# TRANSACTIONS OF SOCIETY OF ACTUARIES 1961 REPORTS

# REPORT OF THE COMMITTEE ON EXPERIENCE UNDER GROUP HEALTH INSURANCE

# GROUP WEEKLY INDEMNITY INSURANCE AND GROUP HOSPITAL AND SURGICAL EXPENSE INSURANCE

HIS is the fourteenth annual report on the continuing study of the morbidity experience of Group Weekly Indemnity insurance and Group Employee and Dependent Hospital and Surgical Expense insurance.

In compiling these reports, the Committee includes the available experience of employer-employee groups. The experience of insured groups outside the United States, and of trusteeship and association cases insuring employees of the member employers, and of union cases, whether or not insurance depends on continued employment, is excluded. The data for Group Weekly Indemnity insurance excludes the experience of plans written under State Cash Sickness laws.

Data in the report for Weekly Indemnity and Employee Hospital insurance are based on the experience of groups in those industrial classifications which the contributing companies individually rate standard for premium purposes; tables covering these plans are headed "Nonrated Industries." Data for Surgical Expense insurance, Employee or Dependent, and for Dependent Hospital Expense insurance are based on the experience of groups regardless of industrial classification; tables covering these plans are headed "All Industries."

The tables in this report show the experience for all exposure size groups combined or for exposure size groups 0-7 only. The data are shown for size groups 0-7 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. The following exposure constitutes exposure size groups 0-7:

Weekly Indemnity-Less than \$40,000 of weekly indemnity.

Hospital-Less than \$10,000 of daily benefit.

Surgical—Less than 2,000 exposure units of the \$150 or \$200 maximum benefit schedules.

#### Ratios of Actual to Tabular Claims

The results of the study of Employee and Dependent Hospital and Surgical Expense insurance experience are presented in the form of ratios of actual to tabular claims. A similar type of reporting will be adopted in the next report for the Weekly Indemnity insurance experience.

The tabular claim factors for Hospital Expense insurance are derived from the graduated claim factors and claim frequencies given in Mr. S. W. Gingery's paper on "A Reinvestigation of Group Hospital Expense Insurance Experience" published in *TSA* XII. This study was based upon 1957 experience of plans providing at least 70 days maximum benefit duration, at least 20× miscellaneous fees, and a maternity benefit. The 1957 Hospital tabular claim cost factors for the plans included in last year's report are shown in Table 15 of that report. Table 10 shows the 1957 Hospital Tabulars used for the 1960 experience of plans included for the first time in this report.

Tabular claim factors for Surgical Expense insurance are being used for the first time in this year's report. The tabular claim factors for the \$200 "Select Schedule" are based on the average benefits per claim and claim frequencies derived from Mr. Morton D. Miller's paper "1957 Study of Group Surgical Expense Insurance Claims" published in TSA X. The tabular claim factors derived from Mr. Miller's paper are approximately related to the 1956 level of experience and were, therefore, adjusted so as to produce a ratio of actual to tabular claims of 100% for the 1957 experience on plans including obstetrical benefits for groups with less than 2,000 surgical exposure units. The tabular claim factors for the \$150 "Standard Schedule" were derived by a similar process based on the benefit relationship between the two schedules. The exposure for Surgical Expense insurance is in units of \$150 maximum benefit for plans based on the Standard Schedule and in units of \$200 maximum benefit for plans based on the Select Schedule. These tabular claims cost factors are shown in Table 15 and will be known as "1957 Surgical Tabular" claim factors.

The Committee wishes to point out that the presentation of Group Accident and Health experience in the form of ratios of actual to tabular claims is still in the experimental state, with many factors affecting experience not reflected by the tabulars. For example, the tabulars do not contemplate a variation in experience caused by the age distribution or the geographic location of the employees. These limitations, as well as other factors which may influence the results of an analysis according to a particular distribution of experience, would indicate that caution should be used when interpreting the data contained in these reports.

## Comparison of Tables

The tables and text in this report have been combined so as to subdivide the study into three sections.

- WEEKLY INDEMNITY: Tables 1 and 2 are unchanged; Table 3 is the same as last year's Table 11.
- HOSPITAL: Tables 4, 5, 6, 7, 8 and 9 correspond to last year's Tables 5, 6, 7, 8, 9 and 12, respectively. Table 10 corresponds to last year's Table 15. It shows the tabulars for plans included for the first time in this report.
- SURGICAL: Table 11 is a condensed modification of last year's Tables 3 and 4; Table 12 is new. Table 13 is a modification of last year's Table 3. Table 14 corresponds to last year's Table 13 (it should be noted that a different surgical tabular has been adopted for the 1961 Report). Table 15 is new.

## Comprehensive Medical Experience

The Committee has commenced to accumulate the experience under Comprehensive Medical (basic Major Medical) plans and is currently working on suitable methods of presentation.

## Contributing Companies

Nine 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. It should be recognized that many groups may have significantly different claim costs from those indicated in this report.

This report contains experience for years labeled 1957, 1958, 1959 and 1960. The majority of the companies contribute exposure and claims based upon policy years ending in the calendar year designated; others have contributed using different periods. When the various contributions are weighted according to the period covered, the central point of the exposure submitted for each year is as shown below. Since each of the coverages centered near the same period, only one central period is shown for each year.

	Central Month of				
Year	Period of Exposure				
1957	September, 1956				
1958	September, 1957				
1959	December, 1958				
1960	December, 1959				

The assumption was made that each company's contribution was distributed uniformly over the period of exposure, which may be improper because of a concentration of policy renewals in January and July.

#### COMBINED 1958-60 POLICY YEARS' EXPERIENCE GROUP WEEKLY INDEMNITY INSURANCE WITH 6 WEEKS MATERNITY BENEFIT NONRATED INDUSTRIES—ALL SIZE GROUPS

Female Percent	NUM- BER OF EXPE- RIENCE UNITS	Weekly Indemnity Exposed	Claims	An- nual Claim Cost*	Num- ber of Expe- rience Units	Weekly Indemnity Exposed	Claims	An- nual Claim Cost*	
				13 WEE	EK PLANS				
				15 WEE			·		
	1st D	ay Accident an	nd 4th Day Si	ckness	4th D	ay Accident a	nd 4th Day Si	ckness	
<11%	1,557	8,145,870	5,332,654	\$ .65	145	949,570	577,543	\$ .61	
11-21	641	4,295,910	2,773,640	.65	82	1,381,570	642,897	.47	
21-31	303 122		1,339,057	.71	25	125,040	94,676		
31-41 41-51	74			. 88 . 93	13 9	43,860 36,790	42,067	.86	
51-61	45	426,790	433,079	1.01	23	215,800	-226, 140	1.05	
61-71	27	60,970	65,218	1.07	10	13,540	13,694		
7181 8191	15 15		42,256 73,331	.97 1.34					
91~100							0,510		
T / 1		16 002 000				2 700 010		<b>_</b>	
lotal	2,803	16,203,980	11,208,152		309	2,780,840	1,640,155		
	1st D	ay Accident a	nd 8th Day Si	ckness	8th D	ay Accident a	nd 8th Day Si	ckness	
< 1.1 CT	1 102	20 150 010	40.005 202		407	4 (00 410	0 (21 (21		
<11% 11-21	14,403	22,479,210 9,073,910	4,375,292	\$.49 .48	495 261	4,620,430 4,365,380	2,634,674 2,371,325	\$ .57 .54	
21-31		5,022,100	2,938,366			1,708,260	993,920		
31-41	759	5.572.120	3,926,073	.70	138	1,516,850	1,143,241	.75	
41-51	535		1,794,114	.81	95	1,128,300	962,439		
51-61	342 251	1,780,920 775,490		.86		516,190 332,470	405,085 253,217	.78	
71-81	182		593,336	.86			185,190	.75	
81-91	97	341,210	362,138	1.06	ſ	232,370	212,777	.92	
<b>91-1</b> 00	29	72,930	61,063	.84	8	54,530		.95	
Total	9,861	48,028,880	27,246,553		1,314	14,722,530	9,213,906		
				26 WEE	K PLAN	5			
	1st D	ay Accident a	nd 8th Day Si	ckness	8th D	ay Accident a	nd 8th Day Si	ckness	
~1107	1 745	24 306 250	16 685 517	e 40	227	11 736 500	8 171 110	e 73	
<11% 11-21	561	24,396,250	9,216,262	\$.68 .78	89	11,736,590 3,716,520	8,421,119 2,361,879	\$ .72 .64	
21-31	308	4,512,560	3,572,658	.79	43	1,782,840	1,356,360	.76	
31-41	174	1,796,180	1,501,179	.84		318,770	255.968	.80	
<b>41</b> -51	85		2,112,402 1,741,858	1.16		314,740 39,990	240,983 41,908	1.05	
61-71	34	241.650	142.293	59		41,410			
71-81	12	44,990	55,778	1.24		20,830			
81-91	4	11,850	25,095	2.12	0	0	] 0	·	
91-100	2	5,400	11,670	2.16	0	0	0		
Total	2,993	46,628,540	35,064,712		424	17,971,690	12,766,577		
		l	·	I	1		·	<u> </u>	

\* Per \$1.00 of exposure.

#### GROUP WEEKLY INDEMNITY INSURANCE NONRATED INDUSTRIES—ALL SIZE GROUPS SECULAR TREND STANDARDIZED MORBIDITY RATIOS Base: 1958–60 Policy Years' Experience

All 1-4-13 and 1-8-13 and 1-8-26 and **Policy** Year Plans Experience 4-4-13 Plans 8-8-13 Plans 8-8-26 Plans 105% 107 102% 103 100% 100% 1952. 1953. 103 99 1954. 102 105 100 102 1955. 96 98 97 97 96 100 102 100 1956. 96 1957. 103 101 101 1958. 99 100 101 102 1959. 95 102 93 96 103 98 103 101 1960...

#### TABLE 3

### GROUP WEEKLY INDEMNITY INSURANCE ANALYSIS OF MALE AND FEMALE EXPERIENCE NONRATED INDUSTRIES—ALL SIZE GROUPS

	1598-60 Policy	1960 Level of Claim Costs						
Plan	Exposure S	Exposure Size Groupings						
	0-7		0-9	Male	Female	Param-		
	Amount Exposed	Female Percentage of Total Exposure	Female Percentage of Total Exposure	Param- eter	Param- eter	eter Ratio		
1-4-13	$\begin{array}{cccc} <11\% & 4,851,590 \\ \Sigma & 8,870,180 \\ <11\% & 903,460 \\ & & 1,601,630 \end{array}$	14%	15%	.610	1.369	224%		
4-4-13	$\gtrsim 1,601,630$ $\le 1,601,630$ <11% 14,154,630	18	17	. 509	1.475	290		
	5 33 700 000 I	21	19	.441	1.053	239		
	<11% 2,634,840 $\Sigma 6,948,790$	24	23	.537	.868	162		
	<11% 11,994,430	14	15	.681	1.258	185		
8-8-26	$\begin{array}{cccc} & 18,958,590 \\ <11\% & 1,333,410 \\ \Sigma & 3,581,890 \end{array}$	14	11	.682	1.431	210		

### COMBINED 1958-60 POLICY YEARS' EXPERIENCE EMPLOYEE GROUP HOSPITAL EXPENSE INSURANCE NONRATED INDUSTRIES—ALL SIZE GROUPS

PLAN IDENTIFICATION	NUMBER OF EXPERIENCE	Daily Benefit	Actual Claims	RATIO OP Actual to 1957 Hospital Tabular		
	UNITS	Exposed		Combined 1958–60	1960 Only	
31 Day		and the second sec				
10×	4,271	6,844,708	11,816,385	99%	106%	
*15×	426	836,132	1,522,059		103	
20×	2,740	4,478,638	8,612.295	104	107	
*20×+75%	1 1	, · · ,	,			
of Excess.	343	500,110	1,094,715		110	
70 Day		,				
10×	739	1,212,347	2,305,227	107	107	
*15×	152	268,500	548,527		112	
20×	2,139	4,027,857	8,080,409	107	110	
*20×+75%	_,,	_,,	,,.			
of Excess	455	664,526	1,517,159		116	
120 Day		,.	.,			
*10×	6	14,435	30,702	]	126	
*15×	7	11,147	30,974		155	
*20×	57	153,453	317,003		116	
*20×+75%	0.			]		
of Excess	51	140,587	357,870	[	135	
		,				
Total	11,386	19,152,440	36,233,325	103%	109%	
	,000	_ ,,,	,	570		

\* These plans contain 1960 experience only.

#### COMBINED 1958-60 POLICY YEARS' EXPERIENCE DEPENDENT GROUP HOSPITAL EXPENSE INSURANCE ALL INDUSTRIES—ALL SIZE GROUPS

Plan Identification	Number of Experience	Daily Benefit	Actual Claims	RATIO OF Actual to 1957 Hospital Tabular		
	UNITS	Exposed		Combined 1958–60	1960 Only	
With Maternity Benefits						
31 Day 10× *15×	3,456 407	$3,688,556 \\ 379,726$	13,614,718 1,616,510	102%	106% 113	
20× *20×+75%	3,080	2,978,540	12,777,977	112	114	
of Excess 70 Day	359	360,295	1,684,950		118	
10× *15×	485 115	476,142 138,233	1,717,043 575,075	99 	109 112	
20× *20×+75%	2,106	2,532,651	10,986,191	114	118	
of Excess 120 Day	477	601,798	2,880,684		120	
*10× *15× *20×	5 12 54	4,287 24,597 59,679	$12,561 \\ 78,154 \\ 241,882$	• • • • • • • • • • • • •	82 89 110	
*20×+75% of Excess	52	104,634	582,502		144	
Total	10,608	11,349,138	46,768,247	108%	114%	
No Maternity Benefits		<b></b>				
$\begin{array}{c} 31 \text{ Day} \\ 10 \times \dots \\ 50 \text{ Day} \end{array}$	317	303,062	962,087	110%	109%	
70 Day *10×	22	68,394	223,334		115	
Total	339	371,456	1,185,421	110%	112%	

NOTE-Dependent maternity benefits are subject to a 9 months waiting period.

\* These plans contain 1960 experience only.

#### EMPLOYEE AND DEPENDENT HOSPITAL EXPERIENCE RATIO OF ACTUAL CLAIMS TO 1957 HOSPITAL TABULAR BY YEAR AND PLAN SIZE GROUPS 0-7 ONLY, EMPLOYEE RATED IN BUSTRIES EXCLUDED

Policy Year and Duration	Number of Experience Units	Daily Benefit Exposed	Actual Claims	Ratio of Actual Claims to 1957 Hospital Tabular	Number of Experience Units	Daily Benefit Exposed	Actual Claims	Ratio of Actual Claims to 1957 Hospital Tabula	
		All 1	0× Plans		All 20× Plans				
Employee 1957, 31 Day 70 Day	2,141 409	2,240,139 453,281	3,564,676 767,063	90% 94	1,004 611	1,095,213 674,523	1,948,504 1,281,782	92% 98	
Total	2,550	2,693,420	4,331,739	90%	1,615	1,769,736	3,230,286	94%	
1958, 31 Day 70 Day	1,365 228	1,351,486 245,511	2,265,353 416,164	95% 97	722 543	853,377 648,280	1,606,958 1,244,971	99% 100	
Total	1,593	1,596,997	2,681,517	95%	1,265	1,501,657	2,851,929	99%	
1959, 31 Day 70 Day	1,554 278	1,748,755 302,426	3,095,171 572,052	101% 109	1,053 820	1,292,106 851,601	2,590,035 1,773,634	107% 110	
Total	1,832	2,051,181	3,667,223	102%	1,873	2,143,707	4,363,669	108%	
1960, 31 Day 70 Day 120 Day	1,240 205 6	1,396,557 242,240 14,435	2,524,604 409,929 30,702	104% 97 126	918 724 53	1,190,112 839,884 90,028	2,417,694 1,722,474 200,293	110% 110 126	
Total	1,451	1,653,232	2,965,235	104%	1,695	2,120,024	4,340,461	111%	
	<u> </u>	All 1	5× Plans			All 20×+75%	of Excess Plans	<u> </u>	
1960, 31 Day 70 Day 120 Day	415 150 7	495,445 218,777 11,147	944,010 413,026 30,974	107% 104 155	339 450 43	435,616 599,325 103,828	972,650 1,350,490 273,229	112% 115 142	
Total	572	725,369	1,388,010	107%	837	1,138,769	2,596,369	116%	

Policy Year and Duration	Number of Experience Units	Daily Benefit Exposed	Actual Claims	Ratio of Actual Claims to 1957 Hospital Tabular	Number of Experience Units	Daily Benefit Exposed	Actual Claims	Ratio of Actual Claims to 1957 Hospital Tabula	
		All 1	0× Plans		All 20× Plans				
Dependent 1957, 31 Day 70 Day	1,953 246	1,497,267 182,188	5,163,739 663,815	93% 97	1,249 672	980,558 550,758	3,908,665 2,306,787	100% 105	
Total	2,199	1,697,455	5,827,554	94%	1,921	1,531,316	6,215,452	102%	
1958, 31 Day 70 Day	1,213 163	915,754 112,760	3,165,842 364,746	95% 87	826 552	631,731 419,221	2,613,725 1,783,688	105% 110	
Total	1,376	1,028,514	3,530,588	94%	1,378	1,050,952	4,397,413	107%	
1959, 31 Day 70 Day	1,382 168	1,163,789 159,806	4,400,646 582,210	105% 100	1,197 745	992,238 581,410	4,376,368 2,640,457	115% 118	
Total	1,550	1,323,595	4,982,856	104%	1,942	1,573,648	7,016,825	116%	
1960, 31 Day 70 Day 120 Day	1,127 172 5	998,033 161,183 4,287	3,800,409 594,050 12,561	107% 104 82	1,037 779 54	942,980 651,931 59,679	4,071,362 2,925,160 241,882	114% 119 110	
Total	1,304	1,163,503	4,407,020	106%	1,870	1,654,590	7,238,404	116%	
		Ali 1	5× Plans	1	All 20×+75% of Excess Plans				
1960, 31 Day 70 Day 120 Day	405 114 12	344,845 125,717 24,597	1,483,371 524,041 78,154	114%     113     89	356 471 52	315,908 481,958 104,634	1,464,629 2,301,997 582,502	117% 120 144	
Total	531	495,159	2,085,566	113%	879	902,500	4,349,128	122%	

TABLE 6-Continued

#### EMPLOYEE AND DEPENDENT HOSPITAL EXPERIENCE RATIO OF ACTUAL CLAIMS TO 1957 HOSPITAL TABULAR BY DAILY BENEFIT, PLAN AND YEAR SIZE GROUPS 0-7 ONLY, EMPLOYEE RATED IN DUSTRIES EXCLUDED

Policy Year and Amount of Daily Benefit (Nearer \$1)	Number of Experience Units	Daily Benefit Exposed	Actual Claims	Ratio of Actual Claims to 1957 Hospital Tabular	Number of Experience Units	Daily Benefit Exposed	Actual Claims	Ratio of Actual Claims to 1957 Hospital Tabular
		All 1	0× Plans		All 20× Plans			
1957, <b>\$</b> 5-8 9-10	2,660 1,286	1,782,459 1,459,762	4,455,037	93% 91	1,181	766,621 1,247,243	2,571,301 3,457,319	103%
11-12	556	686,770	1,484,544	91	605	839,587	2,234,476	97
13-14	149	279,223	571,458	92	170	274,684	753,216	99
15-20	98	164,661	351,278	101	157	172,917	429,426	102
Total	4,749	4,372,875	10,159,293	92%	3,536	3,301,052	9,445,738	99%
1958, \$ 5-8	1,464	897,202	2,305,886	96%	703	442,220	1,466,960	105%
9-10	856	846,952	1,979,466	94	910	816,259	2,367,208	104
11-12	409	544,584	1,199,744	93	609	719,005	1,933,145	103
13-14)	133	191,024	404,223	92	202	291,801	805,830	106
15-20	107	145,749	322,786	99	2.9	283,324	676,199	101
Total	2,969	2,625,511	6,212,105	95%	2,643	2,552,609	7,249,342	104%
1959, \$ 5-8	1,479	1,003,888	2,710,050	102%	733	471,865	1,762,840	120%
9-10	962	998,424	2,637,556	105	1,216	1,068,468	3,348,576	111
11-12	520	683,040	1,669,230	103	959	1,062,489	3,176,445	112
13-14	218	354,385	828,640	99	3.17	394,456	1,162,889	112
15-20	203	335,039	804,603	106	530	720,077	1,929,744	111
Total	3,382	3,374,776	8,650,075	103%	3,815	3,717,355	11,380,494	113%

Policy Year and Amount of Daily Benefit (Nearer \$1)	Number of Experience Units	Daily Benefit Exposed	Actual Claims	Ratio of Actual Claims to 1957 Hospital Tabular	Number of Experience Units	Daily Benefit Exposed	Actual Claims	Ratio of Actual Claims to 1957 Hospital Tabular
		All 1	0× Plans		All 20× Plans			
1960, \$ 5-8 9-10 11-12 13-14 15-16 17-20	1,081 791 458 161 218 46	746,765 823,904 568,825 277,125 310,647 89,469	2,033,075 2,228,380 1,469,575 693,228 742,994 205,003	$     \begin{array}{r}       103\% \\       106 \\       107 \\       104 \\       108 \\       102     \end{array} $	525 975 930 376 592 167	325,967 852,325 1,030,738 544,886 802,334 218,364	1,205,527 2,790,135 3,248,971 1,594,606 2,161,397 578,229	117% 115 116 114 109 114
Total	2,755	2,816,735	7,372,255	105%	3,565	3,774,614	11,578,865	114%
		All 1	5× Plans		All 20×+75% of Excess Plans			
1960, \$ 5-8 9-10 11-12 13-14 15-16 17-20	309 319 220 101 113 41	210,040 316,843 283,948 136,380 160,746 112,571	714,318 924,410 769,741 350,309 422,889 291,909	116% 109 108 102 117 110	236 590 420 186 222 62	192,216 640,033 466,552 264,852 378,174 99,442	776,578 2,473,866 1,483,861 809,876 1,108,130 293,186	125% 128 112 116 113 114
Total	1,103	1,220,528	3,473,576	110%	1,716	2,041,269	6,945,497	119%

TABLE 7—Continued

The following companies contributed experience for the investigation covered in this report:

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 Occidental Life Insurance Company of California Prudential Insurance Company of America The Travelers Insurance Company

#### WEEKLY INDEMNITY

The basic results of the study of Weekly Indemnity insurance are presented in the form of annual claim costs for each plan by percent female. The experience for the three latest policy years combined is shown in Table 1. The annual claim cost is derived by dividing incurred claims by exposure. The exposure unit is one dollar of weekly benefit.

In order to analyze the trend underlying the experience of the Group Weekly Indemnity plans studied, standardized morbidity ratios are presented in Table 2 for each of the last nine policy years. The standardized morbidity ratio is based on the level of experience of the current report, in this case 1958-60. Crude claims costs for each year which vary by plan and female percentage were applied to the accumulated 1958-60 exposure and the resulting calculated claims were compared to the total actual claims of the accumulated 1958-60 experience to arrive at the standard morbidity ratios shown for Group Weekly Indemnity plans. The ratios shown in this report differ from those of previous reports because of the different years used for a base, but the resulting trends are consistent. The total experience under Group Weekly Indemnity insurance has increased over the level of the prior year to that of the three preceding vears. An examination of the data submitted for 1-4 and 4-4-13 week plans shows that a substantial portion of the increase shown in Table 2 for 1960 was due to the experience of a jumbo policy and is not typical of the experience of the nonjumbo groups. Similarly, the dip in the 1-8 and 8-8-26 week experience for 1959 is largely attributable to the experience of jumbo groups.

Male and female parameters have been derived for each Weekly Indemnity plan, together with a parameter ratio (female parameter divided by male parameter), which are shown in Table 3. These parameters are the result of the composite experience of groups whose claim costs vary widely as a result of such influences as geographical location,

#### EMPLOYEE HOSPITAL 1958-60 POLICY YEARS' EXPERIENCE RATIO OF ACTUAL CLAIMS TO 1957 HOSPITAL TABULAR BY PERCENT FEMALE SIZE GROUPS 0-7 ONLY, NONRATED INDUSTRIES

Female Percent	Number of Experience Units	Daily Benefit Exposed	Actual Claims	Ratio of Actual Claims to 1957 Hospital Tabular	Number of Experience Units	Daily Benefit Exposed	Actual Claims	Ratio of Actual Claims to 1957 Hospital Tabular
		All 10	X Plans			All 20	)× Plans	
<11%	1,750 997 654 450 332 234 198 151 89 21 4.876	1,816,129 959,499 775,767 518,794 373,040 265,325 255,822 213,225 100,347 23,462 5,301,410	2,886,855 1,578,539 1,284,822 927,061 741,438 563,484 541,565 505,100 242,089 43,022 9,313,975	101% 99 95 98 104 106 101 107 106 78 100%	1,881 1,121 642 398 290 227 150 66 44 14 4,833	$\begin{array}{r} 2,157,161\\ 1,250,362\\ 745,349\\ 510,029\\ 358,906\\ 370,200\\ 208,146\\ 80,540\\ 64,681\\ 20,014\\ \hline 5,765,388\\ \end{array}$	$\begin{array}{r} 4,030,642\\ 2,437,650\\ 1,437,797\\ 1,038,116\\ 776,356\\ 877,118\\ 524,433\\ 222,057\\ 169,016\\ 42,874\\ \hline 11,556,059\\ \end{array}$	107% 107 102 104 106 112 114 118 107 90
		All 1	5× Plans*	<u> </u>	All 20×+75% of Excess Plans*			
<11% 11-21 21-31 31-41 41-51 51-61 61-71 71-81 81-91 91-100	238 134 86 35 26 19 18 9 6 1	286,190 180,645 101,724 43,910 47,352 22,323 21,298 16,219 5,336 372	506,877320,408194,76989,943109,84455,11643,53945,44721,252815	106% 104 104 107 114 120 94 122 165 73	362 198 80 63 55 37 21 12 8 1	495,658 252,245 120,789 79,021 76,101 65,116 21,501 22,560 5,518 260	1,099,185544,986254,381171,665202,376176,70353,74368,12822,8192,383	119% 113 106 105 125 121 106 123 161 344
Total	572	725,369	1,388,010	107%	837	1,138,769	2,596,369	116%

\* These plans contain 1960 experience only.

#### EMPLOYEE AND DEPENDENT 1958-60 POLICY YEARS' EXPERIENCE ANALYSIS OF HOSPITAL EXPERIENCE BY STATE Employee Rated Industries Excluded

			Size Groups (	)~7	RATIO OF ACTUAL Claims to 1957 Hospital Tabular		
LOCATION CODE	STATE OR REGION	Number of Expe- rience Units	Daily Benefit Exposed	Actual Claims	Size Groups 0-7	All Size Groups	
20 21 22 23 24 25	Region Connecticut Maine Massachusetts New Hampshire Rhode Island	26 544 150 1,106 131 35	31,194 781,938 160,701 1,183,650 230,573 44,267	$\begin{array}{r} 80,006\\ 2,103,487\\ 459,131\\ 2,921,233\\ 543,207\\ 123,883\end{array}$	103%     108     111     101     95     105     105	103% 108 87 103 93 105	
26	Vermont Total	158 2,150	156,390	407,656	105 103%	105	
30. 31. 32. 33. 34. 35.	Region Delaware Dist. Columbia New Jersey New York Pennsylvania	57 17 103 678 1,888 2,106	$58,070 \\11,315 \\76,478 \\545,854 \\1,939,207 \\2,161,944$	159,387 49,404 192,167 1,154,534 4,628,919 5,723,008	103% 179* 107 87 97 104	103% 179 107 85 96 104	
40 41 42 43 43 44 45 46 47.	Total Region Illinois Indiana Kentucky Michigan Ohio Wisconsin West Virginia	4,849 80 1,656 1,034 168 1,104 1,341 473 271	4,792,868 143,355 1,576,474 1,110,173 127,231 1,243,090 1,713,413 510,757 224,098	11,907,419 400,796 4,354,887 3,042,436 336,110 3,879,625 4,906,510 1,737,880 686,045	100% 103% 101 103 104 120 109 123 115	98% 118% 101 101 107 120 107 122 115	
•••	Total	6,127	6,648,591	19,344,289	109%	108%	
50 51 52 53 54 55 55 56 57	Region Iowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota	44 362 224 188 521 219 25 20	83,292 231,362 164,646 128,195 436,546 181,416 16,273 6,760	270,344 802,873 535,369 449,140 1,383,925 582,252 39,966 23,026	113% 120 121 125 114 115 111* 125*	114% 125 129 120 115 115 111 125	
	Total	1,603	1,248,490	4,086,895	117%	120%	

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

			Size Groups	0-7	RATIO OF ACTUAL CLAIMS TO 1957 HOSPITAL TABULAR		
Location Code	STATE OR REGION	Number of Expe- rience Units	Daily Benefit Exposed	Actual Claims	Size Groups 0-7	All Size Groups	
60         61         62         63         64         65         66	Region Colorado Idaho Montana Nevada Utah Wyoming	13 88 32 16 7 59 19	$\begin{array}{r} 8,506\\ 75,536\\ 31,357\\ 21,343\\ 11,060\\ 64,968\\ 11,484\end{array}$	26,648 235,529 90,440 94,641 33,638 131,734 37,977	123%* 125 104 147 129* 87 116*	123% 116 104 147 129 82 116	
i	Total	234	224,254	650,607	114%	108%	
70. 71. 72. 73.	Region California Oregon Washington	9 371 58 56	18,819 322,247 38,689 55,152	52,147 981,388 94,342 168,504	112%* 108 94 105	112%* 107 94 102	
	Total	494	434,907	1,296,381	106%	105%	
80 81 82 83 84 85 86	Region Arizona Arkansas Louisiana New Mexico Oklahoma Texas	47 114 224 281 56 215 973	43,210 93,835 177,418 144,895 40,668 143,320 869,526	$\begin{array}{r} 157,072\\ 305,129\\ 553,325\\ 547,315\\ 141,864\\ 483,184\\ 2,978,405\end{array}$	129% 123 116 133 113 116 121	129% 113 114 134 113 117 121	
	Total	1,910	1,512,872	5,166,294	121%	120%	
90 91 92 93 94 95 96 97	Region Alabama Florida Georgia Maryland Mississippi North Carolina South Carolina	91 164 390 633 415 127 646 190	161,662 169,705 380,161 625,927 389,502 89,095 560,687 174,700	$\begin{array}{r} 457,413\\527,670\\1,177,016\\1,862,423\\1,026,449\\285,009\\1,726,440\\509,180\end{array}$	102% 122 113 110 99 123 113 118	100% 122 112 123 98 123 117 116	
98 99	Tennessee Virginia	338 649	316,819 570,497	940,365 1,600,079	113 111	118 105	
	Total	3,643	3,438,755	10,112,044	111%	111%	
	All Other†	938	1,233,947	3,659,681	108%	109%	
	Total All Loca- tions	21,948	22,123,397	62,862,213	108%	107%	

TABLE 9-Continued

† Less than 75% of employees in one state or region.

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## 1957 Hospital Tabular Annual Claim Costs per \$1 Daily Benefit Reimbursement Plans

DAILY Bene-		1 Day, 15> × Matern		31 Day, 20× +75% of Excess 10× Maternity			31 Day, 15× 14+15× Maternity	
FIT	Male Employee	Female Employee	Dependent Unit	Male Employee	Female Employee	Dependent Unit	Male Employee	Female Employee
\$ 5	\$1.97	\$2.84	\$4.64	\$2.54	\$3.49	\$5.40	\$1.97	\$3.16
6	1.89	2.74	4.43	2.32	3.24	5.00	1.89	3.00
7	1.82	2.66	4.24	2.16	3.05	4.71	1.82	2.87
8	1.76	2.59	4.09	2.04	2.91	4.47	1.76	2.77
9	1.71	2.53	3.97	1.94	2.80	4.28	1.71	2.69
10	1.67	2.47	3.85	1.87	2.70	4.12	1 67	2.61
11	1.63	2.42	3.75	1.80	2.62	3.99	1.63	2.54
12	1.59	2.38	3.65	1.74	2.56	3.86	1.59	2.48
13	1.56	2.33	3.56	1.70	2.50	3.75	1.56	2.43
14	1.52	2.29	3.48	1.65	2.44	3.65	1.52	2.37
15	1.49	2.25	3.41	1.61	2.40	3.56	1.49	2.32
16	1.46	2.22	3 34	1.58	2.35	3.49	1.46	2.28
17	1 43	2 18	3.27	1.55	2.32	3.42	1.43	2.23
18	1.41	2.15	3.21	1.52	2.28	3.36	1.41	2.19
19	1.38	2 12	3.16	1.49	2 25	3 30	1.38	2.15
20	1 35	2 09	3 10	1 47	2 22	3.24	1.35	2 10

DAILS	70 DAY, 15× 10× Maternity			70 Day, $20 \times +75\%$ of Excess $10 \times M$ Aternity			70 Day, 15× 14+15× Maternity	
BENE- PIT	Male Employee	Female Employee	Dependent Unit	Male Employee	Female Employee	Dependent Unit	Male Employee	Female Employee
5	\$2.02	\$2.88	\$4.72	\$2.59	\$3.53	\$5.47	\$2 02	\$3 20
6	1.94	2.78	4.50	2.37	3.28	5.08	1 94	3.04
7	1.87	2.70	4.32	2.22	3 09	4.78	1 87	2.91
8	1.81	2.63	4.17	2.10	2.95	4.55	1 81	2.81
9	1.77	2.57	4.05	2 00	2.84	4.36	1 77	2.73
10	1 7 2	2.51	3.93	1 92	2.74	4.20	1.72	2.65
11	1.68	2.46	3.82	1.86	2.66	4.06	1.68	2.58
12	1.64	2.42	3.73	1.80	2.59	3.94	1.64	2.52
13.	1.61	2.37	3.64	1 75	2.53	3.82	1.61	2 46
14	1.58	2.33	3.56	1.71	2.48	3.73	1.58	2.41
15	1.55	2.29	3.48	1.67	2.44	3.64	1.55	2.36
16	1.52	2.26	3.41	1.63	2.39	3.56	1.52	2.32
17	1.49	2.22	3.35	1.60	2.36	3.49	1.49	2.27
18	1.46	2.19	3.29	1.57	2.32	3.43	1.46	2.23
19	1.44	2.16	3.23	1.55	2.29	3.37	1.44	2.18
20.	1.41	2.13	3.18	1.52	2.26	3.32	1.41	2.14

DAILY Bene-	70 Day, 10× No Maternity		120 Day, 10× 10× Matebnity			120 Day, 15× 10× Maternity			
FIT	Dependent Unit	Male Employee	Female Employee	Dependent Unit	Male Employee	Female Employee	Dependent Unit		
\$ 5	\$3.40	\$1.77	\$2.58	\$4.31	\$2.04	\$2.89	\$4.74		
6	3.27	1.73	2.53	4.18	1.96	2.79	4.53		
7	3.17	1.70	2.49	4.06	1.89	2.71	4.35		
8	3.07	1.67	2.44	3.95	1.83	2.64	4.20		
9	2.98	1.63	2.40	3.86	1.78	2.58	4.08		
10.	2.90	1.61	2.37	3.77	1.74	2.52	3.96		
11.	2.83	1.58	2.33	3.68	1.70	2.47	3.85		
12.	2.76	1.55	2.30	3.61	1.66	2.43	3.75		
13.	2.68	1.53	2.26	3.53	1.63	2.38	3.67		
14	2.62	1.50	2 23	3.45	1.60	2.34	3.59		
15.	2.56	1.48	2.20	3.39	1.57	2.31	3.51		
16	2.50	1.45	2.17	3.32	1.54	2.27	3.44		
17	2.45	1.43	2.14	3.26	1.51	2.23	3.37		
18	2.39	1.41	2.11	3.21	1.48	2.20	3.31		
19.	2.35	1.38	2.09	3.16	1.45	2.17	3.26		
20	2.30	1.36	2.06	3.10	1.43	2.14	3.20		

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TABL	E 10—	Continued

DAILY		20 Day, 20> × Materni		120 Day, 20×+75% of Excess 10× Maternity		
BENE- FIT	Male Employee	Female Employee	Dependent Unit	Male Employee	Female Employee	Dependent Unit
5	\$2.21	\$3.09	\$5.02	\$2.61	\$3.54	\$5.50
6	2.09	2.95	4.74	2.39	3.29	5.10
7	2.00	2.84	4.52	2.23	3.11	4.81
8)	1.93	2.75	4.34	2.11	2.96	4.57
9	1.87	2.67	4.19	2.02	2.85	4.38
10	1.81	2.61	4.05	1.94	2.75	4.23
11	1.77	2.55	3.94	1.87	Z.67	4.09
12	1.72	2.50	3.83	1.82	2.61	3.96
13	1.68	2.45	3.73	1.77	2.55	3.85
14	1.65	2.40	3.65	1.73	2.50	3.75
15	1.61	2.36	3.56	1.69	2.45	3.66
16	1.58	2.32	3.49	1.65	2.41	3.59
17	1.55	2.28	3.41	1.62	2.38	3.52
18	1.52	2.25	3.35	1.59	2.34	3.46
19	1.49	2.21	3.29	1.56	2.30	3.40
20	1.46	2.18	3.23	1.54	2.27	3.35

# REIMBURSEMENT PLANS

#### FIXED BENEFIT PLANS

14+15×1	Y, 15× MATERNITY	70 Day, 15× 14+15× Maternity		
Male Employee	Female Employee	Male Employee	Female Employee	
\$1.97	\$3.16	\$2.02	\$3.20	
1.89	3.00	1.94	3.04	
1.82	2.87	1.87	2.91	
			2.81	
			2.73	
			2.65	
			2,58	
			2.52	
			2.46	
			2.41	
			2.36	
			2.32	
			2.27	
			2.23	
			2.18	
			2.14	
	Male Employee \$1.97	Male Employee         Female Employee           \$1.97         \$3.16           1.89         3.00           1.82         2.87           1.76         2.77           1.71         2.69           1.63         2.54           1.59         2.48           1.56         2.43           1.52         2.37           1.49         2.32           1.46         2.28           1.43         2.23           1.41         2.19           1.38         2.15	Male Employee         Female Employee         Male Employee           \$1.97         \$3.16         \$2.02           1.89         3.00         1.94           1.82         2.87         1.87           1.76         2.77         1.81           1.71         2.69         1.77           1.63         2.54         1.68           1.59         2.48         1.64           1.55         2.37         1.58           1.49         2.32         1.55           1.49         2.32         1.55           1.43         2.23         1.49           1.41         2.19         1.46	

# Combined 1958-60 Policy Years' Experience Employee and Dependent Group Surgical Expense Insurance All Industries—All Size Groups

Plan Identification	Number of Experience Units	Maximum Indemnity Exposed per \$150 or \$200 Basic Unit	Actual Claims	Ratio of Actual Claims to 1957 Surgi- cal Tabular
Employee				
With Obstetrical Benefits \$150 Schedule. \$200 Schedule.	6,525 19,571	$1,867,258 \\ 4,981,514$	8,414,824 28,852,902	$111\% \\ 108$
Total	26,096	6,848,772	37,267,726	108%
Dependent With Obstetrical Benefits* \$150 Schedule \$200 Schedule	3,734 17,291	800,356 2,830,969	10,398,144 43,884,282	105% 103
Total	21,025	3,631,325	54,282,426	103%
No Obstetrical Benefits \$150 Schedule \$200 Schedule	425 2,528	106,389 359,280	970,326 4,569,743	119% 124
Total	2,953	465,669	5,540,069	123%

\* Dependent obstetrical benefits are subject to a 9 months waiting period.

#### Employee and Dependent Surgical Experience Ratio of Actual Claims to 1957 Surgical Tabular by Plan and Year Size Groups 0-7 Only, All Industries

		\$150 Schedule				\$200 SCHEDULE			
POLICY YEAR AND PLAN	Number of Experience Units	Maximum Indem- nity Exposed per \$150 Basic Unit	Actual Claims	Ratio of Actual Claims to 1957 Surgical Tabular	Number of Experience Units	Maximum Indem- nity Exposed per \$200 Basic Unit	Actual Claims	Ratio of Actual Claims to 1957 Surgical Tabular	
Employee, with Ob- stetrical Benefits 1957 1958 1960 Dependent, with Obstetrical Bene	3,466 2,358 2,137 1,877	634,950 422,219 389,772 364,775	2,657,390 1,786,986 1,732,522 1,630,068	101% 103 109 110	7,832 6,127 6,621 6,496	1,372,404 1,006,267 1,147,791 1,203,123	7,395,977 5,620,354 6,667,432 6,902,391	100% 103 107 106	
fits 1957 1958 1959 1960 Dependent, No Ob stetrical Benefit:	1,335 1,207 1,143	264,337 191,401 179,727 187,170	3,282,214 2,350,427 2,316,635 2,343,924	100% 99 104 101	6,880 5,188 5,833 6,122	898,244 609,919 716,638 798,128	13,413,743 9,301,983 11,205,245 12,444,082	999% 102 104 104	
1957 1958 1959 1960	270 151 134	40,630 20,865 24,675 24,275	335,249 171,911 196,981 230,572	108% 107 104 124	1,037 722 803 979	$\begin{array}{r} 127,180\\ 69,196\\ 86,135\\ 105,339 \end{array}$	1,534,456 843,423 1,093,695 1,266,642	118% 119 124 117	

## Employee Surgical 1958-60 Policy Years' Experience Ratio of Actual Claims to 1957 Surgical Tabular by Percent Female Size Groups 0-7 Only, All Industries

Female Percent	Number of Ex- perience Units	Maximum Indemnity Exposed per Basic Unit	Actual Claims	Ratio of Ac- tual Claims to 1957 Surgical Tabular
		\$150 Se	chedule	
<11% 11-21 21-31 31-41 41-51 51-61 61-71 71-81 81-91 91-100 Total	2,335 1,295 879 584 428 294 254 165 106 32 6,372	413,621 243,210 150,986 114,543 77,783 63,302 53,238 30,090 25,271 4,722 1,176,766	1,481,824 978,521 656,441 566,823 390,478 357,823 325,042 194,475 171,842 26,307 5,149,576	115% 111 106 108 99 101 100 98 96 74 107%
		\$200 Se	chedule	
<11% 11-21 21-31 31-41 51-61 61-71 71-81 81-91 91-100	7,799 4,360 2,511 1,469 1,125 843 581 309 195 52	$\begin{array}{c} 1,381,064\\ 694,223\\ 446,709\\ 278,000\\ 193,931\\ 149,113\\ 102,164\\ 72,101\\ 31,178\\ 8,698 \end{array}$	$\begin{array}{c} 6,888,575\\ 3,765,257\\ 2,599,561\\ 1,754,009\\ 1,385,854\\ 1,089,019\\ 833,172\\ 538,066\\ 261,018\\ 75,646\end{array}$	$ \begin{array}{c} 109\% \\ 107 \\ 104 \\ 103 \\ 107 \\ 101 \\ 105 \\ 90 \\ 95 \\ 93 \\ \end{array} $
Total	19,244	3,357,181	19,190,177	106%

industrial classification, age distribution, etc. The resulting lack of homogeneity produces possible variations and inconsistencies when male and female costs are derived or compared.

#### HOSPITAL

The basic results of the study of Hospital Expense insurance are presented in Tables 4 and 5 for plans grouped according to nonmaternity room and board duration and miscellaneous fee benefit. The experience shown includes all size groups for the three latest policy years, except that the plans included for the first time this year show 1960 experience only. Because of this, ratios of actual to 1957 tabular claims are shown for 1960 only as well as for combined 1958-60.

The trend of experience for employee and dependent experience is indicated in Table 6 for each of the four latest policy years in the form of ratios of actual to 1957 Tabular claims. Both employee and dependent experience continue to show an increasing claim cost by year of experience, but the percentage increase of 1960 over 1959 is not as great as that of 1959 over 1958. Part of this difference is probably due to the fact that the central period of exposure for 1959 is approximately 15 months after 1958 rather than 12 months. The annual increases in the ratio of actual to tabular claims indicated by Table 6 are based on the experience (except for a small amount of dependent experience) of plans that contain maternity benefits. No breakdown between maternity and nonmaternity experience is directly available from the annual study. Table 7, which contains combined employee and dependent experience, indicates the trend of experience according to daily benefit groupings.

Ratios of actual to tabular claims for employee plans grouped according to percentage female are shown in Table 8. The fairly uniform ratios in this table, although subject to variations other than those of male and female claim costs, indicate a satisfactory relationship between male and female claim costs in the 1957 Hospital Tabular.

Table 9 shows the results of an analysis of combined employee and dependent experience by state. The experience is presented in the form of ratios of actual to tabular claims for all exposure size groups combined and for exposure size groups 0-7 only. The groups included in the experience for any state are those groups with 75% or more of the insured employees in that state. Where it was not possible to assign a group to a particular state, it was assigned to a region if 75% or more of the insured employees were in that region.

When interpreting the variations in experience by area, it should be borne in mind that the Hospital Tabulars do not include an adjustment for

#### EMPLOYEE AND DEPENDENT 1958-60 POLICY YEARS' EXPERIENCE Analysis of Surgical Experience by State All Industries

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LOCATION	STATE OF		Size Groups 0-	7	CLAIMS	ACTUAL TO 1957 TABULAR
Code	REGION	Number of Experience Units	Maximum Sur- gical Indemnity Exposed	Actual Claims	Size Groups 0-7	All Size Groups
20 21 22 23 24 25 26	Region Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont	$50 \\ 1,023 \\ 239 \\ 2,093 \\ 220 \\ 117 \\ 266$	$\begin{array}{r} 8,152\\ 243,146\\ 37,754\\ 348,193\\ 57,255\\ 21,290\\ 34,422\\ \end{array}$	57,363 2,156,882 297,027 2,892,115 470,860 153,443 267,135	93% 100 103 102 98 99 103	93% 102 97 103 97 99 103
20	Total	4,008	750.212	6,294.825	101%	102%
30         31         32         33         34         35	Region Delaware Dist. Columbia New Jersey New York Pennsylvania	57 45 206 1,076 3,467 4,066	7,276 4,492 28,971 138,637 497,000 628,375	$\begin{array}{r} 64,215\\31,545\\209,509\\1,017,848\\3,809,936\\5,423,786\end{array}$	95% 92* 100 92 95 102	102% 112 93 92 98 101
	Total	8,917	1,304,751	10,556,839	98%	98%
40 41 42 43 43 44 45 46 47	Region Illinois Indiana Kentucky Michigan Ohio Wisconsin West Virginia	142 4,347 2,030 324 2,628 3,048 1,163 514	33,322 690,963 296,242 34,289 412,602 590,102 212,837 56,719	$\begin{array}{r} 339,645\\ 5,354,190\\ 2,743,237\\ 272,961\\ 4,273,366\\ 5,284,639\\ 2,181,481\\ 440,749\end{array}$	115% 90 105 96 114 103 112 98	96% 93 104 96 115 106 113 98
	Total	14,196	2,327,076	20,890,268	102%	103%
50	Region Iowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota	76 877 551 655 1,027 412 105 105	24,907 97,385 52,342 82,640 148,821 44,428 8,561 9,354	275,611 950,109 516,795 913,470 1,303,422 450,141 71,966 93,858	118% 109 106 115 99 112 99 98	119% 109 118 115 99 112 99 98
	Total	3,808	468,438	4,575,372	107%	109%

Location	STATE OR		Size Groups 0-	7	CLAIMS	f Actual to 1957 : Tabular
Code	REGION	Number of Experience Units	Maximum Sur- gical Indemnity Exposed	Actual Claims	Size Groups 0-7	All Size Groups
60 61	Region Colorado	26 188	9,158 31,379	117,573 335,944	130% 123	122% 121
62	Idaho	109	12,365	131,087	119	119
63	Montana	55	9,314	107,234	114	126
64	Nevada	61	8,195	72,609	94	94
65	Utah	240	31,950	343,516	122	122
66	Wyoming	32	3,980	42,891	110*	110
	Total	711	106,341	1,150,854	119%	120%
70	Region	39	10,057	99,880	115%	115%
71	California	3,091	420,443	4,296,983	117	123
72	Oregon	195	20,861	221,314	119	120
73	Washington	199	30,964	309,231	113	105
	Total	3,524	482,325	4,927,408	117%	121%
80	Region	121	26,620	245,917	110%	112%
81	Arizona	257	36,039	400,549	125	130
82	Arkansas	443	50,410	473,629	111	111
83	Louisiana	655	64,559	681,433	118	120
84	New Mexico	170	23,643	249,365	99	107
85	Oklahoma	502	55,223	562,748	115	118
86	Texas	2,515	347,611	3,439,964	117	117
	Total	4,663	604,105	6,053,605	116%	117%
90	Region	136	34,983	294,599	98%	97%
91	Alabama	329	72,029	682,744	111	114
92	Florida	1,128	133,137	1,300,767	112	112
93	Georgia	838	105,520	890,230	104	106
94	Maryland	730	109,835	872,556	97	- 99
95	Mississippi	301	31,155	301,888	105	105
96	North C <b>ar</b> olina	1,112	119,010	1,075,805	105	107
97	South Carolina	279	36,258	311,785	114	114
98	Tennessee	314	52,019	457,367	119	118
99	Virginia	1,182	168,680	1,368,945	100	107
	Total	6,349	862,626	7,556,686	105%	107%
	All others†	2,147	513,155	4,821,441	106%	112%
	Total All Loca- tions	48,323	7,419,029	66,827,298	105%	106%

TABLE 14—Continued

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

 $\dagger$  Less than 75% of employees in one state or region.

### 1957 SURGICAL TABULAR ANNUAL CLAIM COSTS PER BASIC UNIT INDICATED

Percent	BASIC U	NIT
FEMALE	\$150 Schedule	\$200 Schedule
		ee, with ll Benefits
Male	\$ 2.87	\$ 4.30
<11%	3.12 3.61 4.11 4.60 5.09 5.60 6.09 6.59 7.08 7.57 7.82	4.56 5.09 5.62 6.14 6.67 7.21 7.74 8.26 8.79 9.32 9.58
		ent, with al Benefits
	\$12.43	\$15.02
		ent, No al Benefits
	<b>\$</b> 7.67	\$10.26

the expected variation in costs by area. On the other hand, the tabulars do recognize that for any given dollar maximum miscellaneous fee benefit the average benefit payable will increase as the dollar amount of daily benefit increases. For example, for a \$200 maximum miscellaneous fee benefit the assumed average benefit for a male employee is \$76.33 for a \$10 daily benefit provided and \$83.16 for a \$20 daily benefit provided. Thus, for the 1957 Tabulars to produce reasonably accurate miscellaneous fee claims costs, it is necessary that the amount of daily benefit provided be reasonably related to the level of hospital room and board charges. The area variations in experience shown in Table 9 may be due to variations in the relationship of miscellaneous charges to room and board charges in an area, variations in the relationship between the amount of daily benefit provided and the level of room and board charges in the area, variations in frequency or average duration of hospital confinement, or a combination of these factors. However, since the daily room and board benefit provided is limited to a dollar amount and the miscellaneous fee benefits provided have aggregate dollar maximums, it is possible that a substantial part of the variations in experience for area shown in Table 9 is due to the frequency of hospital confinement.

The volume of hospital experience shown for California is relatively small and may be atypical because of the exclusion of employee hospital plans which are integrated with California UCD hospital benefits.

The results of the area analysis can be presented only as a composite experience of groups having various industry classifications, distributions of exposure by age and different types of claim administration. Moreover, it should be understood that the experience of any particular area is affected by various social and economic factors and that variations in experience may be chance fluctuations resulting from an insufficient volume of experience. The analysis indicates a higher claim level in the Plains States, the Mountain States and the Southwestern States. A lower claim level is indicated in the Middle Atlantic States and the New England States. The experience of some states within a given region varies considerably from the region average. There may also be marked variations within a given state.

#### SURGICAL

The basic results of the study of Surgical Expense insurance are presented in Table 11 for the three latest policy years combined.

The trend of experience for employee and dependent experience is indicated in Table 12 for each of the four latest policy years in the form of ratios of actual to 1957 Tabular claims. Experience under the \$200 Schedule with obstetrical benefits shows a steady increase in claim costs for 1958 and 1959 over 1957, while the 1960 experience is slightly below that for 1959. This may indicate a lower level of experience in 1960 or may be due to an accidental fluctuation during 1959 or 1960.

Ratios of actual to tabular claims for employee plans grouped according to percentage female are shown in Table 13. The ratios in this table, although subject to variations other than those of male and female claim costs, indicate the 1957 Surgical Tabular for male employee is relatively low while that for female employee is relatively high.

Table 14 contains an analysis of surgical experience by state corresponding to Table 9 for hospital experience. Many of the warnings given with respect to the interpretation of the hospital experience by area also apply to the surgical experience. In addition, the Committee would like to point out that the tabulars do not include a factor for variations in claim cost by area or by amount of schedule maximum.

The surgical analysis by area indicates a higher claim level in the Mountain States, the Pacific States and the Southwestern States. A lower claim level is indicated in the Middle Atlantic States and the New England States. The experience of some states within a given region varies considerably from the region average. There may also be marked variations within a given state.

The surgical variations in ratios of actual to tabular claims by area are probably due primarily to the variation in claim frequencies, since nearly all claim payments are for the maximum amount allowed for the procedure performed. If frequencies are the same, minor variations in the ratios by area may still occur because of differing frequency distributions of procedures performed, provided such distributions result in different average benefits. Minor variations may also be caused by the relative level of schedule maximums purchased for a given area.