCG		1,388	1,754	3,847	36	51	5.4	2.3	0.085
	ADCG		1,394	1,770	3,870	28	54	5.5	2.4	0.073
	EDCGDX		1,390	1,747	3,844	33	51	5.4	2.4	0.102
	ADCGDX		1,396	1,762	3,857	28	54	5.5	2.4	0.079
Indemnity No Truncation										
IA	Age-Sex	1,512	1,508	2,053	7,539	19%	45%	5.3%	2.4%	0.009
	ACGs		1,501	1,938	7,475	14	62	6.3	2.3	0.032
	ADGs		1,511	1,921	7,454	31	60	6.2	2.2	0.037
	PIPDCGs		1,509	2,007	7,431	23	50	5.6	2.4	0.038
	EDCG		1,504	1,953	7,398	29	52	5.8	2.4	0.049
	ADCG		1,520	1,975	7,417	30	53	5.7	2.7	0.043
	EDCGDX		1,511	1,959	7,495	29	52	5.5	2.5	0.074
	ADCGDX		1,521	1,975	7,476	26	55	5.7	2.5	0.069
Truncated at $25,000										
PA	Age-Sex	1,313	1,360	1,650	2,802	20%	54%	4.9%	2.4%	0.039
	ACGs		1,349	1,547	2,764	20	66	5.0	2.2	0.088
	ADGs		1,345	1,511	2,746	31	62	4.8	2.2	0.106
	PIPDCGs		1,357	1,603	2,755	25	52	5.0	2.2	0.051
	EDCG		1,362	1,658	2,778	21	47	5.0	2.3	0.074
	ADCG		1,357	1,603	2,755	25	52	5.0	2.2	0.069
	EDCGDX		1,351	1,606	2,761	23	53	4.9	2.2	0.078
	ADCGDX		1,355	1,584	2,762	28	52	5.1	2.2	0.081
Truncated at $50,000										
PA	Age-Sex	1,411	1,445	1,800	3,713	19%	50%	4.8%	2.2%	0.030
	ACGs		1,435	1,693	3,669	18	64	5.0	2.1	0.070
	ADGs		1,428	1,658	3,649	31	59	5.0	2.0	0.084
	PIPDCGs		1,449	1,782	3,669	22	53	5.1	2.2	0.052
	EDCG		1,444	1,731	3,646	27	50	5.1	2.1	0.072
	ADCG		1,436	1,731	3,657	27	53	5.0	2.1	0.067
	EDCGDX		1,445	1,736	3,674	26	50	5.2	2.2	0.059
	ADCGDX		1,435	1,729	3,660	27	53	5.2	2.2	0.066

TABLE C-15—*Continued*
SUMMARY OF PREDICTIVE ACCURACY WITH THREE LEVELS OF TRUNCATION
INDIVIDUAL RESULTS, PROSPECTIVE ANALYSIS

Plan Type	Risk Assessment Method	Mean		Absolute Error	Standard Deviation Absolute Error	% Error				Adjusted R^2
		Actual	Predicted			Within $500	Within $1,000	Over $5,000	Over $10,000	
					No Truncation					
PA	Age-Sex	1,497	1,515	1,928	5,447	18%	48%	4.8%	2.2%	0.018
	ACGs		1,504	1,819	5,403	17	63	5.5	2.1	0.044
	ADGs		1,497	1,790	5,384	30	58	5.2	2.1	0.052
	PIPDCGs		1,520	1,908	5,387	22	49	5.4	2.2	0.039
	EDCG		1,515	1,860	5,356	26	50	5.1	2.1	0.054
	ADCG		1,503	1,857	5,366	28	51	5.0	2.1	0.052
	EDCGDX		1,513	1,871	5,434	26	50	5.4	2.2	0.048
	ADCGDX		1,503	1,857	5,366	28	51	5.2	2.2	0.051
					Truncated at $25,000					
IB	Age-Sex	1,372	1,404	1,726	3,000	19%	53%	5.2%	2.7%	0.043
	ACGs		1,396	1,628	2,946	17	68	5.2	2.5	0.095
	ADGs		1,397	1,588	2,913	33	59	5.2	2.5	0.120
	PIPDCGs		1,400	1,718	2,965	23	48	5.1	2.6	0.069
	EDCG		1,394	1,656	2,933	27	52	5.0	2.9	0.102
	ADCG		1,391	1,663	2,934	27	52	5.0	2.5	0.095
	EDCGDX		1,395	1,629	2,925	33	53	5.4	2.5	0.105
	ADCGDX		1,392	1,636	2,927	31	55	5.3	2.5	0.102
					Truncated at $50,000					
IB	Age-Sex	1,501	1,532	1,933	4,098	17%	51%	5.0%	2.6%	0.034
	ACGs		1,523	1,831	4,039	15	65	5.6	2.5	0.074
	ADGs		1,524	1,791	4,001	30	57	5.7	2.4	0.095
	PIPDCGs		1,526	1,896	4,038	20	54	5.6	2.5	0.063
	EDCG		1,519	1,834	4,001	29	1.6	5.7	2.6	0.088
	ADCG		1,516	1,841	4,006	29	54	5.6	2.6	0.085
	EDCGDX		1,521	1,827	3,988	28	51	5.6	2.6	0.094
	ADCGDX		1,519	1,834	3,993	27	52	5.5	2.6	0.091
					No Truncation					
IB	Age-Sex	1,621	1,664	2,138	6,373	15%	43%	4.9%	2.6%	0.019
	ACGs		1,654	2,032	6,323	14	60	6.1	2.4	0.042
	ADGs		1,656	1,998	6,285	3	55	6.5	2.3	0.055
	PIPDCGs		1,657	2,095	6,306	20	52	5.9	2.6	0.041
	EDCG		1,648	2,032	6,262	27	49	6.1	2.6	0.059
	ADCG		1,646	2,038	6,268	26	51	6.2	2.5	0.057
	EDCGDX		1,650	2,024	6,249	27	50	5.9	2.6	0.063
	ADCGDX		1,648	2,031	6,255	26	51	5.7	2.4	0.060

TABLE C-16
SUMMARY OF PREDICTIVE ACCURACY FOR THREE LEVELS OF TRUNCATION
GROUP RESULTS, RETROSPECTIVE ANALYSIS, 1992

Plan Type	Risk Assessment Method	Mean Absolute Error	Mean Absolute % Error	Standard Deviation Absolute Error	Prediction Ratio	% Error Within 5%	% Error Within 10%
			Truncated at $25,000				
IA	Age-Sex	46	3.7%	34	1.01	70%	97%
	ACGs	45	3.6	34	1.01	64	98
	ADGs	43	3.5	31	1.01	74	99
	PIPDCGs	35	2.8	28	1.00	84	99
	EDCG	42	3.4	30	1.01	73	99
	ADCG	46	3.8	35	1.01	73	99
	EDCGDX	44	3.5	31	1.01	78	98
	ADCGDX	47	3.8	37	1.02	71	95
			Truncated at $50,000				
IA	Age-Sex	65	4.8%	53	1.01	64%	87%
	ACGs	60	4.4	45	1.02	61	94
	ADGs	57	4.2	44	1.01	66	96
	PIPDCGs	46	3.4	34	1.01	79	98
	EDCG	55	4.1	38	1.01	60	97
	ADCG	61	4.5	44	1.02	62	94
	EDCGDX	58	4.3	39	1.02	68	95
	ADCGDX	59	4.4	47	1.02	61	94
			No Truncation				
IA	Age-Sex	108	7.3%	79	1.03	42%	74%
	ACGs	104	7.0	75	1.04	43	75
	ADGs	103	7.0	72	1.03	44	73
	PIPDCGs	89	6.1	57	1.03	40	79
	EDCG	103	6.9	65	1.04	39	71
	ADCG	107	7.2	72	1.04	37	76
	EDCGDX	101	6.7	66	1.04	37	78
	ADCGDX	104	6.9	74	1.05	37	80
			Truncated at $25,000				
PA	Age-Sex	55	4.4%	39	1.00	64%	98%
	ACGs	44	3.5	36	1.00	81	97
	ADGs	40	3.2	34	1.00	81	97
	PIPDCGs	42	3.4	31	1.00	76	99
	EDCG	43	3.4	30	1.00	76	98
	ADCG	43	3.4	32	1.00	79	98
	EDCGDX	43	3.4	29	1.00	76	98
	ADCGDX	42	3.3	31	1.00	78	99
			Truncated at $50,000				
PA	Age-Sex	63	4.7%	52	1.00	63%	94%
	ACGs	56	4.2	45	1.00	71	92
	ADGs	52	3.9	42	1.00	76	95
	PIPDCGs	53	3.9	37	1.00	70	95
	EDCG	53	3.9	38	1.00	65	96
	ADCG	52	3.9	39	1.00	72	97
	EDCGDX	51	3.8	39	1.00	65	97
	ADCGDX	50	3.7	37	1.00	71	97

TABLE C-16—*Continued*
SUMMARY OF PREDICTIVE ACCURACY FOR THREE LEVELS OF TRUNCATION
GROUP RESULTS, RETROSPECTIVE ANALYSIS, 1992

Plan	Type	Risk Assessment Method	Mean Absolute Error	Mean Absolute % Error	Standard Deviation Absolute Error	Prediction Ratio	% Error Within 5%	% Error Within 10%
				No Truncation				
PA		Age-Sex	93	6.6%		1.02	45%	74%
		ACGs	86	6.0	59	1.02	50	85
		ADGs	81	5.8	55	1.01	40	86
		PIPDCGs	83	5.8	50	1.02	42	86
		EDCG	81	5.7	49	1.02	40	85
		ADCG	78	5.5	51	1.02	47	88
		EDCGDX	80	5.7	46	1.01	47	90
		ADCGDX	74	5.2	50	1.02	53	91
				Truncated at $25,000				
IB		Age-Sex	58	4.4%	44	0.99	57%	95%
		ACGs	44	3.3	37	1.01	78	98
		ADGs	44	3.4	33	0.99	78	99
		PIPDCGs	37	2.8	29	1.00	86	98
		EDCG	44	3.4	34	0.99	82	97
		ADCG	46	3.5	39	1.00	69	97
		EDCGDX	44	3.3	34	.996	84	98
		ADCGDX	46	3.5	38	1.00	71	98
				Truncated at $50,000				
IB		Age-Sex	68	4.7%	55	1.00	62%	89%
		ACGs	53	3.7	49	1.00	73	93
		ADGs	54	3.8	42	0.99	72	94
		PIPDCGs	49	3.4	39	1.01	81	98
		EDCG	54	3.8	40	1.00	75	96
		ADCG	58	3.6	42	1.00	74	97
		EDCGDX	51	3.6	42	1.00	74	97
		ADCGDX	57	3.9	48	1.00	69	93
				No Truncation				
IB		Age-Sex	96	6.2%	73	1.00	48%	83%
		ACGs	88	5.6	65	1.00	52	85
		ADGs	85	5.5	63	0.99	54	84
		PIPDCGs	77	4.9	59	1.01	55	90
		EDCG	80	5.1	59	0.99	59	88
		ADCG	87	5.5	70	1.00	51	88
		EDCGDX	79	5.1	56	0.99	62	90
		ADCGDX	82	5.3	68	1.00	59	84

TABLE C-17
SUMMARY OF PREDICTIVE ACCURACY FOR THREE LEVELS OF TRUNCATION
GROUP RESULTS, PROSPECTIVE ANALYSIS

Plan Type	Risk Assessment Method	Mean Absolute Error	Mean Absolute % Error	Standard Deviation Absolute Error	Prediction Ratio	% Error Within 5 %	% Error Within 10 %
			Truncated at $25,000				
IA	Age-Sex	50	3.9%	42	1.00	72%	92%
	ACGs	53	4.0	38	1.00	71	95
	ADGs	53	4.2	39	1.00	67	96
	PIPDCGs	54	4.2	44	1.00	68	93
	EDCG	52	4.1	39	1.00	69	93
	ADCG	52	4.1	40	1.00	68	94
	EDCGDX	51	4.0	38	1.00	69	94
	ADCGDX	52	4.1	39	1.00	68	95
			Truncated at $50,000				
IA	Age-Sex	67	4.8%	53	1.00	60%	88%
	ACGs	65	4.7	48	1.00	63	88
	ADGs	65	4.7	49	1.00	61	90
	PIPDCGs	65	4.7	51	1.01	62	90
	EDCG	63	4.5	48	1.00	59	91
	ADCG	64	4.6	50	1.01	63	91
	EDCGDX	62	4.5	47	1.00	62	92
	ADCGDX	64	4.6	47	1.01	63	92
			No Truncation				
IA	Age-Sex	123	8.2%	105	1.00	37%	72%
	ACGs	117	7.8	106	1.00	41	74
	ADGs	117	7.7	104	1.00	39	75
	PIPDCGs	119	7.9	103	1.00	39	75
	EDCG	115	7.6	105	1.00	43	76
	ADCG	118	7.8	103	1.01	42	75
	EDCGDX	115	7.6	100	1.00	40	72
	ADCGDX	120	7.9	97	1.01	40	75
			Truncated at $25,000				
PA	Age-Sex	60	4.4%	42	1.04	64%	95%
	ACGs	62	5.0	43	1.03	56	92
	ADGs	59	4.4	42	1.03	58	96
	PIPDCGs	71	5.2	49	1.04	55	89
	EDCG	67	4.9	47	1.04	56	99
	ADCG	64	4.8	44	1.03	59	93
	EDCGDX	66	4.9	45	1.04	56	94
	ADCGDX	63	4.7	44	1.03	56	94
			Truncated at $50,000				
PA	Age-Sex	75	5.2%	57	1.03	19%	50%
	ACGs	71	5.0	50	1.02	53	89
	ADGs	67	4.7	50	1.02	56	91
	PIPDCGs	76	5.3	56	1.03	54	87
	EDCG	73	5.1	54	1.03	54	91
	ADCG	72	5.0	51	1.02	53	90
	EDCGDX	75	5.2	53	1.03	54	87
	ADCGDX	72	5.0	50	1.02	47	89

TABLE C-17—*Continued*
SUMMARY OF PREDICTIVE ACCURACY FOR THREE LEVELS OF TRUNCATION
GROUP RESULTS, PROSPECTIVE ANALYSIS

Plan Type	Risk Assessment Method	Mean		Standard Deviation	Prediction Ratio	% Error	
		Absolute Error	Absolute % Error	Absolute Error		Within 5 %	Within 10 %
				No Truncation			
PA	Age-Sex	95	6.3%	76	1.02	50%	80%
	ACGs	91	6.1	69	1.01	46	81
	ADGs	88	5.9	70	1.01	53	90
	PIPDCGs	95	6.3	75	1.03	51	77
	EDCG	95	6.3	73	1.02	49	77
	ADCG	92	6.2	70	1.01	51	78
	EDCGDX	94	6.2	72	1.02	52	79
	ADCGDX	92	6.1	70	1.01	49	79
				Truncated at $25,000			
IB	Age-Sex	60	4.3%	39	1.03	57%	96%
	ACGs	59	4.0	38	1.03	61	97
	ADGs	58	4.2	39	1.02	62	97
	PIPDCGs	63	4.5	38	1.03	57	97
	EDCG	58	4.2	35	1.02	63	97
	ADCG	58	4.2	36	1.02	66	97
	EDCGDX	59	4.2	36	1.02	63	97
	ADCGDX	58	4.2	36	1.02	66	94
				Truncated at $50,000			
IB	Age-Sex	82	5.3%	52	1.03	51%	90%
	ACGs	77	5.1	50	1.02	55	89
	ADGs	75	4.9	49	1.02	56	92
	PIPDCGs	79	5.2	50	1.02	53	88
	EDCG	75	4.9	48	1.02	57	93
	ADCG	74	4.9	48	1.02	57	93
	EDCGDX	76	5.0	48	1.02	59	92
	ADCGDX	74	4.9	49	1.02	60	93
				No Truncation			
IB	Age-Sex	112	6.8%	80	1.03	42%	77%
	ACGs	107	6.5	77	1.03	41	79
	ADGs	105	6.4	75	1.03	45	77
	PIPDCGs	111	6.7	77	1.03	40	78
	EDCG	104	6.4	75	1.02	41	80
	ADCG	105	6.4	74	1.02	44	88
	EDCGDX	105	6.4	76	1.02	42	79
	ADCGDX	104	6.4	76	1.02	43	79