

**TRANSACTIONS OF SOCIETY OF ACTUARIES  
1963 REPORTS**

**II: GROUP COMPREHENSIVE MEDICAL  
EXPENSE BENEFITS INSURANCE**

**T**HIS is the first annual report on the study of the morbidity experience of Group Comprehensive Medical Expense insurance.

The report adds another year of experience to the data contained in the Pettengill-Burton paper "Development of Expected Claim Costs for Comprehensive Medical Expense Benefits and Ratios of 1959 and 1960 Actual Experience Thereto," *TSA*, XV, and the data contained in the authors' reply to the discussions of the paper.

Rules similar to those applicable to the group hospital and surgical studies were used to select the groups whose experience would be included in the report. In addition, groups which the contributing companies individually classify as substandard and groups with eligibility limited to only high-salaried employees are excluded from the study.

The tables in this report show the experience for all exposure size groups combined or for nonjumbo groups only. Nonjumbo groups are those with less than 5,000 insured employees. These size groups are shown in order to minimize the effect that jumbo groups might have upon the ratio of actual to tabular claims in any of the groupings shown. This report contains experience for policy years ending in 1959, 1960, 1961, and 1962. The central period of exposure for each policy year is approximately January 1 of that year.

*Ratios of Actual to Tabular Claims*

The results are presented in the form of ratios of actual to tabular claims. Nonmaternity tabular claims are based on the nonmaternity tabular factors presented in the Pettengill-Burton paper, while maternity tabular claims are based on the maternity tabular factors set forth in Table 1 of Mr. Hoffman's discussion of that paper. These tabular factors will be known as the 1960 Tabular. The Committee suggests that those interested in the level and development of the tabular should refer to the paper and the discussions of the paper. Although the 1960 Tabular reflects many factors which influence the cost of Comprehensive Medical Expense Benefits, there are a number of factors for which no adjustment is made. Among these are "all cause" versus "each illness" deductibles, maximum benefit provided, income distribution of the employee group,

restrictions on the period of time during which the deductible must be accumulated, and restrictions in connection with the amount of payment for treatment of mental and nervous conditions. This report contains experience tabulated for cases grouped according to these factors, except that experience grouped according to the period of time during which the deductible must be accumulated is not shown since the results were irregular and did not appear to show any consistent relationship between the various accumulation periods. The Committee wishes to point out that the tabular claim basis was developed using only a limited amount of data under group comprehensive medical expense plans and that the tabulars are still experimental in nature. Because of the large number of variables affecting the claim level under these plans, actual claims often differ considerably from the tabular claims calculated for a group, particularly for groups of small or modest size. In light of the foregoing, caution should be used when interpreting the data contained in this Report.

#### *Contributing Companies*

Eleven companies have contributed to the investigation covered in this report. The results are the composite experience of variations in company practice, in underlying administration and claim procedures as well as variations in experience among groups.

Aetna Life Insurance Company  
Connecticut General Life Insurance Company  
Continental Assurance Company  
Equitable Life Assurance Society  
John Hancock Mutual Life Insurance Company  
Metropolitan Life Insurance Company  
New York Life Insurance Company  
Occidental Life Insurance Company of California  
Provident Life and Accident Insurance Company  
Prudential Insurance Company of America  
The Travelers Insurance Company

A copy of the "Instructions to Contributing Companies," used to prepare contributions for these studies, may be obtained by writing the chairman of the Committee on Experience under Group Health Insurance.

#### *Analysis of Experience*

Table 1 shows combined 1960-62 nonmaternity experience for all size groups. Table 1A contains nonmaternity ratios of actual to tabular by

TABLE 1  
COMBINED 1960-62 POLICY YEARS' EXPERIENCE  
NONMATERNITY EXPERIENCE BY PLAN  
ALL SIZE GROUPS

Plan	Number of Experience Units	Employee Years of Exposure*	Actual Claims	Ratio of Actual to 1960 Tabular
<b>EMPLOYEE</b>				
All Cause plans:				
Without full reimbursement of hospital expenses				
Deductible applied to all expenses.....	887	114,998	5,727,236	110%
Deductible waived for hospital expenses.....	90	32,894	1,247,715	100
Deductible waived for hospital and surgical expenses.....	83	17,902	831,576	98
Total.....	1,060	165,794	7,806,527	107%
With full reimbursement of hospital expenses				
Deductible applied to all expenses.....	360	120,992	5,616,843	102%
Deductible waived for hospital expenses.....	2,057	359,269	17,860,836	104
Deductible waived for hospital and surgical expenses.....	719	103,892	5,378,431	102
Total.....	3,136	584,153	28,856,110	103%
Total, All Cause plans.....	4,196	749,947	36,662,637	104%
Total, Each Illness plans, total disability not required.....	306	43,144	2,167,686	103%†
Total, Each Illness plans, total disability required.....	146	38,737	1,470,308	91%†
<b>DEPENDENT</b>				
All Cause plans:				
Without full reimbursement of hospital expenses				
Deductible applied to all expenses.....	855	74,510	6,491,327	110%
Deductible waived for hospital expenses.....	87	22,221	1,609,667	99
Deductible waived for hospital and surgical expenses.....	91	12,509	1,066,264	98
Total.....	1,033	109,240	9,167,258	106%
With full reimbursement of hospital expenses				
Deductible applied to all expenses.....	352	76,162	6,428,350	103%
Deductible waived for hospital expenses.....	2,025	241,796	21,655,287	103
Deductible waived for hospital and surgical expenses.....	662	72,559	6,715,234	102
Total.....	3,039	390,517	34,798,871	103%
Total, All Cause plans.....	4,072	499,757	43,966,129	104%
Total, Each Illness plans, total disability not required.....	301	28,500	2,455,320	100%†
Total, Each Illness plans, total disability required.....	145	25,969	1,729,028	88%†

\* For dependents, exposure of employees insured with respect to their dependents.

† Tabular nonmaternity claims based on All Cause tabular costs.

year of experience for nonjumbo groups only. The remaining tables are based upon the combined 1960-62 experience under "all cause" plans covering nonjumbo groups.

Table 1 summarizes the nonmaternity experience for broad groups of plans. Since the 1960 Tabular was designed to measure claim costs for "all cause" plans, the experience is shown separately for these plans and for "each illness" plans with a further separation of the latter group for plans requiring total disability. The ratio of actual to tabular claims for plans without full reimbursement of hospital expenses and no waiver of deductible for any type of expense is higher than for any other "all cause"

TABLE 1A  
NONMATERNITY RATIO OF ACTUAL TO TABULAR CLAIMS BY YEAR AND PLAN  
NONJUMBO GROUPS

PLAN	RATIO OF ACTUAL TO 1960 TABULAR			
	1959	1960	1961	1962
EMPLOYEE				
All Cause plans:				
Without full reimbursement of hospital expenses.....	103% 98	107% 102	108% 105	109% 107
With full reimbursement of hospital expenses.....				
Total, All Cause plans.....	99%	102%	106%	108%
Total, Each Illness plans, total disability not required.....	95%*	110%*	98%*	101%*
Total, Each Illness plans, total disability required.....	64%*	75%*	81%*	106%*
DEPENDENT				
All Cause plans:				
Without full reimbursement of hospital expenses.....	99% 100	102% 100	107% 106	111% 108
With full reimbursement of hospital expenses.....				
Total, All Cause plans.....	100%	100%	106%	109%
Total, Each Illness plans, total disability not required.....	86%*	94%*	96%*	109%*
Total, Each Illness plans, total disability required.....	70%*	82%*	83%*	100%*

\* Tabular nonmaternity claims based on All Cause tabular costs.

plan. This variation, which is contrary to expectations, may be the result of the tendency on the part of employers with poor experience to reduce benefits by eliminating any 100 per cent reimbursement feature and any waiver of the deductible for hospital or surgical expenses.

Table 1 also measures the difference in the level of cost between "each illness" plans and "all cause" plans. The results appear to indicate that there may not be a substantial difference between the cost of an "all cause" plan and an "each illness" plan unless the latter includes a total disability requirement.

Table 1A summarizes the ratios of actual to tabular for years 1959 through 1962 and indicates the trend of experience. Both employee and dependent experience show an increase in claim costs by year of experience. It should be noted that the amount of exposure is increasing rapidly with each year of study and that this may have a significant effect on this trend table. In particular, it may account for the fact that the indicated amount of increase is smaller than that which would normally be expected.

Table 2 contains the nonmaternity and maternity experience by average age factor subdivided into two broad classes of female percentage. The average age factor is a measure of the age distribution of the employees and increases as the ages of the employees increase. The ratios of actual to tabular claims for nonmaternity experience are reasonably consistent and appear to indicate that the 1960 Tabular age scale satisfactorily represents the pattern of claim costs by age. The employee data is fairly constant according to female per cent, while the dependent data indicates a consistently lower ratio of actual to tabular for groups with 31 or more per cent female employees. These lower ratios may result from the fact that the tabular is not adjusted to reflect the smaller average proportion of dependent spouses and the smaller average number of children generally characteristic of the dependent units in such groups.

The ratios of actual to tabular claims for maternity experience are based upon a tabular which reflects the combined age distribution of all employees, without regard to sex or marital status. The results appear to indicate that the 1960 Tabular maternity age scale satisfactorily represents the pattern of claim costs by age for groups with less than 31 per cent female employees. Ratios of actual to tabular for groups with thirty-one or more per cent female employees are irregular but generally lower than for groups with less than 31 per cent female employees. These lower ratios may be a reflection of the differing composition of the dependent units and the use of a combined age distribution of all employees.

Table 3 contains nonmaternity and maternity experience by female

TABLE 2  
COMBINED 1960-62 POLICY YEARS' EXPERIENCE  
NONMATERNITY AND MATERNITY EXPERIENCE BY AGE AND FEMALE PER CENT  
NONJUMBO GROUPS, ALL CAUSE PLANS ONLY

AVERAGE AGE FACTOR AND FEMALE PER CENT	NONMATERNITY EXPERIENCE				MATERNITY EXPERIENCE	
	Number of Ex- perience Units	Employee Years of Exposure	Actual Claims	Ratio of Actual to 1960 Tabular	Actual Claims	Ratio of Actual to 1960 Tabular
<b>EMPLOYEE</b>						
60-79						
<31%.....	193	25,706	852,397	96%	48,235	85%
31% or more...	106	14,037	515,266	94	67,400	103
Total.....	299	39,743	1,367,663	95%	115,635	94%
80-89						
<31%.....	450	51,027	2,189,749	106%	57,664	88%
31% or more...	165	20,335	991,100	113	61,428	87
Total.....	615	71,362	3,180,849	108%	119,092	88%
90-99						
<31%.....	599	100,758	4,276,811	101%	130,935	108%
31% or more...	303	42,219	2,202,536	110	88,226	66
Total.....	902	142,977	6,479,347	104%	219,161	86%
100-109						
<31%.....	606	108,583	5,255,622	105%	114,909	106%
31% or more...	254	40,306	2,196,586	101	125,430	89
Total.....	860	148,889	7,452,208	104%	240,339	97%
110-119						
<31%.....	409	75,903	4,202,344	111%	56,492	106%
31% or more...	218	32,395	1,900,395	105	97,846	97
Total.....	627	108,298	6,102,739	109%	154,338	100%
120 or more						
<31%.....	572	66,691	4,259,446	107%	27,342	86%*
31% or more...	308	31,346	2,088,729	106	31,527	76*
Total.....	880	98,037	6,348,175	107%	58,869	80%
All Ages						
<31%.....	2,829	428,668	21,036,369	106%	435,577	100%
31% or more...	1,354	180,638	9,894,612	106	471,857	85
Total.....	4,183	609,306	30,930,981	106%	907,434	92%

\* Less than \$50,000 of tabular claims.

TABLE 2—Continued

AVERAGE AGE FACTOR AND FEMALE PER CENT	NONMATERNITY EXPERIENCE				MATERNITY EXPERIENCE	
	Number of Ex- perience Units	Employee Years of Exposure*	Actual Claims	Ratio of Actual to 1960 Tabular	Actual Claims	Ratio of Actual to 1960 Tabular
DEPENDENT						
60-79.....						
<31%.....	190	17,530	1,418,362	110%	465,162	112%
31% or more...	104	7,830	620,633	101	162,657	102
Total.....	294	25,360	2,044,995	107%	627,819	109%
80-89.....						
<31%.....	442	37,096	3,617,569	118%	642,475	99%
31% or more...	156	9,787	843,096	104	95,201	67
Total.....	598	46,883	4,460,665	115%	737,676	93%
90-99.....						
<31%.....	593	74,200	6,596,398	111%	1,261,690	99%
31% or more...	295	22,230	1,904,693	95	265,342	89
Total.....	888	96,430	8,501,091	107%	1,527,032	97%
100-109.....						
<31%.....	595	82,399	7,517,209	109%	1,101,938	98%
31% or more...	249	19,722	1,842,237	95	144,280	68
Total.....	844	102,121	9,359,446	106%	1,246,218	93%
110-119.....						
<31%.....	399	57,003	5,475,811	110%	575,532	92%
31% or more...	202	17,412	1,458,662	89	145,237	75
Total.....	601	74,415	6,934,473	105%	720,769	88%
120 or more.....						
<31%.....	552	46,380	4,264,731	96%	409,661	93%
31% or more...	283	14,839	1,424,472	95	87,641	71
Total.....	835	61,219	5,689,203	96%	497,302	88%
All Ages.....						
<31%.....	2,771	314,608	28,890,080	109%	4,456,458	98%
31% or more...	1,289	91,820	8,099,793	95	900,358	80
Total.....	4,060	406,428	36,989,873	105%	5,356,816	95%

\* For dependents, exposure of employees insured with respect to their dependents.

per cent without regard to the age factor. The ratios of actual to tabular claims are reasonably consistent, with due regard for the points discussed in connection with Table 2.

Table 4 shows the nonmaternity experience by percentage of employees earning \$10,000 or more annually for that portion of the experience for which contributing companies were able to submit an income

TABLE 3  
COMBINED 1960-62 POLICY YEARS' EXPERIENCE  
NONMATERNITY AND MATERNITY EXPERIENCE BY FEMALE PER CENT  
NONJUMBO GROUPS, ALL CAUSE PLANS ONLY

FEMALE PER CENT	NONMATERNITY EXPERIENCE				MATERNITY EXPERIENCE	
	Number of Ex- perience Units	Employee Years of Exposure*	Actual Claims	Ratio of Actual to 1960 Tabular	Actual Claims	Ratio of Actual to 1960 Tabular
<b>EMPLOYEE</b>						
<11%.....	1,180	171,992	8,380,209	102%	84,738	151%
11-21.....	986	158,623	7,656,282	107	176,409	92
21-31.....	663	98,053	4,999,878	110	174,430	92
31-41.....	379	48,820	2,596,941	107	107,252	97
41-51.....	354	48,297	2,691,354	109	129,354	94
51-61.....	254	34,538	1,882,677	107	84,073	73
61-71.....	177	24,040	1,271,957	100	97,309	101
71-81.....	108	10,749	646,476	105	20,477	56†
81-91.....	55	9,461	519,639	95	27,038	70†
91-100.....	27	4,733	285,568	103	6,354	35†
Total.....	4,183	609,306	30,930,981	106%	907,434	92%
<b>DEPENDENT</b>						
<11%.....	1,155	131,845	12,025,377	106%	1,656,054	96%
11-21.....	965	116,845	10,834,632	111	1,755,320	99
21-31.....	651	65,918	6,030,071	110	1,045,084	102
31-41.....	361	29,323	2,568,137	97	347,250	90
41-51.....	338	24,577	2,284,171	100	235,681	81
51-61.....	246	17,028	1,426,369	90	176,053	82
61-71.....	165	9,485	833,083	92	72,022	65
71-81.....	101	4,141	351,412	90	27,194	46
81-91.....	54	4,628	389,799	88	26,484	56†
91-100.....	24	2,638	246,822	99	15,674	80†
Total.....	4,060	406,428	36,989,873	105%	5,356,816	95%

\* For dependents, exposure of employees insured with respect to their dependents.

† Less than \$50,000 of tabular claims.

distribution of covered employees. Tabular claims are not adjusted to reflect the increase in claim cost expected on account of high income. Therefore, the ratios of actual to tabular claims shown for the indicated salary groupings may be indicative of the effect of income on claim costs. The actual income distribution of covered employees for each income category is shown in Table 11 and may be used to estimate the effect of the scale of income adjustment factors on the ratios of actual to tabular claims shown in this table.

Table 5 presents the combined employee and dependent nonmaternity experience by metropolitan area, state, and region. The 1960 Tabular area factor is also shown in the table in order to facilitate comparisons with

TABLE 4  
COMBINED 1960-62 POLICY YEARS' EXPERIENCE  
NONMATERNITY EXPERIENCE BY PER CENT OF EMPLOYEES  
EARNING \$10,000 OR MORE ANNUALLY  
NONJUMBO GROUPS, ALL CAUSE PLANS ONLY

Per Cent Earning \$10,000 or More Annually	Number of Experience Units	Employee Years of Exposure*	Actual Claims	Ratio of Actual to 1960 Tabular†
<b>EMPLOYEE</b>				
<11%.....	2,797	415,862	20,385,171	103%
11-21.....	804	124,146	6,660,551	109
21-31.....	269	29,363	1,653,504	112
31-41.....	112	10,608	689,929	131
41-100.....	67	5,174	322,074	129
Unknown.....	134	24,153	1,219,752	110
Total.....	4,183	609,306	30,930,981	106%
<b>DEPENDENT</b>				
<11%.....	2,717	273,606	24,530,214	104%
11-21.....	778	86,037	8,039,806	106
21-31.....	264	21,390	2,100,462	110
31-41.....	107	7,372	735,017	114
41-100.....	64	3,621	427,997	136
Unknown.....	130	14,402	1,156,377	102
Total.....	4,060	406,428	36,989,873	105%

\* For dependents, exposure of employees insured with respect to their dependents.

† Tabular claims do not vary by income distribution.

TABLE 5

**EMPLOYEE AND DEPENDENT 1960-62 POLICY YEARS' EXPERIENCE  
NONMATERNITY EXPERIENCE BY REGION, STATE, AND METROPOLITAN AREA  
NONJUMBO GROUPS, ALL-CAUSE PLANS ONLY**

Region,* State,† or Metropolitan Area	Number of Ex- perience Units‡	Employee Years of Exposure‡	Actual Claims	Ratio of Actual to 1960 Tabular	1960 Tabular Area Factor
Region.....	8	3,778	380,039	108%	100%
Connecticut.....	8	1,451	166,731	110	100
Bridgeport.....	9	787	82,303	104	100
New Haven.....	9	383	53,548	138§	100
Total.....	26	2,621	302,582	112%	.....
Maine.....	9	1,432	182,529	110%	92%
Massachusetts.....	20	4,389	453,190	111	100
Boston.....	42	3,724	392,842	95	108
Springfield-Holyoke.....	2	58	5,033	111§	100
Total.....	61	8,171	851,065	103%	.....
New Hampshire.....	4	425	38,630	82%§	92%
Rhode Island.....	0	0	0	108	.....
Providence.....	3	234	34,239	101§	108
Total.....	3	234	34,239	101%§	.....
Vermont.....	7	969	114,382	126%	92%
Region total.....	121	17,630	1,903,466	107%	.....
Region.....	12	3,021	280,350	79%	100%
District of Columbia.....	11	7,156	1,009,005	95	100
New Jersey.....	22	5,063	476,511	105	100
New York.....	51	5,166	514,644	106	92
Albany-Schenectady-Troy.....	14	1,153	115,084	92	100
Buffalo.....	15	1,038	125,477	119	100
New York-Northeastern N.J.....	127	14,444	1,442,704	105	108
Rochester.....	3	446	52,013	104	100
Syracuse.....	10	2,716	330,954	108	100
Total.....	220	24,963	2,580,876	105%	.....
Pennsylvania.....	43	8,102	688,122	91%	92%
Allentown-Bethlehem- Easton.....	2	172	23,452	107§	92
Philadelphia.....	29	1,924	171,609	97	100
Pittsburgh.....	10	1,026	115,266	105	100
Wilkes-Barre-Hazleton.....	1	10	1,919	193§	100
Total.....	85	11,234	1,000,368	94%	.....
Region total.....	350	51,437	5,347,110	99%	.....

\* Excludes groups coded for a specific state or metropolitan area.

† Excludes groups coded for a specific metropolitan area.

‡ Employee only.

§ Less than \$50,000 of tabular claims.

TABLE 5—Continued

Region,* State,† or Metropolitan Area	Number of Ex- perience Units‡	Employee Years of Exposure‡	Actual Claims	Ratio of Actual to 1960 Tabular	1960 Tabular Area Factor
Region.....	32	4,528	452,396	99%	100%
Illinois.....	128	14,385	1,612,168	109	92
Chicago.....	228	28,307	3,102,158	108	100
Total.....	356	42,692	4,714,326	108%	.....
Indiana.....	63	6,213	565,421	105%	84%
Indianapolis.....	28	7,709	800,178	111	84
Total.....	91	13,922	1,365,599	108%	.....
Kentucky.....	26	1,944	189,225	103%	84%
Louisville.....	13	1,408	188,381	133	92
Total.....	39	3,352	377,606	116%	.....
Michigan.....	60	7,377	839,385	107%	100%
Detroit.....	41	4,061	632,305	117	116
Total.....	101	11,438	1,471,690	111%	.....
Ohio.....	34	4,743	493,792	113%	92%
Akron.....	2	277	24,888	84\$	108
Cincinnati.....	6	294	25,112	83\$	100
Cleveland.....	7	522	80,560	134	108
Columbus.....	21	6,313	580,066	93	100
Dayton.....	5	719	64,571	93	100
Toledo.....	3	172	31,368	180\$	100
Youngstown.....	2	132	16,138	148\$	100
Total.....	80	13,172	1,316,495	103%	.....
Wisconsin.....	41	3,268	341,470	95%	92%
Milwaukee.....	49	5,554	584,403	101	100
Total.....	90	8,822	925,873	99%	.....
West Virginia.....	27	2,054	219,821	116%	84%
WHEELING (W. Va.)-Steu- benville (Ohio).....	3	90	8,323	87\$	92
Total.....	30	2,144	228,144	114%	.....
Region total.....	819	100,070	10,852,129	107%	.....
Region.....	19	3,686	388,616	108%	100%
Iowa.....	39	5,840	632,000	101	100
Kansas.....	31	2,813	314,370	139	92
Minnesota.....	35	12,564	1,380,358	122	92
Minneapolis-St. Paul.....	29	1,841	246,531	120	108
Total.....	64	14,405	1,626,889	122%	.....
Missouri.....	19	1,455	140,822	100%	92%
Kansas City.....	17	961	92,117	113	100
St. Louis.....	62	4,752	500,099	102	100
Total.....	98	7,168	733,038	103%	.....

\* Excludes groups coded for a specific state or metropolitan area.

† Excludes groups coded for a specific metropolitan area.

‡ Employee only.

§ Less than \$50,000 of tabular claims.

TABLE 5—Continued

Region,* State,† or Metropolitan Area	Number of Ex- perience Units‡	Employee Years of Exposure‡	Actual Claims	Ratio of Actual to 1960 Tabular	1960 Tabular Area Factor
Region—Continued					
Nebraska.....	8	445	42,638	109%\$	92%
Omaha.....	2	56	1,572	41§	100
Total.....	10	501	44,210	103%\$	.....
North Dakota.....	9	921	119,638	116%	92%
South Dakota.....	29	1,840	193,515	104	92
Region total.....	299	37,174	4,052,276	113%	.....
Region.....	3	273	30,749	93%\$	100%
Colorado.....	7	454	62,456	113	100
Denver.....	30	1,730	200,918	118	108
Total.....	37	2,184	263,374	117%	.....
Idaho.....	39	1,528	185,524	102%	100%
Montana.....	32	1,151	133,400	98	100
Nevada.....	23	1,440	179,218	124	108
Utah.....	53	4,360	510,734	114	92
Wyoming.....	24	1,124	148,400	124	92
Region total.....	211	12,060	1,451,399	113%	.....
Region.....	20	1,944	204,568	92%	124%
California.....	266	40,140	4,928,636	102	132
Los Angeles.....	581	51,732	6,545,733	107	140
San Diego.....	38	3,786	487,287	115	132
San Francisco-Oakland.....	119	10,852	1,333,975	102	140
Total.....	1,004	106,510	13,295,631	105%	.....
Oregon.....	30	3,264	392,440	95%	108%
Portland.....	21	1,242	134,509	95	116
Total.....	51	4,506	526,949	95%	.....
Washington.....	28	6,529	720,881	102%	108%
Seattle.....	27	2,891	318,467	103	116
Total.....	55	9,420	1,039,348	103%	.....
Region total.....	1,130	122,380	15,066,496	104%	.....
Region.....	28	1,788	156,629	91%	100%
Arizona.....	84	3,759	519,208	110	116
Arkansas.....	40	4,410	421,658	106	84
Louisiana.....	54	11,654	1,183,247	92	100
New Orleans.....	14	636	89,121	121	108
Total.....	68	12,290	1,272,368	94%	.....
New Mexico.....	33	1,982	238,547	106%	100%
Oklahoma.....	30	1,797	210,902	114	92

\* Excludes groups coded for a specific state or metropolitan area.

† Excludes groups coded for a specific metropolitan area.

‡ Employee only.

§ Less than \$50,000 of tabular claims.

TABLE 5—Continued

Region,* State,† or Metropolitan Area	Number of Ex- perience Units‡	Employee Years of Exposure‡	Actual Claims	Ratio of Actual to 1960 Tabular	1960 Tabular Area Factor
Region—Continued					
Texas.....	105	15,759	1,865,178	109%	108%
Dallas.....	23	2,390	328,311	107	124
Forth Worth.....	13	2,202	198,174	105	124
Houston.....	65	12,239	1,682,144	104	140
San Antonio.....	13	634	65,936	99	108
Total.....	219	33,224	4,139,743	107%	.....
Region total.....	502	59,250	6,959,055	104%	.....
Region.....	20	8,706	1,020,817	104%	92%
Alabama.....	29	3,348	356,420	122	92
Birmingham.....	19	2,601	270,840	102	100
Total.....	48	5,949	627,260	112%	.....
Florida.....	78	9,787	950,600	104%	92%
Miami.....	39	3,416	456,780	116	108
Tampa.....	23	2,180	252,120	113	108
Total.....	140	15,383	1,659,500	109%	.....
Georgia.....	40	11,467	1,228,782	103%	92%
Atlanta.....	37	3,335	255,563	84	100
Total.....	77	14,802	1,484,345	99%	.....
Maryland.....	17	2,465	256,445	119%	84%
Baltimore.....	31	9,686	1,148,648	84	92
Total.....	48	12,151	1,405,093	89%	.....
Mississippi.....	8	662	77,599	120%	92%
North Carolina.....	32	4,650	448,421	117	84
South Carolina.....	24	2,031	210,776	108	76
Tennessee.....	29	2,747	276,059	109	92
Knoxville.....	1	90	14,999	134§	100
Memphis.....	23	4,061	482,088	114	100
Total.....	53	6,898	773,146	113%	.....
Virginia.....	36	4,210	297,003	106%	84%
Norfolk-Portsmouth.....	10	421	35,892	93§	92
Total.....	46	4,631	332,895	104%	.....
Region total.....	496	75,863	8,039,852	103%	.....
Hawaii.....	11	1,151	53,571	74%	100%
Alaska.....	7	529	84,714	110	132
Total, all locations above.....	3,946	477,544	53,810,068	105%	.....
All other (see Note).....	237	131,762	14,110,786	108%	100%
Total, all locations.....	4,183	609,306	67,920,854	105%	.....

\* Excludes groups coded for a specific state or metropolitan area.

† Excludes groups coded for a specific metropolitan area.

‡ Employee only.

§ Less than \$50,000 of tabular claims.

Note: Less than 75 per cent of employees in one region, state, or metropolitan area.

TABLE 6  
 EMPLOYEE AND DEPENDENT 1960-62 POLICY YEARS' EXPERIENCE  
 NONMATERNITY EXPERIENCE BY STATE AND METROPOLITAN AREA  
 NONJUMBO GROUPS, ALL CAUSE PLANS ONLY

METROPOLITAN AREA	NUMBER OF EXPERIENCE UNITS*	EMPLOYEE YEARS OF EXPOSURE*	ACTUAL CLAIMS	RATIO OF ACTUAL TO 1960 TABULAR	1960 TABULAR AREA FACTOR	RATIO TO LOS ANGELES		
						1960 Tabular Area Factor	1960-62 Actual Experience	1959 Area Study†
Baltimore, Md. ....	31	9,686	1,148,648	84%	92%	66%	52%	59.8%
	228	28,307	3,102,158	108	100	71	72	68.7
	21	6,313	580,066	93	100	71	62	73.7
	41	4,061	632,305	117	116	83	91	88.6
	65	12,239	1,682,144	104	140	100	97	91.5
	28	7,709	800,178	111	84	60	62	55.1
	581	51,732	6,545,733	107	140	100	100	100.0
	49	5,554	584,403	101	100	71	67	66.2
	127	14,444	1,442,704	105	108	77	76	77.2
	119	10,852	1,333,975	102	140	100	95	93.6
Chicago, Ill. ....	62	4,752	500,099	102	100	71	68	48.6
	Total.....	1,352	155,649	104%	.....	.....	.....	.....

\* Employee only.

† *TSA*, XIII, 573-74.

TABLE 6—Continued

STATE‡	NUMBER OF EXPERIENCE UNITS*	EMPLOYEE YEARS OF EXPOSURE*	ACTUAL CLAIMS	RATIO OF ACTUAL TO 1960 TABULAR	1960 TABULAR AREA FACTOR	RATIO TO LOS ANGELES		
						1960 Tabular Area Factor	1960-62 Actual Experience	1959 Area Study†
Arizona.....	84	3,759	519,208	110%	116%	83%	85%	98.9%
California.....	266	40,140	4,928,636	102	132	94	90	84.8
Dist. of Columbia.....	11	7,156	1,009,005	95	100	71	63	71.9
Florida.....	78	9,787	950,600	104	92	66	64	122.1
Georgia.....	40	11,467	1,228,782	103	92	66	64	.....
Illinois.....	128	14,385	1,612,168	109	92	66	67	66.8
Indiana.....	63	6,213	565,421	105	84	60	59	50.5
Iowa.....	39	5,840	632,000	101	100	71	67	73.6
Louisiana.....	54	11,654	1,183,247	92	100	71	61	74.8
Michigan.....	60	7,377	839,385	107	100	71	71	75.4
Minnesota.....	35	12,564	1,380,358	122	92	66	75	63.8
New York.....	51	5,166	514,644	106	92	66	65	70.0
Pennsylvania.....	43	8,102	688,122	91	92	66	56	67.4
Texas.....	105	15,759	1,865,178	109	108	77	78	57.2
Utah.....	53	4,360	510,734	114	92	66	70	56.2
Washington.....	28	6,529	720,881	102	108	77	73	.....
Total.....	1,138	170,258	19,148,369	104%	.....	.....	.....	.....

\* Employee only.

† *TSA*, XIII, 573-74.

‡ Excludes groups coded for a specific metropolitan area.

actual experience. In assigning metropolitan area codes to the data submitted, contributing companies used state and region codes in those instances where it was not known whether 75 per cent of the covered employees were in a given metropolitan area. Hence, the experience shown for states and regions may include a few cases where a substantial proportion of the employees are actually located in one of the metropolitan areas shown in the table. In general, the ratios of actual to tabular claims appear to indicate that the 1960 Tabular area factors adopted are reasonably satisfactory, at least for those metropolitan areas and states with a substantial volume of experience.

TABLE 7  
COMBINED 1960-62 POLICY YEARS' EXPERIENCE  
NONMATERNITY EXPERIENCE BY MENTAL  
AND NERVOUS RESTRICTION  
NONJUMBO GROUPS, ALL CAUSE PLANS ONLY

Code*	Number of Experience Units	Employee Years of Exposure†	Actual Claims	Ratio of Actual to 1960 Tabular‡
EMPLOYEE				
1.....	1,648	307,548	15,644,394	109%
2.....	864	176,831	8,983,678	105
3.....	523	39,525	1,928,152	100
4.....	1,123	82,510	4,241,431	100
5.....	25	2,892	133,326	99
Total.....	4,183	609,306	30,930,981	106%
DEPENDENT				
1.....	1,640	212,765	19,426,308	108%
2.....	793	110,607	9,789,733	103
3.....	515	24,351	2,203,293	95
4.....	1,087	56,927	5,412,377	105
5.....	25	1,778	158,162	104
Total.....	4,060	406,428	36,989,873	105%

\* Mental and Nervous Restriction Code:

1. Covered for full plan benefits whether or not confined in a hospital.
2. Covered for full plan benefits while confined in a hospital and reduced or limited benefits while not confined in a hospital.
3. Covered for full plan benefits while confined in a hospital and no benefits while not confined in a hospital.
4. Covered for reduced or limited benefits whether or not confined in a hospital.
5. Not covered.

† For dependents, exposure of employees insured with respect to their dependents.

‡ Tabular claims do not vary by mental and nervous restrictions.

Table 6 summarizes the experience in Table 5 for the 11 metropolitan areas and 16 states for which the largest amount of experience data was submitted. It provides a comparison of the relative level of experience with the previous intercompany area study results published in *TSA*, XIII. The ratio to Los Angeles of 1960-62 actual experience was obtained by first determining for each area the 1960 Tabular area factor which would have produced the same ratio of actual to tabular as observed in Los Angeles and then reducing to a base 100 by dividing by the 1960 Tabular area factor for Los Angeles.

Table 7 shows the nonmaternity experience for plans classified according to the type of restriction applicable to treatment of mental and nervous disorders. The 1960 Tabular was not adjusted to reflect these restrictions. The ratios of actual to tabular claims shown in this table are,

TABLE 8  
COMBINED 1960-62 POLICY YEARS' EXPERIENCE  
NONMATERNITY EXPERIENCE BY MAXIMUM BENEFIT  
NONJUMBO GROUPS, ALL CAUSE PLANS ONLY

Maximum Benefit Lifetime or per Cause	Number of Experience Units	Employee Years of Exposure*	Actual Claims	Ratio of Actual to 1960 Tabular†
<b>EMPLOYEE</b>				
\$ 2,500-4,999.....	14	3,271	138,113	99%
5,000.....	2,109	179,012	8,810,380	102
5,001-9,999.....	115	19,387	919,613	106
10,000.....	1,899	385,671	20,004,766	107
10,001-19,999.....	36	14,282	661,213	109
20,000 or more.....	10	7,683	396,896	108
Total.....	4,183	609,306	30,930,981	106%
<b>DEPENDENT</b>				
\$ 2,500-4,999.....	11	1,978	188,353	127%
5,000.....	2,033	117,518	10,368,077	101
5,001-9,999.....	113	13,884	1,171,930	105
10,000.....	1,855	256,769	23,930,712	107
10,001-19,999.....	38	10,691	859,172	108
20,000 or more.....	10	5,588	471,629	99
Total.....	4,060	406,428	36,989,873	105%

\* For dependents, exposure of employees insured with respect to their dependents.

† Tabular claims do not vary by maximum benefit.

TABLE 9  
 COMBINED 1960-62 POLICY YEARS' EXPERIENCE  
 NONMATERNITY EXPERIENCE BY COINSURANCE PERCENTAGE  
 NONJUMBO GROUPS, ALL CAUSE PLANS ONLY

Coinsurance Percentage	Number of Experience Units	Employee Years of Exposure*	Actual Claims	Ratio of Actual to 1960 Tabular
<b>EMPLOYEE</b>				
75/25%				
Without full reimbursement of hospital expenses.....	75	19,022	951,621	109%
With full reimbursement of hospital expenses.....	225	54,179	2,539,302	100
Total.....	300	73,201	3,490,923	102%
80/20%				
Without full reimbursement of hospital expenses.....	982	124,278	6,124,241	108%
With full reimbursement of hospital expenses.....	2,901	411,827	21,315,817	105
Total.....	3,883	536,105	27,440,058	106%
Total.....	4,183	609,306	30,930,981	106%
<b>DEPENDENT</b>				
75/25%				
Without full reimbursement of hospital expenses.....	71	14,332	1,314,454	111%
With full reimbursement of hospital expenses.....	216	38,357	3,073,889	98
Total.....	287	52,689	4,388,343	101%
80/20%				
Without full reimbursement of hospital expenses.....	959	79,760	6,867,086	107%
With full reimbursement of hospital expenses.....	2,814	273,979	25,734,444	105
Total.....	3,773	353,739	32,601,530	106%
Total.....	4,060	406,428	36,989,873	105%

\* For dependents, exposure of employees insured with respect to their dependents.

as would be expected, generally less for plans including a restriction on the treatment of mental and nervous disorders.

Table 8 shows the nonmaternity experience by amount of maximum benefit provided by the plan, a factor for which the 1960 Tabular was not adjusted. The ratios of actual to tabular claims indicate that plans with a \$10,000 maximum benefit have a significantly higher level of claim cost than plans with a \$5,000 maximum benefit. The amount of this excess cost is larger than would be anticipated on the basis of expenses incurred beyond \$5,000 and, therefore, seems to indicate that high maximum plans result in greater utilization of benefits.

Table 9 shows the nonmaternity experience according to the coinsurance provision of the plan. Even though the tabulars were adjusted for coinsurance, the ratios of actual to tabular for 80 per cent coinsurance plans are greater than those for 75 per cent coinsurance plans.

Tables 10, 11, 12, 13, and 14 show distributions of the combined 1960-62 exposure by age, income, and dependent unit composition for "all cause" nonjumbo plans. These distributions were prepared to facilitate a comparison of the exposure characteristics with the claim experience shown in Tables 1-9. The exposure tables relate to nonmaternity experience under all plans whether or not they include maternity benefits; separate exposure for plans with maternity benefits was not calculated. Table 10 shows the percentage distribution of covered employees by age for groupings of the average age factor and female percentage. Table 11 shows the distribution of covered employees by income for those cases having specified percentages of their employees earning \$10,000 or more annually, while Table 12 shows income distributions for groupings of the average age factor. Table 13 shows the composition of dependent units by average age factor, and Table 14 shows this information by female percentage. In Tables 11-14, only a portion of the total exposure was distributed by income or dependent unit composition, since this information was not available for many groups.

TABLE 10

COMBINED 1960-62 POLICY YEARS' EXPERIENCE  
 EMPLOYEE AGE DISTRIBUTION BY AVERAGE AGE FACTOR AND FEMALE PER CENT  
 NONJUMBO GROUPS, ALL CAUSE PLANS ONLY

226

AVERAGE AGE FACTOR AND FEMALE PER CENT	NUMBER OF EXPERIENCE UNITS	EMPLOYEE YEARS OF EXPOSURE	PERCENTAGE DISTRIBUTION BY AGE							Total	
			< 40	40-44	45-49	50-54	55-59	60-64	≥ 65		
60-79	<31%.....	193	25,706	82.5%	9.4%	4.9%	2.0%	0.9%	0.2%	0.1%	100%
		106	14,037	84.3	6.9	4.5	2.4	1.3	0.5	0.1	100
	Total.....	299	39,743	83.2%	8.5%	4.7%	2.2%	1.0%	0.3%	0.1%	100%
80-89	<31%.....	450	51,027	69.4%	12.7%	8.4%	5.1%	2.8%	1.1%	0.5%	100%
		165	20,335	71.5	11.2	8.1	4.6	2.7	1.3	0.6	100
	Total.....	615	71,362	70.1%	12.3%	8.3%	4.9%	2.8%	1.1%	0.5%	100%
90-99	<31%.....	599	100,758	60.1%	13.5%	10.5%	7.7%	4.7%	2.6%	0.9%	100%
		303	42,219	62.0	13.0	9.9	7.0	4.3	2.7	1.1	100
	Total.....	902	142,977	60.8%	13.3%	10.3%	7.5%	4.5%	2.6%	1.0%	100%

TABLE 10—Continued

AVERAGE AGE FACTOR AND FEMALE PER CENT	NUMBER OF EXPERIENCE UNITS	EMPLOYEE YEARS OF EXPOSURE	PERCENTAGE DISTRIBUTION BY AGE							Total	
			< 40	40-44	45-49	50-54	55-59	60-64	≥ 65		
227	100-109 ≤ 31%..... 31% or more.	606	108,583	52.6%	13.5%	12.0%	9.7%	6.6%	4.0%	1.6%	100%
		254	40,306	53.1	13.2	11.6	9.3	6.3	3.9	2.6	100
		Total.....	860	148,889	52.8%	13.4%	11.9%	9.6%	6.5%	4.0%	1.8%
	110-119 ≤ 31%..... 31% or more.	409	75,903	45.2%	13.8%	13.0%	11.0%	8.5%	5.8%	2.7%	100%
		218	32,395	45.4	13.3	12.7	11.7	8.7	5.1	3.1	100
		Total.....	627	108,298	45.4%	13.6%	12.9%	11.2%	8.5%	5.6%	2.8%
	120 or more ≤ 31%..... 31% or more.	572	66,691	32.7%	13.0%	12.4%	12.8%	11.7%	9.3%	8.1%	100%
		308	31,346	35.8	12.0	12.7	13.1	11.2	8.6	6.6	100
		Total.....	880	98,037	33.7%	12.7%	12.5%	12.9%	11.5%	9.1%	7.6%
	All Groups ≤ 31%..... 31% or more.	2,829	428,668	53.9%	13.1%	11.0%	8.9%	6.5%	4.2%	2.4%	100%
		1,354	180,638	55.3	12.3	10.6	8.8	6.3	4.1	2.6	100
	Total.....	4,183	609,306	54.2%	12.9%	10.9%	8.9%	6.4%	4.2%	2.5%	100%

TABLE 11  
 COMBINED 1960-62 POLICY YEARS' EXPERIENCE  
 EMPLOYEE INCOME DISTRIBUTION BY PER CENT OF EMPLOYEES  
 EARNING \$10,000 OR MORE ANNUALLY  
 NONJUMBO GROUPS, ALL CAUSE PLANS ONLY

PER CENT EARNING \$10,000 OR MORE ANNUALLY	NUM- BER OF EXPE- RIENCE UNITS	EMPLOYEE YEARS OF EXPO- SURE	PERCENTAGE DISTRIBUTION BY ANNUAL EARNINGS							Total
			Less than \$5,000	\$5,000 to 7,500	\$7,500 to 10,000	\$10,000 to 15,000	\$15,000 to 20,000	\$20,000 or more		
<11%....	2,797	415,862	57.5%	27.9%	10.1%	2.9%	0.9%	0.7%	100%	
11-21....	804	124,146	34.2	34.2	17.2	9.5	2.8	2.1	100	
21-31....	269	29,363	22.7	34.0	19.2	15.6	4.8	3.7	100	
31-41....	112	10,608	18.8	32.3	14.7	20.3	8.0	5.9	100	
41 or more	67	5,174	12.0	21.4	14.1	34.8	8.8	8.9	100	
Total....	4,049	585,153	49.7%	29.5%	12.3%	5.5%	1.7%	1.3%	100%	
	134	24,153								Distribution not available

TABLE 12  
 COMBINED 1960-62 POLICY YEARS' EXPERIENCE  
 EMPLOYEE INCOME DISTRIBUTION BY AVERAGE AGE FACTOR  
 NONJUMBO GROUPS, ALL CAUSE PLANS ONLY

AVERAGE AGE FACTOR	NUM- BER OF EXPE- RIENCE UNITS	EM- PLOYEE YEARS OF EXPO- SURE	PERCENTAGE DISTRIBUTION BY ANNUAL EARNINGS							Total
			Less than \$5,000	\$5,000 to 7,500	\$7,500 to 10,000	\$10,000 to 15,000	\$15,000 to 20,000	\$20,000 or more		
60-79....	296	36,693	54.3%	30.5%	8.1%	4.4%	1.8%	0.9%	100%	
80-89....	602	68,321	50.9	27.7	13.3	5.5	1.5	1.1	100	
90-99....	876	140,007	50.8	29.0	11.8	5.5	1.6	1.3	100	
100-109....	826	144,426	49.7	28.3	13.7	5.3	1.6	1.4	100	
110-119....	600	104,865	48.2	32.5	11.5	5.1	1.6	1.1	100	
120 or more	849	90,841	47.0	30.0	12.0	7.0	2.3	1.7	100	
Total....	4,049	585,153	49.7%	29.5%	12.3%	5.5%	1.7%	1.3%	100%	
	134	24,153								Distribution not available

TABLE 13  
 COMBINED 1960-62 POLICY YEARS' EXPERIENCE  
 DEPENDENT UNIT COMPOSITION BY AVERAGE AGE FACTOR  
 NONJUMBO GROUPS, ALL CAUSE PLANS ONLY

AVERAGE AGE FACTOR	NUMBER OF EXPERIENCE UNITS	DEPENDENT UNIT YEARS OF EXPOSURE*	PERCENTAGE OF DEPEND- ENT UNITS CONTAINING:	
			Spouse	Children
60-79.....	63	6,108	90.6%	77.1%
80-89.....	112	21,195	91.4	79.3
90-99.....	193	36,344	91.4	76.1
100-109.....	254	43,032	92.0	75.1
110-119.....	167	24,732	91.9	70.8
120 or more.....	214	19,597	92.1	66.6
Total.....	1,003	151,008	91.7%	74.2%
			One Dependent	Two or More Dependents
60-79.....	60	9,970	28.8%	71.2%
80-89.....	161	12,222	25.5	74.5
90-99.....	226	35,329	26.6	73.4
100-109.....	233	34,740	29.1	70.9
110-119.....	175	27,813	34.2	65.8
120 or more.....	229	13,792	39.8	60.2
Total.....	1,084	133,866	30.3%	69.7%
	1,973	121,554	Distribution not available	

\* Exposure of employees insured with respect to their dependents.

TABLE 14  
 COMBINED 1960-62 POLICY YEARS' EXPERIENCE  
 DEPENDENT UNIT COMPOSITION BY FEMALE PER CENT  
 NONJUMBO GROUPS, ALL CAUSE PLANS ONLY

FEMALE PER CENT	NUMBER OF EXPERIENCE UNITS	DEPENDENT UNIT YEARS OF EXPOSURE*	PERCENTAGE OF DEPEND- ENT UNITS CONTAINING:	
			Spouse	Children
<11%.....	222	38,252	96.7%	76.3%
11-21.....	231	40,667	95.2	75.3
21-31.....	153	28,603	93.6	72.1
31-41.....	90	8,896	86.5	77.4
41-51.....	92	12,062	84.6	68.1
51 or more.....	215	22,528	80.6	73.2
Total.....	1,003	151,008	91.7%	74.2%
			One Dependent	Two or More Dependents
<11%.....	293	38,498	27.3%	72.7%
11-21.....	291	47,921	29.7	70.3
21-31.....	183	19,833	32.3	67.7
31-41.....	94	12,619	32.6	67.4
41-51.....	99	7,625	31.5	68.5
51 or more.....	124	7,370	38.1	61.9
Total.....	1,084	133,866	30.3%	69.7%
	1,973	121,554	Distribution not available	

\* Exposure of employees insured with respect to their dependents.