# TRANSACTIONS OF SOCIETY OF ACTUARIES 1969 REPORTS

# III. GROUP COMPREHENSIVE MEDICAL EXPENSE BENEFITS INSURANCE

This is the seventh annual report on the study of morbidity experience of Group Comprehensive Medical Expense insurance. This report is abbreviated because several companies were unable to contribute 1968 experience in time to be included, although additional 1967 experience has been contributed and is included. The contributions of two companies for 1966 and 1967 included in prior reports have been revised, and this report includes the revised experience. These revisions resulted in a modest decrease in aggregate exposure but have not had a significant effect on aggregate actual to tabular ratios. The contribution of one company which normally includes a substantial portion of the "each illness" experience was not received for 1968, and this report therefore excludes "each illness" experience from Tables 1 and 2. Although this report is abbreviated, the experience according to factors such as age and sex does not differ significantly from that included in previous reports.

The tables in this report show the experience either for all exposure-size groups combined or for nonjumbo groups only. Nonjumbo groups are those with less than 5,000 insured employees. Experience for nonjumbo groups is 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 1964, 1965, 1966, 1967, and 1968. The central period of exposure for each policy year is approximately January 1 of that year. Actual claims are shown to the nearest \$1,000.

# Ratios of Actual to Tabular Claims

The results are presented in the form of ratios of actual to tabular claims. The basis for the tabular claims is the 1965 Comprehensive Tabular presented in the 1967 Reports of TSA. A comparison of the 1965 Comprehensive Tabular and 1960 Comprehensive Tabular used for the 1966 and prior reports is also shown in the 1967 Reports. The 1965 Comprehensive Tabular makes adjustments for most of the factors which influence the cost of Comprehensive Medical Expense Benefits, but no adjustment was made for the income distribution of the employee group.

Caution should be used in comparing factors or ratios of actual to

tabular claims of this report to those for the Supplementary Major Medical report, since the respective tabulars often contain different adjustments for the same cost factors. Caution should also be exercised when interpreting the experience results due to the effect on experience resulting from the COB provision, the advent of Medicare, and resulting hospital utilization trends as described in the Introduction to this report.

## Contributing Companies

Ten companies have contributed to the investigation covered in this report. The results are the composite experience of variations in company practice and in underlying administration and claim procedures, as well as of 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
Prudential Insurance Company of America
The Travelers Insurance Company

# Analysis of Experience

Table 1 summarizes the 1966-68 nonmaternity experience for broad groups of plans for all size groups. "All cause" experience only is shown because of the small amount of "each illness" experience submitted for 1968. The actual to tabular ratios are generally consistent for all plans, and a review of the experience for nonjumbo groups only indicates results similar to those shown in Table 1 for all size groups.

Table 2 summarizes the ratio of actual to tabular for years 1964–68 and indicates the trend of experience for nonjumbo groups. Nonmaternity experience is shown for "all cause" plans only, but all plans are included in the maternity experience. Again, the factors mentioned in the Introduction should be kept in mind when interpreting these results.

Table 3 presents the combined employee and dependent nonmaternity experience by metropolitan area, state, and region. This table, as in prior reports, includes the reported experience under "each illness" plans. These plans include 9 per cent of the total claims. The 1965 Tabular area factors are also shown in Table 3 in order to facilitate comparisons with actual experience. In assigning metropolitan area codes to the data sub-

#### TABLE 1

### COMPREHENSIVE MEDICAL ALL SIZE GROUPS-NONMATERNITY EXPERIENCE BY PLAN COMBINED 1966-68 POLICY YEARS' EXPERIENCE

Plan	No. Experience Units	Employee Years of Exposure*	Actual Claims (000)	Ratio of Actual to 1965 Tabular†		
	Employee					
All-Cause plans: Without full reimbursement of hospital expenses:						
Deductible applied to all expenses Deductible waived for hospital expenses	1,094 115	170,939 54,229	11,554 2,915	115% 117		
Deductible waived for hospital and sur- gical expenses	36	5,186	405	123		
Total	1,245	230,354	14,874	116%		
With full reimbursement of hospital ex-						
penses: Deductible applied to all expenses Deductible waived for hospital expenses	295 1,163	121,826 240,765	8,449 16,843	110% 115		
Deductible waived for hospital and sur- gical expenses	304	63,401	4,297	108		
Total	1,762	425,992	29,589	112%		
Total, All-Cause plans	3,007	656,346	44,463	113%		
		Deper	ıdent	lent		
All-Cause plans: Without full reimbursement of hospital						
expenses: Deductible applied to all expenses Deductible waived for hospital expenses	1,064 111	105,852 36,285	13,270 3,894	120% 117		
Deductible waived for hospital and sur- gical expenses	36	3,687	523	117		
Total	1,211	145,824	17,687	120%		
With full reimbursement of hospital ex- penses:						
Deductible applied to all expenses.  Deductible waived for hospital expenses Deductible waived for hospital and sur-	279 1,086	81,681 157,323	10,375 19,604	115% 109		
gical expenses	267	38,080	4,923	111		
Total	1,632	277,084	34,902	111%		
Total, All-Cause plans	2,843	422,908	52,589	114%		

<sup>\*</sup> For dependents, exposure of employees insured with respect to their dependents. † Tabular adjustments in Steps I, II, and III.

# TABLE 2

# COMPREHENSIVE MEDICAL NONJUMBO GROUPS

# RATIOS OF ACTUAL TO TABULAR CLAIMS 1964-68 POLICY YEARS' EXPERIENCE BY PLAN

Plan	RATIO OF ACTUAL TO 1965 TABULAR FOR POLICY YEAR ENDING IN:					
	1964	1965	1966	1967	1968	
	Employees					
Nonmaternity: All-Cause plans: Without full reimbursement of hospital expenses With full reimbursement of hospital expenses	100% 95	100% 100	110% 105	111% 111	123% 121	
Total, All-Cause plans	96%	100%	106%	111%	123%	
Maternity: Total, all plans	108%	98%	79%	96%	79%	
	Dependents					
Nonmaternity: All-Cause plans: Without full reimbursement of hospital expenses. With full reimbursement of hospital expenses	97% 92	103% 100	114% 102	116% 110	125% 122	
Total, All-Cause plans	93%	101%	106%	111%	122%	
Maternity: Total, all plans	110%	102%	81%	84%	85%	

TABLE 3—COMPREHENSIVE MEDICAL NONJUMBO GROUPS
NONMATERNITY EXPERIENCE BY REGION, STATE, AND METROPOLITAN AREA
EMPLOYEE AND DEPENDENT COMBINED 1966-68 POLICY YEARS' EXPERIENCE

Region,* State,† or Metropolitan Area	No. Experience Units‡	Years of Exposure;	Actual Claims (000)	Ratio of Actual to 1965 Tabular	1965 Tabular Area Factor
Total, all locations.	3,407	664,666	98,791	113%	
New England States: Connecticut. Bridgeport-Stamford- Norwalk.	16	2,545 2,905	352 473	106%	96% 100
Hartford-New Britain- Bristol New Haven-Waterbury	11 13	1,315 877	177 157	91 130	96 104
Total	49	7,642	1,159	106%	
Maine	25	8,935	1,471	113%	92%
Massachusetts Boston Springfield-Holyoke	36 38	3,117 3,214	450 457	102%	104% 108 100
Total	74	6,331	907	97%	
New Hampshire	12	993	132	99%	92%
Rhode Island Providence				§	104% 104
Vermont				§	92%
Region	7	4,906	745	131%	100%
Region total	169	28,966	4,426	110%	
Middle Atlantic States: Delaware	,				92%
District of Columbia	29	5,834	842	117%	100%
New Jersey	30	9,371	1,332	110%	100%
New York	80	7,000	1,066	111%	96%
Troy Buffalo New York-Northeastern	15 8	2,215 557	420 46	127 76	96 96
New Jersey Rochester Syracuse	202 4 23	28,045 433 8,021	4,436 43 863	113 73 103	108 96 96
Total	332	46,271	6,874	111%	
Pennsylvania Allentown-Bethlehem-	62	10,497	1,567	124%	80%
Easton Philadelphia Pittsburgh Wilkes-Barre–Hazelton	22	2,216	255	\$ 99 \$	88 92 100 88
Total	91	13,108	1,888	120%	

<sup>\*</sup> Excludes groups coded for a specific state or metropolitan area.

<sup>†</sup> Excludes groups coded for a specific metropolitan area.

<sup>‡</sup> Employee only.

Less than \$50,000 of tabular claims and less than ten experience units.

Region,* State,† or Metropolitan Area	No. Ex- perience Units‡	Years of Exposure‡	Actual Claims (000)	Ratio of Actual to 1965 Tabular	1965 Tabular Area Factor
Region	9	947	141	119%	100%
Region total	491	75,531	11,077	113%	
North Central States: Illinois Chicago	201 169	31,903 46,865	4,487 6,164	116% 1 <b>04</b>	92% 100
Total	370	78,768	10,651	109%	
IndianaIndianapolis	73 17	15,144 6,046	2,093 968	120% 117	84% 84
Total	90	21,190	3,061	119%	
Kentucky Louisville	17 23	1,946 6,291	238 1,231	94% 118	92% 108
Total.	40	8,237	1,469	113%	
Michigan Detroit	58 18	7,656 2,608	1,071 451	100% 116	100% 116
Total	76	10,264	1,522	104%	
Ohio Akron Cincinnati Cleveland	45 3 9	12,632 702 3,024	1,545 107 257	109% 97 97 8	92% 96 92 104
Columbus Dayton Toledo Youngstown	7	4,700	825	115 90 90	92 92 92 92
Total	72	21,795	2,830	109%	
West Virginia. Wheeling-Steubenville	31	3,172	479	124% §	88% 92
Total	32	3,825	495	125%	
Wisconsin Milwaukee .	33 16	20,125 2,044	3,279 346	131% 120	92% 100
Total	49	22,169	3,625	130%	
Region	25	9,506	1,593	121%	96%
Region total	754	175,214	25,246	114%	
Plains States:	40	5,447	800	107%	100%
Kansas.	12	3,016	570	150%	100%
Minnesota Minneapolis-St. Paul	23 30	5,861 3,066	958 394	121% 104	96% 108
Total	53	8,927	1,352	116%	

<sup>\*</sup> Excludes groups coded for a specific state or metropolitan area.

<sup>†</sup> Excludes groups coded for a specific metropolitan area.

<sup>:</sup> Employee only.

<sup>§</sup> Less than \$50,000 of tabular claims and less than ten experience units.

TABLE 3—Continued

Region,* State,† or Metropolitan Area	No. Ex- perience Units‡	Years of Exposure!	Actual Claims (000)	Ratio of Actual to 1965 Tabular	1965 Tabular Area Factor
Missouri Kansas City. St. Louis.	15 31 50	1,683 1,695 3,747	253 277 492	118% 120 111	92% 100 100
Total	96	7,125	1,022	115%	
Nebraska Omaha	17	1,745	286	\$ 114%	92% 100
Total	26	2,034	316	114%	
North Dakota					92%
South Dakota				§	88%
Region	4	347	50	94%	100%
Region total	234	27,031	4,127	117%	,
Mountain States: Colorado Denver	12 16	6,310 9,560	1,219 1,936	124% 127	112% 120
Total	28	15,870	3,155	126%	, , , ,
Idaho	9	720	125	128%	100%
Montana	14	1,279	181	120%	92%
Nevada	13	1,048	178	129%	120%
Utah	19	2,257	376	123%	96%
Wyoming				§	96%
Region					104%
Region total	88	21,323	4,041	126%	
Pacific States: California. Los Angeles San Diego. San Francisco-Oakland.	172 360 37 52	22,529 41,774 5,782 8,926	3,562 6,947 843 1,573	110% 110 112 106	124% 140 136 140
Total	621	79,011	12,889	109%	
Oregon	31 8	3,315 650	580 83	113% 99	100% 108
Total	39	3,965	663	111%	
Washington Seattle	31 18	4,382 2,701	708 370	112% 100	108% 116
Total	49	7,083	1,078	108%	

TABLE 3—Continued

Region,* State,† or Metropolitan Area	No. Ex- perience Units‡	Years of Exposure‡	Actual Claims (000)	Ratio of Actual to 1965 Tabular	1965 Tabular Area Factor
Region	18	4,854	882	116%	112%
Region total	727	94,813	15,512	110%	
Gulf States: Arizona	38	5,982	949	92%	116%
Arkansas	28	3,190	359	108%	84%
Louisiana	35 15	4,877 1,836	696 331	112% 108	100% 108
Total	50	6,713	1,027	111%	
New Mexico	19	1,761	201	102%	100%
Oklahoma	29	1,958	344	127%	104%
Texas Dallas Fort Worth	58 15	10,303 680	1,233	104% 107	108% 120 116
Houston San Antonio	25 9	3,963 1,322	740 239	128 127	120 108
Total	109	16,396	2,299	113%	
Region	7	981	146	105%	100%
Region total	280	36,981	5,325	108%	
Southeastern States: Alabama Birmingham	22 19	3,739 1,159	704 142	118% 83	108% 108
Total	41	4,898	846	111%	
Florida Miami Tampa	46 16 7	7,216 1,434 1,927	907 216 220	108% 120 87	92% 116 104
Total	69	10,577	1,343	105%	
Georgia Atlanta	32 29	5,062 9,320	665 973	121% 106	88% 96
Total	61	14,382	1,638	112%	
MarylandBaltimore	16 20	1,951 2,243	226 323	92% 114	84% 92
Total	36	4,194	549	104%	
Mississippi	8	705	117	156%	100%
North Carolina	29	3,368	369	95%	96%
South Carolina	30	3,092	447	115%	88%

<sup>\*</sup> Excludes groups coded for a specific state or metropolitan area.

<sup>†</sup> Excludes groups coded for a specific metropolitan area.

Employee only.

Less than \$50,000 of tabular claims and less than ten experience units.

TABLE 3—Continued

Region,* State,† or Metropolitan Area	No. Experience Units‡	Years of Exposure;	Actual Claims (000)	Ratio of Actual to 1965 Tabular	1965 Tabular Area Factor
Tennessee	25	4,337	769	155%	96% 104
Memphis	24	3,044	449	112	108
Total	52	7,632	1,262	135%	
Virginia Norfolk-Portsmouth	62 12	16,625 930	2,075 113	124% 103	84% 92
Total	74	17,555	2,188	123%	
Region	19	3,978	540	118%	92%
Region total	419	70,381	9,299	115%	
Hawaii	14	676	67	80%	100%
Alaska	9	728	101	83%	132%
Total, states and regions	3,185	531,644	79,221	113%	
All others	222	133,022	19,570	113%	

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

mitted, 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 1965 Tabular area factors satisfactorily represent area variations.