## TRANSACTIONS OF SOCIETY OF ACTUARIES 1964 REPORTS

# REPORT OF THE COMMITTEE ON EXPERIENCE UNDER GROUP HEALTH INSURANCE

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

THIS is the seventeenth 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 and excludes the experience of insured groups outside the United States, of trusteeship and association cases insuring employees of the member employers and of union cases, whether or not insurance depends on continued employment. The data for Group Weekly Indemnity insurance exclude the experience of plans written under State Cash Sickness laws.

While most of the report deals with the combined experience of non-maternity and maternity benefits, the Committee has been able to secure, for some but not all the groups, a separation of the experience into its nonmaternity and maternity components. This separate experience is shown for the first time in Tables 2, 5, and 9. The tables show combined nonmaternity and maternity unless otherwise designated. Table 2 introduces experience under Weekly Indemnity plans that provide no maternity benefits. Tables 5 and 9 introduce the nonmaternity portion of the experience under Hospital and Surgical plans which differ from those normally studied. Such plans are designated as plans with "other" maternity benefits. Another addition is the 1963 experience of the \$300 surgical schedule, which is based upon Mr. Morton D. Miller's 1957 "Schedule of Relative Values of Surgical Procedures," published in TSA, X, 465.

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 classifications; tables covering these plans are headed "All Industries."

The tables in this report show the experience for all exposure size groups combined, or, to minimize the effect that jumbo groups might have upon the ratio of actual to tabular claims, excluding the largest exposure size groups. In the latter instance, experience is derived from groups with exposures limited as shown below:

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, \$200, or \$300 maximum benefit schedules.

### Ratios of Actual to Tabular Claims

The results of the study are presented in the form of ratios of actual to tabular claims. The tabular factors as described and published in the 1961 and 1962 Reports have been expanded where necessary to reflect more liberal benefits, additional plans, and separate maternity benefits.

1957 Surgical tabulars for the \$300 schedule were derived by applying appropriate nonmaternity factors from Mr. Miller's Table R, TSA, X, 503, to the 1957 Surgical tabulars for the \$200 schedule. The maternity portion of the \$300 schedule tabular is 150 per cent of the \$200 schedule tabular. The tabulars for the \$300 schedule are shown in Table 12.

Current experience confirms the Committee's earlier views regarding certain characteristics of the tabulars, namely, that the relationship between male and female tabulars is satisfactory for weekly indemnity and hospital, but the male surgical tabular is relatively low and the female surgical tabular is relatively high; that the hospital tabulars yield consistent results when the actual to tabular ratios are examined by the amounts of daily benefit provided; and that there is a tendency for the ratio of actual to tabular to increase as the surgical maximum benefit increases.

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 characteristic of the experience, would indicate that caution should be used when interpreting the data contained in these reports.

### 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 1958, 1959, 1960, 1961, 1962, and 1963. 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 appears to be December, except for the 1958 experience which was September, 1957. 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.

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

Members of the Society may obtain "Instructions to Contributing Companies," used to prepare contributions for these studies, by writing the chairman of the Committee on Experience under Group Health Insurance.

#### WEEKLY INDEMNITY

The basic results of the study of Weekly Indemnity insurance are presented in Table 1, which includes all size groups for the three latest policy years combined. The exposure unit is one dollar of weekly benefit.

Experience for the 1963 policy year on groups with less than \$40,000 of Weekly Indemnity exposed is presented in Table 2. The experience of plans with six weeks maternity benefits is shown on a combined basis and separately for the nonmaternity and maternity components of a portion of this experience. The experience of plans with no maternity benefits is shown separately. The nonmaternity experience of plans with no maternity benefits appears to be more favorable than the nonmaternity experi-

ence of plans with six weeks maternity benefits. This difference may be due to the difference in the age of the group or other factors not measured by the tabular. The maternity portion of the 1947–49 Weekly Indemnity Tabular published in the 1962 Reports does not include any adjustment for the declining birth rate since about 1957, as indicated by statistics published by the Department of Health, Education, and Welfare. As

TABLE 1
GROUP WEEKLY INDEMNITY INSURANCE
WITH SIX WEEKS MATERNITY BENEFIT
ALL SIZE GROUPS, NONRATED INDUSTRIES
COMBINED 1961-63 POLICY YEARS' EXPERIENCE, BY PLAN

Plan	Number of Experience Units	Weekly Indemnity Exposed	Actual Claims	Ratio of Actual to 1947-49 Weekly Indemnity Tabular
1-4-13	2,289	12,532,590	8,726,031	100%
4-4-13	312	1,592,330	851,184	81
1-8-13	8,492	41,708,910	25,491,709	97
8-8-13	1,196	11,822,780	7,042,091	96
Total, 13-week plans: All size groups <\$40,000 W.I.*	12,289	67,656,610	42,111,015	97%
	12,058	45,552,490	27,221,529	93
1-4-26.	527	9,494,430	7,806,960	101%
4-4-26.	86	3,292,580	3,096,259	115
1-8-26.	3,091	52,345,850	42,236,058	110
8-8-26.	436	22,583,120	17,051,470	106
Total, 26-week plans: All size groups <\$40,000 W.I.*	4,140	87,715,980	70,190,747	108%
	3,814	25,373,600	18,461,537	96
Total, all plans: All size groups <\$40,000 W.I.*	16,429	155,372,590	112,301,762	104%
	15,872	70,926,090	45,683,066	94

<sup>\*</sup> Groups with less than \$40,000 of Weekly Indemnity.

might be expected, the maternity tabulars appear to be too high when compared to the 1963 policy year maternity experience.

Ratios of actual to tabular claims for the six latest policy years are summarized in Table 3. These ratios indicate that combined maternity and nonmaternity experience (excluding experience on groups with no maternity) has remained fairly constant over the period for all plans.

The Committee wishes to point out that the 1947-49 Weekly Indemnity Tabular is based on rather old continuation data and may, therefore,

TABLE 2

GROUP WEEKLY INDEMNITY INSURANCE

GROUPS WITH LESS THAN \$40,000 WEEKLY INDEMNITY EXPOSED, NONRATED INDUSTRIES

1963 POLICY YEAR EXPERIENCE, BY PLAN

	1	Nonmaternity A Combined E	AND MATERNITY XPERIENCE*	r	Nonmaternity and Maternity Separate Experience*						
Plan	Number of	of Weekly	Actual	Ratio of Actual to 1947-49 Number of	of Weekly	Nonmate	ernity	Maternity			
	Experi- ence Units	Indemnity Exposed	Claims	Weekly Indemnity Tabular	Experi- ence Units	ence Exposed	Actual Claims	Ratio A/T	Actual Claims	Ratio A/T	
		Plans with Six Weeks Maternity Benefit									
13-week: 4th-day sickness	791 2,797	2,923,730 11,387,430	1,806,860 6,957,397	92% 96	616 1,558	2,113,220 6,393,110	1,275,082 3,734,747	96% 103	68,935 323,336	70% 65	
Total	3,588	14,311,160	8,764,257	95%	2,174	8,506,330	5,009,829	101%	392,271	66%	
26-week: 4th-day sickness 8th-day sickness	181 1,012	1,451,710 6,813,590	1,146,670 4,895,535	97% 96	126 583	890,880 3,832,090	680,018 2,696,998	98% 101	28,119 137,387	76% 66	
Total	1,193	8,265,300	6,042,205	96%	709	4,722,970	3,377,016	101%	165,506	68%	
		<u> </u>		Plai	ns with No I	Maternity Bene	fits	·	<u>`</u>	·	
13-week: 4th-day sickness 8th-day sickness					185 1,923	819,730 6,206,400	486,569 3,427,621	91% 96			
Total					2,108	7,026,130	3,914,190	95%			
26-week: 4th-day sickness 8th-day sickness					90 888	385,300 3,487,990	332,132 2,259,792	110% 92			
Total					978	3,873,290	2,591,924	94%			

<sup>\*</sup> The separate experience exposure is less than the combined experience exposure because separate experience is not available for all groups.

be unsuitable for purposes other than the measurement of trends based on the plans studied by the Committee.

#### HOSPITAL

The basic results of the study of Hospital Expense insurance are presented in Table 4 for plans grouped according to nonmaternity room-and-board duration and miscellaneous-fee benefit. The experience shown is for all size groups for the three latest policy years.

Experience for the 1963 policy year on groups with less than \$10,000 of daily benefit exposed is presented in Table 5. Experience of plans with

TABLE 3

GROUP WEEKLY INDEMNITY INSURANCE
WITH SIX WEEKS MATERNITY BENEFIT
GROUPS WITH LESS THAN \$40,000 WEEKLY INDEMNITY EXPOSED
NONRATED INDUSTRIES
RATIOS OF ACTUAL CLAIMS TO 1947-49 WEEKLY INDEMNITY TABULAR
LATEST SIX POLICY YEARS, BY PLAN

Plan	1958	1959	1960	1961	1962	1963
l3-week plans: 4th-day sickness 8th-day sickness	96% 90	94% 90	96% 92	92% 93	91% 91	92% 96
Total	91%	91%	93%	93%	91%	95%
26-week plans: 4th-day sickness 8th-day sickness	99% 95	99% 97	95% 98	95% 95	94% 98	97% 96
Total	96%	97%	97%	95%	97%	96%

maternity benefits is shown on a combined basis and separately for the nonmaternity and maternity components of a portion of this experience. For the employee coverage, the combined experience is a mixture of  $10 \times$  and  $14 + n \times$  maternity, while the separate experience is essentially all  $10 \times$  maternity. The nonmaternity experience of plans with no maternity or "other" maternity benefits is shown separately. The maternity portion of the 1957 Hospital Tabular has not been adjusted to reflect the declining birth rate, as indicated in the discussion of Weekly Indemnity experience, and the maternity ratios of actual to tabular indicate that the maternity tabular appears to be too high when compared to the 1963 policy year maternity experience.

Ratios of actual to tabular claims for the six latest years for groups

TABLE 4 EMPLOYEE AND DEPENDENT GROUP HOSPITAL EXPENSE INSURANCE ALL SIZE GROUPS, EMPLOYEE-RATED INDUSTRIES EXCLUDED COMBINED 1961-63 POLICY YEARS' EXPERIENCE, BY PLAN

Plan	Number of Experience Units	Daily Benefit Exposed	Actual Claims	Ratio of Actual to 1957 Hospital Tabular
Employee With maternity benefits*				
31 day: 10× 15×	2,938 1,051	4,975,163 1,937,810	9,221,914 3,722,344	107% 109
20×	2,597 905	4,223,533 1,326,768	8,669,350 3,096,451	114 122
70 day: 10× 15×	543 395	1,012,392 1,172,420	2,008,747 2,475,005	115 123
$20 \times \dots$ $20 \times +75\%$ of excess 120 day:	2,691 1,403	4,658,085 2,151,347	9,824,076 5,160,122	117 125
10×	20 23	49,503 37,205	98,840 81,355	122 120
$20 \times \dots 20 \times +75\%$ of excess	229 156	703,776 365,317	1,428,690 872,615	117 126
Total	12,951	22,613,319	46,659,509	115%
Dependent With maternity benefits† 31 day:		l		
10× 15×	2,522 1,114	3,003,677 1,212,573	11,651,134 5,295,695	111% 120
$20 \times \dots $ $20 \times +75\%$ of excess 70 day:	3,220 1,107	3,458,513 1,105,153	15,625,542 5,375,778	124 125
10× 15×	482 383	721,878 577,725	2,653,300 2,663,280	105 127
$20 \times \dots $ $20 \times +75\%$ of excess 120 day:	3,464 1,751	3,768,272 1,990,960	17,269,907 10,015,843	127 131
10× 15×	22 31	45,934 60,683	161,995 258,646	105 122
$20 \times \dots 20 \times +75\%$ of excess	330 219	546,831 341,886	2,489,053 1,840,078	130 142
Total	14,645	16,834,085	75,300,251	123%
With no maternity benefits				
31 day; 10× 70 day;	297	507,837	1,666,843	121%
10×	65	276,822	947,815	130
Total	362	784,659	2,614,658	124%

<sup>\*</sup>  $10 \times$  or  $14 + n \times$ . Plans with "other" maternity benefits are excluded. †  $10 \times$ , subject to a nine-month waiting period. Plans with "other" maternity benefits are excluded.

TABLE 5

EMPLOYEE AND DEPENDENT HOSPITAL EXPENSE INSURANCE
GROUPS WITH LESS THAN \$10,000 DAILY BENEFIT EXPOSED, EMPLOYEE-RATED INDUSTRIES EXCLUDED
1963 POLICY YEAR EXPERIENCE, BY PLAN

	1	Nonmaternity Combined I	and Maternit Experience*	Y		Non	maternity ani Separate Expi	MATERNIT	Y	
Plan	Number of	Daily	Actual	Ratio of Actual to	Number of	Daily	Nonmate	rnity	Maternity	
	Experi- ence Units	Beneht Exposed	Claims	1957 Hospital Tabular	Experi- ence Units	Benefit Exposed	Actual Claims	Ratio A/T	Actual Claims	Ratio A/T
			Em	ployee Plans	with 10× a	and 14+n× M	aternity Benefit	s	···	•
10× 31 day 70 day 120 day	751 175 7	971,932 257,055 17,698	1,835,161 500,642 39,157	110% 114 137	371 53	488,346 89,896	836,642 163,684	114% 120	55,025 13,731	70% 98
Total	933	1,246,685	2,374,960	111%	424	578,242	1,000,326	115%	68,756	74%
15× 31 day	298 135 7	398,936 201,033 8,040	822,244 417,695 18,285	118% 117 117	208 66 2	272,335 100,613 3,381	524,745 188,373 7,559	119% 119 144	22,866 10,526 504	65% 101 65
Total	440	608,009	1,258,224	117%	276	376,329	720,677	119%	33,896	73%
20× 31 day 70 day 120 day	793 958 92	1,140,868 1,313,971 172,443	2,410,133 2,750,917 344,774	120% 117 115	525 563 44	782,142 745,977 87,546	1,532,149 1,440,290 156,287	121% 118 114	76,060 78,017 9,860	78% 81 84
Total	1,843	2,627,282	5,505,824	118%	1,132	1,615,665	3,128,726	119%	163,937	80%
20× +75% of excess	248 383 43	343,815 544,009 66,322	841,366 1,358,319 152,156	127% 130 125	188 230 16	275,981 332,208 30,639	647,657 770,506 60,757	132% 129 112	34,011 34,394 1,004	77% 87 47
Total	674	954,146	2,351,841	128%	434	638,828	1,478,920	130%	69,409	81%
				Employee P	lans with "(	Other" Materni	ty Benefits†		1	<u> </u>
Total					146	231,205	447,964	120%		

<sup>\*</sup> The separate experience exposure is less than the combined experience exposure because separate experience is not available for all groups.

<sup>†</sup> Nonmaternity experience only submitted for these plans.

TABLE 5-Continued

	1		and Maternit Experience*	Y		No	nmaternity an Separate Exp		ry	
Plan	Number	Daily		Ratio of Actual to	Number	Daily	Nonmate	ernity	Materi	nity
	Experi- ence Units	Benefit Exposed			Experi- ence Units	Benefit Exposed	Actual Claims	Ratio A/T	Actual Claims	Ratio A/T
				Depender	t Plans with	10× Maternit	y Benefits			
10× 31 day	760 169 7	745,766 223,235 14,104	2,805,724 863,036 51,215	108% 112 110	435 70 1	403,968 109,178 2,829	1,262,520 360,924 9,576	117% 126 137	273,468 67,187 2,332	82% 76 104
Total	936	983,105	3,719,975	109%	506	515,975	1,633,020	119%	342,987	81%
15× 31 day 70 day 120 day	351 146 12	318,685 175,519 24,293	1,393,795 727,095 106,479	121% 117 129	235 82 3	2:5,574 93,512 3,850	778,515 338,360 11,707	129% 136 121	151,596 74,497 2,270	86% 99 75
Total	509	518,497	2,227,369	120%	320	3-2.936	1,128,582	131%	228,363	90%
20× 31 day 70 day 120 day	1,098 1,435 158	1,105,721 1,259,399 189,169	5,081,299 5,845,132 862,580	127% 129 130	666 779 68	7.1,439 682,033 73,403	2,654,985 2,561,404 261,410	135% 136 136	566,257 517,017 49,790	98% 94 86
Total	2,691	2,554,289	11,789,011	129%	1,513	1,466,875	5,477,799	136%	1,133,064	96%
20× +75% of excess 31 day	307 551 77	308,257 554,707 85,018	1,522,488 2,966,108 422,896	129% 139 134	212 272 25	225,566 291,588 45,307	934,757 1,361,219 207,514	139% 155 156	167,621 246,216 39,114	91% 104 107
Total	935	947,982	4,911,492	135%	509	502,461	2,503,490	149%	452,951	99%
			<u>'</u>	Dependent	Plans with "	Other ' Matern	ity Benefits†	·	<u> </u>	
Total					236	221,043	770,778	129%		
				Depender	nt Plans witl	h No Maternity	Benefits			
Total					128	124,718	427,145	125%		

<sup>\*</sup> The separate experience exposure is less than the combined experience exposure because separate experience is not available for all groups.

<sup>†</sup> Nonmaternity experience only submitted for these plans.

with maternity experience (except for a small amount of dependent experience with no maternity benefits) are summarized in Table 6. The employee experience continues to show a substantial increase in claim cost by year of experience. The dependent experience, although irregular, also indicates increasing claim costs by year of experience. Because of the age of the data and the substantial increases in claim cost which have occurred in the past, caution should be used when projecting the data contained in these reports to estimate current or future claim costs.

The ratios in Table 6 also indicate that the use of the 1957 Hospital Tabular results in a higher ratio of actual to tabular claims as the size of the

TABLE 6

EMPLOYEE AND DEPENDENT GROUP HOSPITAL EXPENSE INSURANCE
GROUPS WITH LESS THAN \$10,000 DAILY BENEFIT EXPOSED
EMPLOYEE-RATED INDUSTRIES EXCLUDED
RATIOS OF ACTUAL CLAIMS TO 1957 HOSPITAL TABULAR
LATEST SIX POLICY YEARS, BY PLAN

Plan	1958	1959	1960	1961	1962	1963
Employee* 10×		102%	104% 107	106% 106	107% 109	111% 117
$20\times \dots 20\times +75\%$ of excess.	99	108	111 116	112 119	115 124	118 128
Dependent*  10×		104	106 113	109 116	112 122	110 120
15×	107	116	116 122	121 129	127 129	120 129 135

<sup>\*</sup> Employee with 10× or 14 + n× maternity; dependent with 10× maternity or no maternity. Plans with "other" maternity benefits are excluded.

miscellaneous benefit increases. The 1957 Hospital Tabular is based upon an annual frequency of claim which does not vary by plan and an average miscellaneous benefit which does vary by plan. This average benefit is based upon an actual distribution of miscellaneous benefit charges. No direct evidence is available to indicate whether the variations in actual to tabular by miscellaneous benefit are the results of inflation, the average miscellaneous benefit assumed by the tabular, an increased frequency of claim under plans with larger miscellaneous benefits, or of other factors.

Table 7 shows the results of an analysis of employee plus dependent experience for all plans by state for the three latest policy years combined. The experience is presented for all exposure size groups combined and for groups with exposures of less than \$10,000 of daily benefit. The groups included in the experience for any state are those groups with 75 per cent

TABLE 7

EMPLOYEE AND DEPENDENT GROUP HOSPITAL EXPENSE INSURANCE
EMPLOYEE-RATED INDUSTRIES EXCLUDED
COMBINED 1961-63 POLICY YEARS' EXPERIENCE, BY STATE

·				ESS THAN \$10,000 EFIT EXPOSED	)	All Size
LOCA- TION CODE	STATE OR REGION	Number of Expe- rience Units	Daily Benefit Exposed	Actual Claims	Ratio A/T*	GROUPS, RATIO A/T*
	Total, all loca- tions	27,891	30,982,189	97,841,943	120%	120%
20	Region Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont Total	66 613 169 1,257 185 26 134 2,450	102,119 908,547 258,350 1,570,238 332,928 32,216 187,974	268,356 2,477,462 779,453 4,270,869 804,317 103,345 467,789 9,171,591	113% 110 119 112 102 121 110	116% 113 107 112 107 121 110
30 31 32 33 34 35	Region Delaware Dist. of Columbia New Jersey New York Pennsylvania Total	53 18 77 688 2,016 2,484 5,336	68,955 36,115 109,791 608,686 2,085,011 2,747,872 5,656,430	196,566 94,969 307,274 1,549,552 5,348,747 7,836,372 15,333,480	110% 110 121 103 106 113 	110% 110 121 102 109 114 111%
40 41 42 43 44 45 46	Region Illinois Indiana Kentucky Michigan Ohio Wisconsin West Virginia Total	258 2,235 1,308 207 1,416 1,650 663 404	294,365 2,427,408 1,601,559 180,965 1,678,729 2,303,406 897,222 348,874	1,012,159 7,896,238 4,721,662 524,878 5,603,330 7,234,188 3,025,924 1,227,223	129% 120 111 114 134 120 125 125	134% 118 112 123 131 120 122 125
50 51 52 53 54 55 56	Region Iowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota	59 508 384 321 734 289 40 53	75,761 416,293 333,247 275,824 615,235 276,210 33,741 18,906 2,045,217	259,504 1,593,786 1,203,377 1,068,966 2,156,370 926,816 130,296 85,270 7,424,385	125% 131 130 133 123 124 142 145 128%	125% 131 140 128 128 124 142 145 130%

<sup>\*</sup> Ratio of actual to 1957 Hospital Tabular. Note that these ratios are not expressed as a percentage of the national average. For the distribution of experience in this table, the national average is shown in "Total, all locations."

TABLE 7—Continued

				ESS THAN \$10,000	)	
			DAILY BENI	EFIT EXPOSED		
Loca-	STATE OR		· · · · · · · · · · · · · · · · · · ·		<del></del>	ALL SIZE GROUPS,
TION	REGION	Number				RATIO
Code	ACEUION	of Expe-	Daily	Actual	Ratio	A/T*
		rience	Benefit	Claims	A/T*	21/ 1
		Units	Exposed	-	, -	
60	Region	7	6,340	17,674	137%†	137%†
61	Colorado	105	83,639	306,801	143	143
62	Idaho	61	56,851	175,915	109	109
63	Montana	19	33,975	92,074	104	104
64	Nevada	18	21,802	77,014	135	143
65	Utah	66	81,243	208,259	107	106
66	Wyoming	6	4,842	16,735	126†	126†
	Total	282	288,692	894,472	120%	120%
70	Region	10	12,155	38,183	111%†	117%
71	California	405	436,842	1,376,235	117	122
72	Oregon	73	35,502	91,138	99	99
73	Washington	91	98,990	262,572	95	92
	Total	579	583,489	1,768,128	112%	116%
80	Region	79	73,742	277,258	142%	142%
81	Arizona	124	145,289	572,794	147	142
82	Arkansas	365	317,394	1,117,071	124	122
83	Louisiana	533	351,533	1,499,288	151	150
84	New Mexico	68	50,946	205,167	129	145
85	Oklahoma	310	207,746	825,177	131	133
86	Texas	1,372	1,218,604	4,670,200	136	136
	Total	2,851	2,365,254	9,166,955	137%	137%
90	Region	179	337,277	1,097,082	115%	115%
91	Alabama	213	165,957	649,962	144	144
92	Florida	627	682,184	2,403,574	128	133
93	Georgia	802	811,605	2,669,769	123	123
94	Maryland	465	513,467	1,438,369	109	109
95	Mississippi	208	136,511	570,682	144	144
96 97	North Carolina	939 223	826,905	2,642,914	118 121	120 122
98	South Carolina Tennessee	430	216,638 458,284	706,159 1,635,793	131	134
99	Virginia	869	751,607	2,319,010	119	113
	Total	4,955	4,900,435	16,133,314	122%	122%
01	Hawaii	16	43,569	169,029	101%	100%
02	Alaska	15	18,194	34,689	87†	87†
	Total, States and Regions	27,013	29,026,180	91,341,645	120%	120%
	All other‡	878	1,956,009	6,500,298	119%	121%
			-,,	-,,		,0

<sup>†</sup> Less than \$50,000 of tabular claims. ‡ Less than 75 per cent of employees in one state or region.

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 per cent 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 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 the 1957 Hospital Tabular to produce reasonably accurate miscellaneous-fee claim costs, it is necessary that the amount of daily benefit provided be reasonably related to the level of hospital roomand-board charges. The area variations in experience shown in Table 7 may be due to variations in the relationship of miscellaneous charges to room-and-board charges in an 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 7 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 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 8 for the three latest policy years combined.

Experience for the 1963 policy year on groups with less than 2,000 surgical units exposed is presented in Table 9. Separate obstetrical and nonobstetrical experience is shown as in Tables 2 and 5 for weekly indem-

nity and hospital. This table includes, for the first time, the experience of the \$300 surgical schedule, with tabular claims based upon the values shown in Table 12. The experience of the \$300 schedule is not included in any of the other tables in this report. As was noted with respect to the weekly indemnity and hospital maternity experience, the obstetrical por-

TABLE 8

EMPLOYEE AND DEPENDENT GROUP SURGICAL EXPENSE INSURANCE
ALL SIZE GROUPS, ALL INDUSTRIES
COMBINED 1961-63 POLICY YEARS' EXPERIENCE, BY PLAN

Plan	Number of Experience Units	Maximum Indemnity Exposed per \$150 or \$200 Basic Units	Actual Claims	Ratio of Actual to 1957 Surgical Tabular
Employee With obstetrical benefits*				
\$150 schedule \$200 schedule	4,276 17,357	1,187,009 4,848,788	5,261,911 28,890,507	111% 111
Total	21,633	6,035,797	34,152,418	111%
Dependent With obstetrical benefits* \$150 schedule	2,612	595,830	7,669,239	104%
\$200 schedule	18,050	3,227,560	52,299,053	108
Total	20,662	3,823,390	59,968,292	107%
No obstetrical benefits \$150 schedule	348	90,237	838,059	121%
\$200 schedule	3,309	489,131	6,479,445	129
Total	3,657	579,368	7,317,504	128%

<sup>\*</sup> Plans with "other" obstetrical benefits are excluded. Dependent obstetrical benefits are subject to a nine-month waiting period.

tion of the 1957 surgical tabulars appears to be too high when compared to the 1963 policy year obstetrical experience.

Ratios of actual to tabular claims for the six latest years are summarized in Table 10. A modest trend toward higher claim levels on plans with obstetrical benefits is indicated. Exposures and claims are not reproduced in this table since they are available elsewhere in this and earlier reports. The 1961 exposure for "Dependent, with Obstetrical Benefits" under the \$200 schedule, as published in Table 8 of the 1963 Reports, should be corrected to read "795,890."

#### TABLE 9

## EMPLOYEE AND DEPENDENT SURGICAL EXPENSE INSURANCE GROUPS WITH LESS THAN 2,000 SURGICAL UNITS EXPOSED, ALL INDUSTRIES 1963 POLICY YEAR EXPERIENCE, BY PLAN

		Nonobstetrical Combined	and Obstetrical Experience*	•	Nonobstetrical and Obstetrical Separate Experience*						
Plan	Number of	Maximum		Ratio of Actual to	Number of	Maximum	Nonobste	trical	Obstetrical		
	Experience Units	Surgical Indemnity Exposed	Actual Claims	1957 Surgical Tabular	Experience Units	Surgical Indemnity Exposed	Actual Claims	Ratio A/T	Actual Claims	Ratio A/T	
				Employee P	lans with Sta	ndard Obstetric	al Benefits				
\$150 \$200 \$300	1,149 5,262 793	231,521 1,069,372 139,444	1,060,442 6,515,001 1,079,631	111% 111 107	525 2,769 549	85,584 541,277 111,619	347,386 2,953,752 761,732	120% 114 108	53,863 281,554 85,328	78% 81 77	
Total	7,204	1,440,337	8,655,074	111%	3,843	738,480	4,062,870	113%	420,745	80%	
			·	Employee P	lans with "Ot	her" Obstetrica	Benefits†	<u>' </u>			
Total					186	32,591	164,542	107%			
		<u> </u>	·	Dependent I	Plans with Sta	ndard Obstetric	al Benefits	·	<u> </u>	·	
\$150 \$200 \$300	776 6,225 1,225	140,515 909,361 131,897	1,798,420 14,732,675 3,048,012	103% 108 114	358 3,151 648	54,492 434,494 91,627	501,070 5,240,017 1,509,092	120% 118 125	186,351 1,754,761 587,679	72% 85 90	
Total	8,226	1,181,773	19,579,107	108%	4,157	580,613	7,250,179	119%	2,528,791	85%	
			·	Dependent I	Plans with "O	ther" Obstetric	al Benefits†	<u>'                                    </u>	··		
Total					266	30,826	384,567	122%			
		···		Depender	nt Plans with	No Obstetrical	Benefits	·	·		
\$200					103 1,112 274	19,830 117,461 18,650	187,778 1,492,588 326,502	123% 124 133			
Total					1,489	155,991	2,006,868	125%			

<sup>\*</sup>The separate experience exposure is less than the combined experience exposure because separate experience is not available for all groups.
† Nonobstetrical experience only submitted for these plans.

Table 11 contains an analysis of surgical experience by state for the three latest policy years corresponding to Table 7 for hospital experience. The experience of all plans except the \$300 schedule is included in Table 7. Some of the warnings given with respect to the interpretation of hospital experience by area also apply to the surgical experience. The Committee would like to point out that the tabulars do not include a factor for variations in claim costs 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 variations in claim frequencies, since nearly all claim payments are for the maximum amount allowed by 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.

TABLE 10

EMPLOYEE AND DEPENDENT SURGICAL EXPENSE INSURANCE
GROUPS WITH LESS THAN 2,000 SURGICAL UNITS EXPOSED, ALL INDUSTRIES
RATIOS OF ACTUAL CLAIMS TO 1957 SURGICAL TABULAR
LATEST SIX POLICY YEARS, BY PLAN

Plan	1958	1959	1960	1961	1962	1963
Employee						
With obstetrical bene-	i					
fits*	40000	4000	4000	40.00	40501	44404
\$150 schedule	103%	109%	109%	106%	105%	111%
\$200 schedule	103	107	106	107	108	111
De pendent			. Ì	1	1	
With obetetrical bene-		İ				
fits*				1		
\$150 schedule	99	104	100	101	100	103
\$200 schedule	102	104	104	107	107	108
With no obstetrical bene-						
fits						
\$150 schedule	107	104	123	122	124	123
\$200 schedule	119	124	116	123	129	124

<sup>\*</sup> Plans with "other" obstetrical benefits are excluded.

TABLE 11

EMPLOYEE AND DEPENDENT GROUP SURGICAL EXPENSE INSURANCE
ALL INDUSTRIES
COMBINED 1961-63 POLICY YEARS' EXPERIENCE, BY STATE

•		Groups with Less than 2,000 Surgical Units Exposed				ALL SIZE
Loca- tion Code	STATE OR REGION	Number of Expe- rience Units	Maximum Surgical Indemnity Exposed	Actual Claims	Ratio A/T*	GROUPS, RATIO A/T*
	Total, all locations	45,709	7,312,704	72,086,465	108%	110%
20	Region Connecticut Maine Massachusetts New Hampshire Rhode Island Vermont	146 1,013 184 1,752 221 87 189	29,140 219,529 30,680 292,699 54,954 11,768 28,000	249,098 2,091,265 278,167 2,650,135 442,741 86,794 237,252	95% 101 108 102 93 106 104	97% 101 108 105 94 106 104
	Total	3,592	666,770	6,035,452	101%	103%
30	Region Delaware Dist. of Columbia New Jersey New York Pennsylvania Total	116 22 142 946 3,088 3,686	32,055 3,595 25,938 117,838 463,418 582,374	299,871 34,396 211,226 1,042,954 4,043,036 5,291,131 10,922,614	92% 115† 94 95 99 104	93% 115† 93 101 102 104 
40 41 42 43	Region Illinois Indiana Kentucky	478 3,879 1,855 311	104,628 616,332 293,965 34,379	1,178,927 5,266,510 2,983,010 312,299	114% 95 113 105	113% 95 112 109
44 45 46 47	Michigan Ohio Wisconsin West Virginia	2,300 2,981 879 538	360,798 597,232 168,270 59,486	3,971,814 5,888,776 1,917,692 557,299	118 107 114 107	119 108 114 107
50	Total Region	13,221	2,235,090	22,076,327	107%	107%
51 52 53 54 55 56 57	Iowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota	819 565 609 1,096 357 109 102	106,581 82,123 94,673 169,845 39,528 9,776 8,681	1,147,384 862,877 1,310,702 1,629,002 392,753 90,723 93,474	118 110 124 102 109 102 107	118 112 127 104 109 102 107
	Total	3,738	534,981	5,797,375	112%	113%

<sup>\*</sup>Ratio of actual to 1957 Surgical Tabular. Note that these ratios are not expressed as a percentage of the national average. For the distribution of experience in this table, the national average is shown in "Total, all locations."

<sup>†</sup> Less than \$50,000 of tabular claims.

TABLE 11-Continued

		1				
		GROUPS WITH LESS THAN 2,000 SURGICAL UNITS EXPOSED				
Loca-	_					ALL SIZE
TION	STATE OR					GROUPS,
CODE	Region	Number	Maximum		<b>.</b>	RATIO
		of Expe-	Surgical Indemnity	Actual Claims	Ratio	A/T*
		Units	Exposed	Claims	A/T*	
		Units	Exposed			
60	Region	9	4,072	52,219	146%†	141%
61	Colorado	175	24,118	271,464	121	135
62	Idaho	101	15,308	146,910	108	109
63	Montana	62	11,995	135,527	121	121
64	Nevada	69	15,716	165,303	121	121
65	Utah	179	28,506	370,537	131	135
66	Wyoming	13	899	10,018	105†	105†
	Total	608	100,614	1,151,978	123%	130%
70	Region	35	9,138	114,890	122%	125%
71	California	3,081	418,864	4,612,191	127	130
72	Oregon	179	24,633	282,102	122	122
73	Washington	217	30,719	341,377	115	109
	Total	3,512	483,354	5,350,560	125%	128%
80	Region	77	11,070	119,957	121%	121%
81	Arizona	254	38,332	449,560	130	144
82	Arkansas	497	71,939	449,560 655,819	106	105
83	Louisiana	823	87,819	937,312	122	127
84	New Mexico	130	21,131	232,234	117	112
85	Oklahoma	518	56,460	649,017	128	128
86	Texas	2,543	346,336	3,557,740	119	120
	Total	4,842	633,087	6,601,639	120%	122%
90	Region	179	42,896	389,257	97%	100%
91	Alabama	309	57,103	540,014	113	113
92	Florida	937	126,722	1,310,807	115	115
93	Georgia	899	113,361	1,057,960	107	109
94	Maryland	661	97,899	888,310	102	111
95	Mississippi	392	40,324	418,343	109	109
96	North Carolina	1,149	137,929	1,298,519	103	103
97 98	South Carolina	334	47,762	456,259	111	115
98	Tennessee Virginia	290 1,147	45,982 114,157	483,666 992,951	116 101	120 103
,,,,,,	Total	6,297	824,135	7,836,086		109%
ļ			024,100	7,000,000		
01	Hawaii	27	9,898	128,786	112%	121%
02	Alaska	34	2,408	23,746	112†	112†
	Total, States and					
	Regions	43,871	6,715,555	65,924,563	108%	110%
	All other‡	1,838	597,149	6,161,902	108%	111%

<sup>‡</sup> Less than 75 per cent of employees in one state or region.

TABLE 12
1957 SURGICAL TABULAR
ANNUAL CLAIM COSTS
PER BASIC UNIT INDICATED

	Basic Unit-\$300 Schedule			
PER CENT FEMALE	Employee, with Obstetrical Benefits	Employee, No Obstetrical Benefits		
Male Less than 11%. 11-21. 21-31. 31-41. 41-51. 51-61. 61-71. 71-81. 81-91. 91-100. Female.	\$ 5.68 6.06 6.79 7.52 8.25 8.98 9.73 10.46 11.19 11.92 12.65 13.03	\$5.68 5.83 6.11 6.39 6.67 6.95 7.24 7.52 7.80 8.08 8.36 8.51		
	Dependent, with Obstetrical Benefits	Dependent, No Obstetrical Benefits		
	\$20.29	<b>\$</b> 13.15		