

**TRANSACTIONS OF SOCIETY OF ACTUARIES
1969 REPORTS**

**II. EXPERIENCE UNDER INDIVIDUAL
MEDICAL EXPENSE POLICIES, 1966-67**

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SUMMARY OF EXPERIENCE UNDER INDIVIDUAL
MEDICAL EXPENSE POLICIES, 1966-67

This report presents an analysis of morbidity experience under individual medical expense policies in force during the 1966 and 1967 calendar years. Results of data submitted by nineteen companies are presented for the following:

1. Hospital Room and Board Benefit
2. Miscellaneous Hospital Expense Benefit
3. Surgical Expense Benefit
4. Deductible Amount
5. Maternity Expense Benefit
6. Major Medical Expense Benefit

Frequencies of hospitalization, average claim, and claim costs are shown by age and sex for maximum benefit periods of 31, 90, and 365 days. A comparison of the current experience to the previous 1964-65 experience for all ages combined shows the claim costs for the room and board benefit for males about the same and for females and children 2-3 per cent smaller. The average claim for the miscellaneous hospital expense benefit for a given maximum benefit in the current study continues to show an increase over the previous studies, with the increase becoming greater as the maximum benefit increases.

Frequencies, average claims, and claim costs per \$100 of maximum surgical benefit for a standard schedule are shown. A comparison of the current experience to the previous 1964-65 experience for all ages combined indicates that the claim costs for males are about the same and those for females and children about 5 per cent smaller.

A rather extensive analysis of the major medical experience is shown, subdivided by deductible amounts, maximum amounts, coinsurance, hospital room and board limit, duration, and renewability status. A comparison of the current experience to the previous 1964-65 experience for all ages combined shows that the claims costs are about 123 per cent higher.

THIS report presents an analysis of morbidity experience under individual medical expense policies during the calendar years 1966 and 1967. The three previous studies appear in the *1967 Reports*, *1965 Reports*, and *1963 Reports*.

Studies were made of the following:

1. Hospital Room and Board Benefit
2. Miscellaneous Hospital Expense Benefit
3. Surgical Expense Benefit
4. Deductible Amounts
5. Maternity Expense Benefit
6. Major Medical Expense Benefits

The experience on lives covered under family and individual policies was combined. No differentiation was made by the types of renewal

provision except for the separate data for guaranteed renewable and cancellable policies shown under the Major Medical section of the study. Payments made to the end of the calendar year following the year in which a claim was incurred are included; estimates of future payments on claims pending at the end of this period are included on major medical claims only.

Where data for deductible policies are shown, experience was tabulated by amount of deductible. Data on policies with a deductible were submitted only if the deductible applied to all benefits under the policy except the maternity benefit. Only data on claims which were in excess of the deductible are included; claim data reflect amounts of eligible medical expenses *before* the application of the deductible, except in the study of major medical benefits.

Excluded from the investigation were the following:

1. Franchise and wholesale insurance.
2. Conversions from group insurance.
3. Policies issued with an extra premium unless such policies constituted a very small proportion of the contributing company's total business. (Policies issued with a medical impairment rider, but without an extra premium, were included in the study.)
4. Policies issued at senior ages on a mass-enrollment basis, without evidence of insurability.

In the sections on frequency of hospitalization and average amount of hospital claim, only inpatient claims are included. The section on miscellaneous hospital expense benefit includes data on both inpatient and outpatient hospital claims. The section on surgery combines data on surgery performed both in and out of the hospital, and the section on major medical insurance includes data on services performed both in and out of the hospital.

Maternity claims were excluded except in the section dealing specifically with maternity expense benefits.

Unless otherwise indicated, data shown are for all durations combined. The duration is a calendar-year duration rather than a policy-year duration and is determined by subtracting the calendar year of issue from the calendar year of experience. Companies were requested not to submit data for duration 0 (the calendar year in which a policy was issued).

It should be noted that data for the current study on lives 65 and over reflects to a great extent experience emerging during the initial period of Medicare (July 1, 1966). This should be taken into consideration when comparing the experience on the current study with the previous study.

CONTRIBUTING COMPANIES

The following nineteen companies contributed data to one or more sections of this report:

Aetna Life Insurance Company
Connecticut General Life Insurance Company
Continental Assurance Company
General American Life Insurance Company
Great-West Life Assurance Company
John Hancock Mutual Life Insurance Company
Liberty Life Insurance Company
Life Insurance Company of Virginia
Lincoln National Life Insurance Company
Metropolitan Life Insurance Company
Mutual Life Insurance Company of New York
Mutual of Omaha Insurance Company
New York Life Insurance Company
Pacific Mutual Life Insurance Company
Provident Mutual Life Insurance Company of Philadelphia
Prudential Insurance Company of America
Standard Insurance Company
Western and Southern Life Insurance Company
Woodmen Accident and Life Company

HOSPITAL ROOM AND BOARD BENEFIT

Sixteen companies contributed experience to this section of the study. The distribution of claims by maximum benefit period is shown in the tabulation on page 87.

The frequency of hospitalization is based on the combined experience for all maximum benefit periods and was obtained by dividing the amount of daily hospital benefit in force on nonmaternity hospitalization claims by the amount of daily hospital benefit exposed.

The average claim per \$1 of daily hospital benefit was obtained by dividing the amount paid for hospital room and board by the amount of daily hospital benefit in force on nonmaternity hospitalization claims. In order to include in Table 1 all data and to show the effect of limiting the length of the benefit period, data for maximum benefit periods of 28-45 days were adjusted to a 31-day period, those for 50-180-day periods to a 90-day period, and those for periods over 180 days to a 365-day period. Table 2 was derived by adjusting all maximum benefit periods

to a 90-day period. The adjustments were made based on the conversion tables shown on page 137 of *TSA, 1963 Reports*.

MAXIMUM DURATION OF DHB	DAILY HOSPITAL BENEFIT IN FORCE ON HOSPITALIZATION CLAIMS		
	No Deductible	\$25 Deductible	\$50 Deductible
28.....	\$ 11,878	\$ 0	\$ 0
30.....	2,401,024	0	0
31.....	58,860	0	9,745
35.....	559,345	0	47,224
45.....	73,916	5,455	20,199
50.....	0	23,107	0
60.....	32,096	32,816	0
75.....	1,040	0	195
90.....	2,684,756	25,156	18,759
100.....	457,389	10,107	2,396
120.....	963,665	76,204	301,591
150.....	76,771	0	854
180.....	6,875	55,697	47,310
365.....	1,340,388	174,309	171,990
500.....	2,075,884	0	0
Total....	\$10,743,887	\$402,851	\$620,263

Annual claim costs were obtained by multiplying the frequencies of hospitalization by the corresponding average amounts of claim.

Table 1 shows, for policies with no deductible, the frequency of hospitalization, the average claim, and the average claim costs per \$1 of daily hospital benefit for adjusted maximum benefit periods of 31, 90, and 365 days. Because the data are not homogeneous, the values in Table 1 are not too smooth. In general, the claim costs increase as the adjusted maximum benefit period increases, and the claim costs for each adjusted maximum benefit period increase as the age increases. For ages 20-54 the claim costs for males are lower than those for females, while above age 54 the relation is reversed.

Table 2 shows, for policies with no deductible and those with \$25 or \$50 deductibles, data for an adjusted maximum benefit period of 90 days. If the data in Table 2 were homogeneous, the frequency of hospitalization should be smaller, the average claim larger, and the claim cost smaller on policies with a \$50 deductible than on policies with no deductible; and the experience on policies with a \$25 deductible should lie between the other two. However, because of the lack of homogeneity and the small volume of experience for the \$25 and \$50 deductibles, only the frequency of hospitalization follows this pattern closely. As an indica-

TABLE 1
 1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 FREQUENCY OF HOSPITALIZATION;
 AVERAGE CLAIM AND CLAIM COST PER \$1 OF DAILY HOSPITAL BENEFIT FOR
 ADJUSTED MAXIMUM BENEFIT PERIODS OF 31, 90, AND 365 DAYS
 NO DEDUCTIBLE

ATTAINED AGE	FREQUENCY OF HOSPITALIZATION	AVERAGE CLAIM FOR ADJUSTED MAXIMUM BENEFIT PERIOD OF:			CLAIM COST FOR ADJUSTED MAXIMUM BENEFIT PERIOD OF:		
		31 Days	90 Days	365 Days	31 Days	90 Days	365 Days
MALE							
15-19	.1180	\$ 5.87	\$ 5.94	\$ 6.27	\$.693	\$.701	\$.740
20-24	.0687	5.51	6.18	6.73	.379	.425	.462
25-29	.0647	5.81	6.14	6.72	.376	.397	.435
30-34	.0718	6.09	6.52	7.01	.437	.468	.503
35-39	.0807	6.84	7.13	7.42	.552	.575	.599
40-44	.0950	7.24	8.02	8.00	.688	.762	.760
45-49	.1047	7.93	8.58	8.68	.830	.898	.909
50-54	.1236	8.52	9.39	9.66	1.053	1.161	1.194
55-59	.1398	9.18	10.12	9.94	1.283	1.415	1.390
60-64	.1585	10.04	11.07	10.87	1.591	1.755	1.723
65-69	.1975	10.96	11.90	11.59	2.165	2.350	2.289
70-74	.2162	11.87	13.21	13.74	2.566	2.856	2.971
75-79	.2665	12.89	14.30	14.71	3.435	3.811	3.920
Female							
15-19	.1265	\$ 5.04	\$ 5.21	\$ 5.00	\$.638	\$.659	\$.633
20-24	.0925	5.34	5.61	5.59	.494	.519	.517
25-29	.1009	6.00	6.14	6.32	.605	.620	.638
30-34	.1189	6.64	6.94	6.94	.789	.825	.825
35-39	.1340	6.97	7.51	7.56	.934	1.006	1.013
40-44	.1447	7.78	8.11	8.34	1.126	1.174	1.207
45-49	.1480	8.01	8.55	8.57	1.185	1.265	1.268
50-54	.1443	8.29	9.10	9.05	1.196	1.313	1.306
55-59	.1368	9.13	9.91	10.08	1.249	1.356	1.379
60-64	.1420	9.88	10.99	10.92	1.403	1.561	1.551
65-69	.1642	11.20	12.22	12.31	1.839	2.007	2.021
70-74	.1820	12.30	13.74	14.05	2.239	2.501	2.557
75-79	.2199	13.38	15.62	16.90	2.942	3.435	3.716
Child							
All ages	.0797	\$ 4.16	\$ 4.31	\$ 4.31	\$.332	\$.344	\$.344

TABLE 2
 1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 FREQUENCY OF HOSPITALIZATION;
 AVERAGE CLAIM AND CLAIM COST PER \$1 OF DAILY HOSPITAL BENEFIT FOR
 ADJUSTED MAXIMUM BENEFIT PERIOD OF 90 DAYS

ATTAINED AGE	NO DEDUCTIBLE			\$25 DEDUCTIBLE			\$50 DEDUCTIBLE		
	Fre- quency	Average Claim	Claim Cost	Fre- quency	Average Claim	Claim Cost	Fre- quency	Average Claim	Claim Cost
Male									
15-19	.1180	\$ 6.03	\$.712	.0694	\$ 8.01	\$.556	.0803	\$ 5.60	\$.450
20-24	.0687	6.27	.431	.0631	6.75	.426	.0554	6.98	.387
25-29	.0647	6.28	.406	.0592	6.49	.384	.0478	6.99	.334
30-34	.0718	6.57	.472	.0687	7.21	.495	.0542	7.13	.386
35-39	.0807	7.12	.575	.0706	8.43	.595	.0574	7.11	.408
40-44	.0950	7.77	.738	.0827	7.70	.637	.0672	8.16	.548
45-49	.1047	8.39	.878	.1045	9.13	.954	.0801	8.74	.700
50-54	.1236	9.18	1.135	.1125	10.89	1.225	.0936	9.84	.921
55-59	.1398	9.70	1.356	.1399	11.82	1.654	.1053	10.93	1.151
60-64	.1585	10.57	1.675	.1547	13.50	2.088	.1218	11.79	1.436
65-69	.1975	11.34	2.240	.1656	14.22	2.355	.1384	13.34	1.846
70-74	.2162	12.55	2.713	.1988	13.70	2.724	.1517	14.64	2.221
75-79	.2665	13.61	3.627	.2410	14.25	3.434	.2091	15.93	3.331
Female									
15-19	.1265	\$ 5.06	\$.640	.1083	\$ 4.58	\$.496	.0989	\$ 5.62	\$.556
20-24	.0925	5.52	.511	.0971	6.02	.585	.0754	5.89	.444
25-29	.1009	6.16	.622	.0973	6.52	.634	.0823	7.31	.602
30-34	.1189	6.85	.814	.1149	7.71	.886	.1013	7.47	.757
35-39	.1340	7.38	.989	.1256	8.75	1.099	.1045	8.02	.838
40-44	.1447	8.09	1.171	.1378	8.73	1.203	.1168	8.12	.948
45-49	.1480	8.40	1.243	.1520	8.63	1.312	.1219	8.54	1.041
50-54	.1443	8.82	1.273	.1409	10.13	1.427	.1142	9.42	1.076
55-59	.1368	9.67	1.323	.1326	10.72	1.421	.1100	11.04	1.214
60-64	.1420	10.55	1.498	.1409	11.50	1.620	.1120	11.44	1.281
65-69	.1642	11.72	1.924	.1682	12.34	2.076	.1254	12.65	1.586
70-74	.1820	13.04	2.373	.1799	14.39	2.589	.1379	12.98	1.790
75-79	.2199	14.72	3.237	.1890	16.19	3.060	.1686	17.00	2.866
Child									
All ages	.0797	\$ 4.50	\$.359	.0712	\$ 4.86	\$.346	.0561	\$ 4.74	\$.266

TABLE 3
 1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 COMPARISON WITH 1964-65 INTERCOMPANY EXPERIENCE AND
 1956 INTERCOMPANY HOSPITAL TABLE
 FREQUENCY OF HOSPITALIZATION;
 AVERAGE CLAIM AND CLAIM COST PER \$1 OF DAILY HOSPITAL BENEFIT
 ADJUSTED MAXIMUM BENEFIT PERIOD OF 90 DAYS
 NO DEDUCTIBLE

ATTAINED AGE	1966-67 INTERCOMPANY EXPERIENCE			RATIO OF 1966-67 EXPERIENCE TO 1964-65 EXPERIENCE			RATIO OF 1966-67 EXPERIENCE TO 1956 TABLE		
	Fre- quency	Average Claim	Claim Cost	Fre- quency	Average Claim	Claim Cost	Fre- quency	Average Claim	Claim Cost
Male									
15-19	.1180	\$ 6.03	\$.712	.99	1.04	1.03	1.51	.81	1.22
20-24	.0687	6.27	.431	.96	1.00	.97	.88	.84	.74
25-29	.0647	6.28	.406	.94	1.01	.94	.85	.83	.71
30-34	.0718	6.57	.472	.97	1.03	1.00	.96	.82	.79
35-39	.0807	7.12	.575	.92	1.01	.93	1.01	.80	.81
40-44	.0950	7.77	.738	1.00	1.02	1.03	1.07	.78	.83
45-49	.1047	8.39	.878	.97	.99	.96	1.04	.75	.78
50-54	.1236	9.18	1.135	.98	1.00	.99	1.07	.75	.81
55-59	.1398	9.70	1.356	.99	.94	.93	1.04	.77	.81
60-64	.1585	10.57	1.675	1.00	.97	.97	1.03	.82	.85
65-69	.1975	11.34	2.240	1.18	.96	1.13	1.19	.82	.98
70-74	.2162	12.55	2.713	1.10	.94	1.03	1.25	.73	.91
75-79	.2665	13.61	3.627	1.12	1.00	1.11	1.52	.58	.89
Female									
15-19	.1265	\$ 5.06	\$.640	.96	1.03	.98	1.35	.70	.94
20-24	.0925	5.52	.511	.92	.98	.90	.93	.75	.70
25-29	.1009	6.16	.622	.92	.96	.88	.90	.80	.72
30-34	.1189	6.85	.814	.93	.99	.92	.98	.83	.81
35-39	.1340	7.38	.989	.98	1.00	.98	1.03	.84	.86
40-44	.1447	8.09	1.171	.95	1.01	.96	1.04	.86	.90
45-49	.1480	8.40	1.243	.97	1.00	.97	1.02	.84	.86
50-54	.1443	8.82	1.273	.98	.97	.95	.95	.83	.79
55-59	.1368	9.67	1.323	.98	.99	.97	.87	.85	.74
60-64	.1420	10.55	1.498	1.02	.99	1.00	.87	.85	.74
65-69	.1642	11.72	1.924	1.05	1.00	1.05	.98	.86	.84
70-74	.1820	13.04	2.373	1.05	.94	.99	1.05	.76	.80
75-79	.2199	14.72	3.237	1.06	1.02	1.08	1.26	.63	.79
Child									
All ages	.0797	\$ 4.50	\$.359	.92	1.05	.97	Not applicable		

tion of the relations shown by homogeneous data, reference should be made to the experience of one large company, which appears in the *1963 Reports* (p. 141, Table 3).

Table 3 compares the experience shown in Table 2 for policies with no deductible with the 1964-65 intercompany experience and with the 1956 Intercompany Hospital Table.

The relation of the 1966-67 experience to the 1964-65 experience is as follows: For both males and females, the frequencies are generally lower below age 60 and higher above age 60. For males the average claims are generally higher at the younger ages and lower at the higher ages, while the pattern of claim costs is somewhat mixed. For females the pattern for average claims is somewhat mixed, while the claim costs are lower below age 60 and generally higher above age 60. Ratios of the 1966-67 experience to the 1964-65 experience for all ages combined (based on the 1966-67 distribution of exposures by age) are shown in the following tabulation:

	Frequency	Average Claim	Claim Cost
Male.....	100%	100%	100%
Female.....	98	100	98
Child.....	92	105	97

An analysis by duration was made of the 1966-67 experience on policies with no deductible. Ratios of experience by duration to that for duration 3 (where each duration is based on the same distribution of exposures by age) are shown in the following tabulation:

DURATION	MALES			FEMALES			CHILDREN		
	Fre- quency	Aver- age Claim	Claim Cost	Fre- quency	Aver- age Claim	Claim Cost	Fre- quency	Aver- age Claim	Claim Cost
1.....	80%	89%	71%	83%	91%	76%	118%	99%	117%
2.....	85	92	78	90	95	85	113	101	114
3 and later.....	100	100	100	100	100	100	100	100	100
All.....	95%	98%	93%	96%	99%	96%	107%	100%	107%

Table 4 contains a graduation of the crude frequencies and average claims of Table 2 for policies with no deductible. Claim costs in Table 4 are derived as a product of these functions.

TABLE 4
 GRADUATED 1966-67 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 FREQUENCY OF HOSPITALIZATION;
 AVERAGE CLAIM AND CLAIM COST
 PER \$1 OF DAILY HOSPITAL BENEFIT
 NO DEDUCTIBLE
 MAXIMUM BENEFIT PERIOD OF 90 DAYS

Attained Age	Frequency	Average Claim	Claim Cost
Male			
15-19 .....	.1096	\$ 5.98	\$.655
20-24 .....	.0780	6.21	.484
25-29 .....	.0663	6.34	.420
30-34 .....	.0700	6.62	.463
35-39 .....	.0803	7.12	.572
40-44 .....	.0931	7.74	.721
45-49 .....	.1061	8.41	.892
50-54 .....	.1221	9.10	1.111
55-59 .....	.1397	9.76	1.363
60-64 .....	.1620	10.54	1.707
65-69 .....	.1920	11.42	2.193
70-74 .....	.2227	12.50	2.784
75-79 .....	.2631	13.60	3.578
Female			
15-19 .....	.1186	\$ 4.98	\$.591
20-24 .....	.1017	5.57	.566
25-29 .....	.1030	6.18	.367
30-34 .....	.1171	6.82	.799
35-39 .....	.1327	7.42	.985
40-44 .....	.1434	7.98	1.144
45-49 .....	.1464	8.41	1.231
50-54 .....	.1430	8.90	1.273
55-59 .....	.1393	9.64	1.343
60-64 .....	.1447	10.57	1.529
65-69 .....	.1618	11.72	1.896
70-74 .....	.1854	13.10	2.429
75-79 .....	.2171	14.66	3.183
Child			
All ages .....	.0797	\$ 4.50	\$.359

MISCELLANEOUS HOSPITAL EXPENSE BENEFIT

Sixteen companies contributed to this section of the study. There were over 917,000 claims, but many of the data lacked sufficient homogeneity to incorporate into tables which would be meaningful and useful. It was deemed necessary to build the study around the \$200 maximum benefit rather than the \$100 maximum benefit as was done with the 1960-61, 1962-63, and 1964-65 studies. The \$100 maximum benefit cell has the largest number of claims, but it shows little variation by company or age due to the low maximum amount.

Table 5 shows the average claim for a \$200 maximum benefit on policies with no deductible. Graduated average claims are also shown and are used as a basis of comparison in subsequent tables and analyses.

Table 6 shows the graduated frequencies of hospitalization, the graduated average claims, and the claim costs for a \$200 maximum benefit. The frequencies of hospitalization are the same as those shown in Table 4, and the average claims are the same as those shown in Table 5. The claim cost is the product of the frequency and the average claim.

Table 7 shows a comparison of the actual 1966-67 experience for a \$100 maximum benefit on policies with no deductible with the corresponding 1964-65 experience.

Table 8 shows a comparison of the actual 1966-67 experience for a \$200 maximum benefit on policies with no deductible with the 1956 Intercompany Hospital Table. The 1956 table does not show average claim amounts for a \$200 maximum benefit, and therefore it was necessary to use the arithmetic mean of the values for a \$150 and a \$250 maximum benefit. The frequencies of hospitalization for the 1966-67 experience are the same as those shown in Table 3. Except for ages 55-74 on females, the actual claim costs are substantially higher than those of the 1956 table.

Table 9 shows the relationship of average claims for other maximum benefit amounts for which there were two hundred or more claims to those for the \$200 maximum benefit amount. It also indicates to what extent each experience cell consists of the experience of a single company and the number of companies contributing to each cell.

Table 10 indicates the range in the level of average claims experience for the \$200 maximum benefit amount among companies offering the maximum. The level of the ratios of actual to tabular varies considerably from one company to another.

Table 11 shows the variation in average claims by maximum benefit and age. The average claim increases more rapidly by age as the maxi-

TABLE 5
 1966-67 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
 INPATIENT ONLY; AVERAGE AMOUNT OF CLAIM
 NO DEDUCTIBLE—\$200 MAXIMUM BENEFIT

ATTAINED AGE	NUMBER OF CLAIMS	AVERAGE CLAIM	
		Actual	Graduated
Male			
15-19	328	\$ 99.60	\$101.00
20-24	3,983	109.66	109.21
25-29	3,304	114.22	114.79
30-34	1,949	119.71	120.37
35-39	1,584	127.61	125.40
40-44	1,698	128.38	129.19
45-49	2,041	131.83	132.77
50-54	2,859	136.97	135.89
55-59	3,505	138.04	138.92
60-64	3,780	140.69	140.46
65-69	2,225	140.35	140.03
70-74	1,681	138.56	138.56
75-79	1,095	136.65	136.76
Total	30,032		
Female			
15-19	893	\$100.75	\$101.16
20-24	6,628	111.79	111.79
25-29	4,140	121.20	121.20
30-34	2,818	130.27	129.44
35-39	2,884	133.26	134.21
40-44	3,623	137.61	136.88
45-49	5,093	138.07	136.88
50-54	6,471	134.62	136.88
55-59	7,179	136.39	136.88
60-64	6,917	137.65	136.88
65-69	4,313	137.82	136.88
70-74	3,275	134.62	135.18
75-79	1,873	132.46	132.25
Total	56,107		
Child			
All ages	19,204	\$ 88.18	\$ 88.18

TABLE 6
 1966-67 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 GRADUATED FREQUENCY OF HOSPITALIZATION;
 GRADUATED AVERAGE CLAIM AND CLAIM COST
 \$200 MAXIMUM MISCELLANEOUS HOSPITAL
 EXPENSE BENEFIT
 INPATIENT ONLY; NO DEDUCTIBLE

Attained Age	Frequency	Average Claim	Claim Cost
Male			
15-19 .....	.1096	\$101.00	\$11.07
20-24 .....	.0780	109.21	8.52
25-29 .....	.0663	114.79	7.61
30-34 .....	.0700	120.37	8.43
35-39 .....	.0803	125.40	10.07
40-44 .....	.0931	129.19	12.03
45-49 .....	.1061	132.77	14.09
50-54 .....	.1221	135.89	16.59
55-59 .....	.1397	138.92	19.41
60-64 .....	.1620	140.46	22.75
65-69 .....	.1920	140.03	26.89
70-74 .....	.2227	138.56	30.86
75-79 .....	.2631	136.76	35.98
Female			
15-19 .....	.1186	\$101.16	\$12.00
20-24 .....	.1017	111.79	11.37
25-29 .....	.1030	121.20	12.48
30-34 .....	.1171	129.44	15.16
35-39 .....	.1327	134.21	17.81
40-44 .....	.1434	136.88	19.63
45-49 .....	.1464	136.88	20.04
50-54 .....	.1430	136.88	19.57
55-59 .....	.1393	136.88	19.07
60-64 .....	.1447	136.88	19.81
65-69 .....	.1618	136.88	22.15
70-74 .....	.1854	135.18	25.06
75-79 .....	.2171	132.25	28.71
Child			
All ages .....	.0797	\$ 88.18	\$ 7.03

TABLE 7
 1966-67 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
 INPATIENT ONLY; AVERAGE CLAIM
 NO DEDUCTIBLE—\$100 MAXIMUM BENEFIT

ATTAINED AGE	NUMBER OF CLAIMS	AVERAGE CLAIM	
		Actual	Ratio of 1966-67 Experience to 1964-65 Experience
Male			
15-19.....	350	\$72.19	1.088
20-24.....	3,405	76.80	1.077
25-29.....	3,210	79.82	1.088
30-34.....	2,181	82.11	1.120
35-39.....	1,831	84.24	1.096
40-44.....	2,004	85.22	1.085
45-49.....	2,371	86.59	1.083
50-54.....	3,412	87.18	1.061
55-59.....	4,320	88.43	1.059
60-64.....	4,481	89.28	1.066
65-69.....	2,409	87.78	1.037
70-74.....	1,751	87.77	1.039
75-79.....	1,287	88.25	1.046
Total.....	33,012		
Female			
15-19.....	827	\$73.01	1.110
20-24.....	5,451	78.05	1.065
25-29.....	4,190	82.47	1.078
30-34.....	3,023	85.82	1.073
35-39.....	3,126	86.36	1.079
40-44.....	3,823	87.08	1.053
45-49.....	5,450	87.76	1.060
50-54.....	7,117	87.78	1.062
55-59.....	7,806	87.81	1.051
60-64.....	7,294	87.45	1.053
65-69.....	4,281	87.48	1.048
70-74.....	3,355	88.01	1.056
75-79.....	2,016	86.92	1.065
Total.....	57,759		
Child			
All ages.....	17,020	\$68.66	1.085

TABLE 8

1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 COMPARISON WITH 1956 INTERCOMPANY HOSPITAL TABLE
 \$200 MAXIMUM MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
 INPATIENT ONLY; NO DEDUCTIBLE

ATTAINED AGE	1966-67 INTERCOMPANY EXPERIENCE			1956 INTERCOMPANY TABLE			RATIO OF 1966-67 EXPERIENCE TO 1956 TABLE		
	Fre-quency	Average Claim	Claim Cost	Fre-quency	Average Claim	Claim Cost	Fre-quency	Average Claim	Claim Cost
Male									
15-19 . . .	.1180	\$ 99.60	\$11.75	.0783	\$ 85.55	\$ 6.70	1.51	1.16	1.75
20-24 . . .	.0687	109.66	7.53	.0779	87.77	6.84	.88	1.25	1.10
25-29 . . .	.0647	114.22	7.39	.0758	93.32	7.07	.85	1.22	1.05
30-34 . . .	.0718	119.71	8.60	.0747	98.87	7.39	.96	1.21	1.16
35-39 . . .	.0807	127.61	10.30	.0797	104.42	8.32	1.01	1.22	1.24
40-44 . . .	.0950	128.31	12.19	.0889	109.97	9.78	1.07	1.17	1.25
45-49 . . .	.1047	131.83	13.80	.1003	115.52	11.59	1.04	1.14	1.19
50-54 . . .	.1236	136.97	16.93	.1150	121.07	13.92	1.07	1.13	1.22
55-59 . . .	.1398	138.04	19.30	.1339	126.62	16.95	1.04	1.09	1.14
60-64 . . .	.1585	140.69	22.30	.1536	132.17	20.30	1.03	1.06	1.10
65-69 . . .	.1975	140.35	27.72	.1665	137.72	22.93	1.19	1.02	1.21
70-74 . . .	.2162	138.56	29.96	.1728	143.27	24.76	1.25	.97	1.21
75-79 . . .	.2665	136.65	36.42	.1751	148.82	26.06	1.52	.92	1.40
Female									
15-19 . . .	.1265	\$100.75	\$12.74	.0935	\$ 85.55	\$ 8.00	1.35	1.18	1.59
20-24 . . .	.0925	111.79	10.34	.0993	87.77	8.72	.93	1.27	1.19
25-29 . . .	.1009	121.20	12.23	.1116	93.32	10.41	.90	1.30	1.17
30-34 . . .	.1189	130.27	15.49	.1215	98.87	12.01	.98	1.32	1.29
35-39 . . .	.1340	133.26	17.86	.1306	104.42	13.64	1.03	1.28	1.31
40-44 . . .	.1447	137.61	19.91	.1385	109.97	15.23	1.04	1.25	1.31
45-49 . . .	.1480	138.07	20.43	.1455	115.52	16.81	1.02	1.20	1.22
50-54 . . .	.1443	134.62	19.43	.1519	121.07	18.39	.95	1.11	1.06
55-59 . . .	.1368	136.39	18.66	.1577	126.62	19.97	.87	1.08	.93
60-64 . . .	.1420	137.65	19.55	.1630	132.17	21.54	.87	1.04	.91
65-69 . . .	.1642	137.82	22.63	.1682	137.72	23.16	.98	1.00	.98
70-74 . . .	.1820	134.62	24.50	.1728	143.27	24.76	1.05	.94	.99
75-79 . . .	.2199	132.46	29.13	.1751	148.82	26.06	1.26	.89	1.12

imum amount increases. The ratios in the table were derived from data obtained by truncating the claims of a single company (which had a \$1,225 maximum for this benefit) at \$100, \$150, \$200, \$250, and \$300.

Table 12 presents the experience of one company and shows the variation in average claim by maximum benefit and deductible amount. The average claim is generally larger on policies with a deductible, and the difference becomes greater as the maximum benefit amount increases.

Table 13 compares the experience of several companies with an outpatient benefit to their corresponding experience under the inpatient-only benefit for the \$100, \$200, and \$300 maximum benefit amounts. If outpatient claims are included, the average claims for children are re-

TABLE 9
1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
INPATIENT ONLY
VARIATION IN AVERAGE CLAIM BY MAXIMUM BENEFIT AMOUNT
NO DEDUCTIBLE

MAXIMUM BENEFIT AMOUNT	NUMBER OF CLAIMS			PROPORTION BY NUMBER OF CLAIMS OF EXPERIENCE FROM LARGEST SINGLE CONTRIBUTOR (PER CENT)	NUMBER OF CONTRIBUTORS WITH CLAIMS	RATIO OF ACTUAL TO TABULAR*		
	Male	Female	Child			Male	Female	Child
\$ 38.....	81	130	0	100.0	1	.210	.273	.....
40.....	27	43	269	78.5	3	.284	.292	.445
50.....	4,894	7,660	904	71.9	5	.309	.325	.490
60.....	2,444	5,638	2,151	80.3	6	.424	.434	.631
75.....	4,356	7,579	1,135	55.8	4	.485	.482	.603
80.....	219	317	2,504	79.5	6	.547	.564	.778
90.....	8,244	16,496	2,964	62.8	6	.469	.518	.729
100.....	33,263	58,267	17,020	67.1	14	.655	.651	.779
112.....	269	374	170	100.0	1	.353	.366	.445
113.....	257	352	119	100.0	1	.319	.351	.452
120.....	4,712	11,200	3,096	86.4	8	.807	.804	.999
125.....	1,898	2,744	683	66.7	2	.760	.755	.847
150.....	28,736	52,360	17,342	74.0	11	.841	.841	.893
160.....	1,230	2,489	1,276	94.3	6	.954	.952	1.114
175.....	192	290	0	100.0	1	.997	1.015	.....
180.....	361	663	462	54.7	6	.931	.996	1.033
200.....	30,238	56,515	19,204	68.8	11	1.000	1.000	1.000
225.....	261	508	178	39.8	5	1.061	1.071	1.197
240.....	4,292	7,745	4,211	94.7	8	1.159	1.162	1.192
250.....	23,296	42,207	13,158	92.6	7	1.070	1.062	.962
300.....	28,356	50,744	18,382	74.7	13	1.145	1.136	1.030
320.....	3,900	5,512	2,794	100.0	1	1.382	1.383	1.326
360.....	77	184	72	99.7	2	1.578	1.419	1.292
375.....	88	154	24	47.4	3	1.655	1.590	1.133
400.....	5,104	7,457	3,831	86.1	6	1.450	1.488	1.292
480.....	177	128	54	100.0	1	1.612	1.555	1.659
500.....	1,651	2,251	868	67.0	4	1.650	1.627	1.406
550.....	163	298	157	100.0	1	1.668	1.595	1.443
600.....	1,061	1,105	386	54.3	3	1.811	1.803	1.653
1,225.....	21,725	38,951	12,173	100.0	1	1.390	1.302	1.014
Total.....	211,572	380,361	125,587	.....	.....	.....	.....	.....

* Tabular based on graduated average amount of claim for \$200 maximum benefit shown in Table 5.

duced considerably while the average claims for females are reduced the least.

Table 14 shows the ratios of average claim on all claims to average claim on inpatient-only claims for one company with an outpatient benefit. The ratios increase with age for plans with no deductible. The \$50 deductible shows no such trend.

TABLE 10
1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
INPATIENT ONLY
VARIATION IN AVERAGE CLAIM BY CONTRIBUTING COMPANY
NO DEDUCTIBLE—\$200 MAXIMUM BENEFIT

COMPANY	NUMBER OF CLAIMS			RATIO OF ACTUAL TO TABULAR*		
	Male	Female	Child	Male	Female	Child
A.....	4,390	10,278	4,154	1.134	1.129	1.205
B.....	130	248	215	.973	.947	.981
C.....	1,303	2,715	1,192	1.114	1.125	1.191
E.....	129	187	134	.948	1.033	.826
G.....	216	353	146	1.050	1.013	1.068
H.....	174	237	64	1.050	1.057	1.068
J.....	31	81	29	1.176	1.134	1.095
K.....	257	566	361	1.142	1.147	1.197
M.....	1,552	2,436	736	1.003	.990	1.041
N.....	21,725	38,951	12,173	.964	.955	.904
P.....	331	463	0	1.165	1.135	.....
Total.....	30,238	56,515	19,204	1.000	1.000	1.000

* Tabular based on graduated average amount of claim for \$200 maximum benefit shown in Table 5

Table 15 shows for all companies studied the variation in actual to tabular claims by period studied. The increase in average size is greater for children's benefits and also for the higher maximum benefit amounts.

SURGICAL EXPENSE BENEFIT

Sixteen companies contributed experience covering almost \$34 million of claims to this section of the study. A description of the data used, methods of calculation, and techniques used in standardizing heterogeneous surgical schedules was presented with the 1960-61 study (*1963 Reports*, pp. 150-60).

Table 16 shows for policies without a deductible provision the ungraduated frequencies, average claims, and claim costs per \$100 of maximum surgical benefit. Also shown is a comparison with similar

TABLE 11
1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
INPATIENT ONLY
VARIATION IN AVERAGE CLAIM BY MAXIMUM BENEFIT AMOUNT AND AGE
NO DEDUCTIBLE

(Based on One Company's Claims Truncated at \$100, \$150, \$200, \$250, and \$300)

ATTAINED AGE	NUMBER OF CLAIMS	RATIO OF ACTUAL TO TABULAR* FOR MAXIMUM BENEFIT AMOUNT					
		\$100	\$150	\$200	\$250	\$300	\$1,225
Male							
15-19	190	.737	.885	.957	1.002	1.035	1.175
20-24	2,541	.711	.861	.939	.985	1.016	1.132
25-29	2,404	.698	.861	.950	1.005	1.042	1.191
30-34	1,397	.687	.859	.956	1.013	1.051	1.177
35-39	1,080	.667	.851	.966	1.042	1.093	1.294
40-44	1,125	.658	.842	.957	1.031	1.082	1.285
45-49	1,327	.645	.829	.947	1.031	1.089	1.318
50-54	2,019	.637	.835	.971	1.064	1.133	1.409
55-59	2,701	.632	.832	.970	1.068	1.140	1.465
60-64	3,028	.632	.834	.975	1.079	1.161	1.537
65-69	1,585	.628	.830	.973	1.079	1.161	1.549
70-74	1,278	.631	.828	.973	1.085	1.173	1.632
75-79	909	.637	.839	.987	1.097	1.183	1.604
All ages	21,584	.655	.842	.964	1.050	1.113	1.390
Female							
15-19	631	.728	.871	.939	.980	1.005	1.101
20-24	4,186	.699	.847	.926	.972	1.001	1.085
25-29	2,713	.681	.842	.935	.992	1.029	1.119
30-34	1,679	.660	.843	.962	1.040	1.093	1.218
35-39	1,717	.642	.821	.934	1.007	1.054	1.180
40-44	2,096	.626	.809	.930	1.009	1.062	1.241
45-49	3,193	.638	.826	.948	1.030	1.088	1.261
50-54	4,540	.638	.823	.945	1.028	1.085	1.277
55-59	5,423	.640	.835	.967	1.058	1.122	1.352
60-64	5,257	.633	.830	.965	1.060	1.130	1.417
65-69	3,060	.636	.835	.975	1.076	1.150	1.428
70-74	2,595	.645	.845	.985	1.088	1.165	1.467
75-79	1,568	.653	.848	.981	1.077	1.152	1.483
All ages	38,658	.649	.834	.955	1.038	1.096	1.302
Child							
All ages	12,173	.759	.858	.904	.931	.949	1.014

* Tabular based on graduated average amount of claim for \$200 maximum benefit shown in Table 5.

TABLE 12
 1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
 INPATIENT ONLY
 VARIATION IN AVERAGE CLAIM BY MAXIMUM
 BENEFIT AMOUNT, DEDUCTIBLE, AND AGE
 (Experience of One Company)

ATTAINED AGE	RATIOS OF ACTUAL TO TABULAR*							
	Maximum Benefit Amount							
	\$150 Deductible		\$200 Deductible		\$240 Deductible		\$320 Deductible	
	\$0	\$50	\$0	\$50	\$0	\$50	\$0	\$50
	Male							
15-19	(1.142)†		1.071					
20-24	.996	(.795)	1.133	(1.085)	1.177		1.333	
25-29	.973	(.974)	1.149	(1.256)	1.163	1.317	1.346	1.334
30-34	.935	1.002	1.132	1.177	1.135	1.198	1.364	1.360
35-39	.903	.993	1.162	1.078	1.159	1.229	1.392	1.533
40-44	.917	.995	1.079	1.260	1.146	1.165	1.414	1.459
45-49	.907	.950	1.097	1.195	1.132	1.261	1.386	1.504
50-54	.928	.965	1.143	1.168	1.179	1.200	1.403	1.436
55-59	.884	.953	1.098	1.136	1.197	1.308	1.390	1.472
60-64	.908	.950	1.165	1.170	1.187	1.324	1.572	1.652
65-69	.910	.961	1.190	1.236				
70-74	.933	1.019	1.173	(1.249)				
75-79	.997		1.058					
All ages	.924	.968	1.134	1.184	1.161	1.249	1.382	1.468
	Female							
15-19	1.018		1.158					
20-24	.901	1.094	1.116	1.244	1.182	(1.396)	1.306	(1.468)
25-29	.929	.906	1.135	1.110	1.115	1.289	1.296	1.343
30-34	.910	.984	1.073	1.151	1.155	1.231	1.349	1.422
35-39	.911	.958	1.105	1.150	1.139	1.230	1.372	1.560
40-44	.893	.956	1.112	1.177	1.145	1.244	1.382	1.439
45-49	.900	.962	1.120	1.159	1.196	1.175	1.372	1.478
50-54	.916	.970	1.144	1.234	1.200	1.307	1.429	1.418
55-59	.907	.953	1.125	1.157	1.179	1.260	1.486	1.590
60-64	.902	.947	1.141	1.163	1.242	1.314	1.511	1.569
65-69	.907	.988	1.165	1.218	(1.294)			
70-74	.943	.888	1.171	1.192				
75-79	.928	(.966)	1.222	(1.323)				
All ages	.910	.960	1.129	1.176	1.169	1.254	1.383	1.470
	Child							
All ages	1.062	1.129	1.205	1.325	1.196	1.336	1.326	1.519

NOTE.—For policies with a deductible, average claim reflects eligible medical expenses *before* application of the deductible.

* Tabular based on graduated average claim for \$200 maximum benefit shown in Table 5.

† Parentheses indicate that the number of claims is 10-25.

TABLE 13
 1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
 VARIATION IN AVERAGE CLAIM WITH OR WITHOUT OUTPATIENT BENEFIT
 NO DEDUCTIBLE

COMPANY	NUMBER OF CLAIMS INPATIENT AND OUTPATIENT			PERCENTAGE OF CLAIMS WHICH ARE OUTPATIENT			RATIO OF AVERAGE CLAIM ON ALL CLAIMS TO AVERAGE CLAIM ON INPATIENT-ONLY CLAIMS		
	Male	Female	Child	Male	Female	Child	Male	Female	Child
\$100 Maximum Benefit									
A	1,993	4,181	2,124	22.4	17.6	52.5	.830	.870	.589
B	240	372	306	19.6	14.8	38.9	.847	.884	.696
C	190	430	323	31.6	17.9	41.8	.766	.874	.667
J	413	735	343	26.9	18.8	45.2	.780	.844	.622
K	430	571	740	34.2	20.0	48.4	.743	.850	.619
P	5,834	10,000	1,038	36.2	33.7	56.5	.669	.686	.512
Total	9,100	16,289	4,874	32.1	27.6	50.7	.719	.756	.592
\$200 Maximum Benefit									
A	6,769	13,450	8,586	35.1	23.6	51.6	.702	.803	.571
B	187	303	355	30.5	18.2	39.4	.746	.847	.677
C	2,018	3,492	2,215	35.4	22.2	46.2	.704	.855	.622
J	44	102	47	29.5	20.6	38.3	.749	.836	.676
K	391	703	751	34.3	19.5	51.9	.709	.837	.569
P	662	896	0	50.0	48.3	.....	.534	.539	.....
Total	10,071	18,946	11,954	36.0	24.3	50.2	.693	.795	.584
\$300 Maximum Benefit									
A	9,265	13,090	11,084	45.0	29.1	52.2	.606	.743	.553
B	328	399	372	30.8	14.0	37.9	.742	.882	.690
C	348	547	297	41.4	23.4	43.8	.653	.803	.634
K	352	461	432	36.6	24.3	48.8	.681	.789	.582
P	495	779	0	53.1	52.2	.....	.508	.495	.....
Total	10,788	15,276	12,185	44.5	29.5	51.5	.610	.738	.560

TABLE 14
1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
VARIATION IN AVERAGE CLAIM WITH OR WITHOUT OUTPATIENT BENEFIT
BY MAXIMUM BENEFIT AMOUNT, DEDUCTIBLE, AND AGE
(Experience of One Company)

ATTAINED AGE	RATIOS OF AVERAGE CLAIM ON ALL CLAIMS TO AVERAGE CLAIM ON INPATIENT-ONLY CLAIMS							
	\$0 Deductible				\$50 Deductible			
	Maximum Benefit Amount				Maximum Benefit Amount			
	\$150	\$200	\$240	\$320	\$150	\$200	\$240	\$320
Male								
15-19.....	(.494)*	.617	0	0	0	0	0	0
20-24.....	.659	.606	.674	.635	(.943)	(.957)	0	0
25-29.....	.626	.598	.694	.649	(.971)	(.880)	.906	.878
30-34.....	.639	.616	.714	.645	1.000	.967	.951	.981
35-39.....	.696	.653	.726	.713	.923	.949	.955	.936
40-44.....	.757	.698	.799	.725	.962	.907	.934	.959
45-49.....	.778	.750	.806	.771	.926	.984	.993	.955
50-54.....	.793	.787	.850	.842	1.000	.967	.979	.982
55-59.....	.825	.790	.854	.846	.984	.964	1.000	.918
60-64.....	.886	.833	.912	.884	.951	.958	1.000	.981
65-69.....	.897	.867	0	0	.993	.947	0	0
70-74.....	.911	.907	0	0	.975	(1.000)	0	0
75-79.....	.875	.980	0	0	0	0	0	0
Female								
15-19.....	.727	.710	0	0	0	0	0	0
20-24.....	.768	.732	.802	.797	.984	.949	1.000	(.965)
25-29.....	.813	.774	.826	.778	1.000	.973	.977	.932
30-34.....	.807	.827	.834	.801	.973	.950	.972	.950
35-39.....	.843	.814	.866	.841	.991	.970	.990	.964
40-44.....	.837	.831	.875	.838	.981	.958	.979	.988
45-49.....	.847	.805	.804	.848	.960	.957	.985	.984
50-54.....	.851	.814	.860	.861	.961	.959	.973	.975
55-59.....	.830	.806	.853	.831	.960	.983	.971	.973
60-64.....	.846	.817	.887	.863	.977	.960	.981	.967
65-69.....	.877	.872	(.831)	0	.953	.955	0	0
70-74.....	.889	.868	0	0	.956	1.000	0	0
75-79.....	.915	.853	0	0	1.000	(.902)	0	0
Child								
All ages.....	.581	.571	.610	.588	.935	.915	.947	.927

NOTE.—For policies with a deductible, average claim reflects eligible medical expenses before application of the deductible.

* Parentheses indicate that the number of inpatient-only claims is 10-25.

data previously published for the 1964-65 experience as well as a comparison with the 1956 Intercompany Surgical Table adjusted to a standardized basis as shown on page 155 of the *1963 Reports*. For males below age 65 and for females below age 60, the frequencies were generally lower than those in the previous study. However, for males age 65 and over, and for females age 60 and over, the frequencies were somewhat higher. This may reflect continuation of coverage beyond the Medicare date on

TABLE 15
 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
 INPATIENT ONLY
 VARIATION IN ACTUAL TO TABULAR*
 CLAIMS BY PERIOD STUDIED
 NO DEDUCTIBLE

SEX	STUDY PERIOD		
	1962-63	1964-65	1966-67
\$100 Maximum Benefit			
Male	1.000	1.041	1.110
Female	1.000	1.049	1.109
Child	1.000	1.092	1.185
Total	1.000	1.050	1.119
\$200 Maximum Benefit			
Male	1.000	1.100	1.225
Female	1.000	1.118	1.234
Child	1.000	1.190	1.363
Total	1.000	1.119	1.244
\$300 Maximum Benefit			
Male	1.000	1.098	1.256
Female	1.000	1.112	1.264
Child	1.000	1.158	1.367
Total	1.000	1.110	1.268

* Tabular in all periods is based on 1966-67 graduated average amount of claims for \$200 maximum benefit shown in Table 5, and the results were adjusted to a base period of 1962-63.

TABLE 16

1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 COMPARISON WITH 1964-65 INTERCOMPANY EXPERIENCE
 AND 1956 INTERCOMPANY SURGICAL TABLE
 FREQUENCY OF SURGERY; AVERAGE CLAIM AND CLAIM COST
 PER \$100 OF MAXIMUM SURGICAL SCHEDULE
 STANDARD SCHEDULE—NO DEDUCTIBLE

ATTAINED AGE	1966-67 INTERCOMPANY EXPERIENCE			RATIO OF 1966-67 EXPERIENCE TO 1964-65 EXPERIENCE			RATIO OF 1966-67 EXPERIENCE TO 1956 TABLE*		
	Fre- quency	Aver- age Claim	Claim Cost	Fre- quency	Aver- age Claim	Claim Cost	Fre- quency	Aver- age Claim	Claim Cost
Male									
15-19	.1599	\$11.92	\$1.91	.96	1.02	.98	1.97	.70	1.38
20-24	.0872	12.96	1.13	.99	1.02	1.01	1.12	.75	.84
25-29	.0805	13.49	1.09	1.01	1.04	1.05	1.08	.76	.83
30-34	.0818	14.30	1.17	.99	1.03	1.01	1.11	.79	.88
35-39	.0861	15.26	1.31	.96	1.00	.95	1.17	.82	.96
40-44	.0898	17.32	1.56	1.04	1.00	1.05	1.20	.90	1.08
45-49	.0913	19.37	1.77	.99	1.04	1.03	1.17	.91	1.07
50-54	.0977	22.36	2.18	1.00	.99	.99	1.18	.93	1.09
55-59	.1035	25.20	2.61	.99	.98	.97	1.15	.99	1.13
60-64	.1095	30.34	3.32	.99	.96	.95	1.13	1.04	1.17
65-69	.1248	34.78	4.34	1.05	1.04	1.10	1.27	1.18	1.50
70-74	.1259	37.11	4.67	1.08	.93	1.01	1.28	1.26	1.61
75-79	.1317	38.85	5.12	1.04	1.04	1.07	1.34	1.32	1.77
Female									
15-19	.1214	\$14.22	\$1.73	.99	1.03	1.02	1.45	.69	1.00
20-24	.0947	14.75	1.40	1.01	.94	.95	1.02	.70	.72
25-29	.1020	17.15	1.75	.95	.95	.90	.96	.76	.72
30-34	.1148	21.04	2.42	.96	.95	.91	1.03	.84	.87
35-39	.1222	23.41	2.86	.95	.98	.93	1.09	.86	.94
40-44	.1285	25.66	3.30	.98	.95	.93	1.14	.88	1.01
45-49	.1273	25.70	3.27	1.00	.95	.95	1.16	.89	1.03
50-54	.1181	25.53	3.02	1.02	.97	1.00	1.12	.90	1.01
55-59	.1054	25.08	2.64	.99	.96	.95	1.04	.90	.94
60-64	.1042	27.24	2.84	1.05	.95	1.00	1.05	.96	1.01
65-69	.1072	29.58	3.17	1.03	.97	1.00	1.09	1.06	1.15
70-74	.1080	31.14	3.36	1.11	.90	1.00	1.10	1.11	1.22
75-79	.1079	33.17	3.58	1.00	1.06	1.06	1.10	1.18	1.30
Child									
All ages	.1041	\$11.75	\$1.22	1.00	.95	.95	Not applicable		

* Average claims and claim costs of the 1956 Intercompany Surgical Table adjusted to a standardized basis, as shown in the 1963 Reports (p. 155, Table 15).

the part of less healthy lives or an increase in elective surgery following the introduction of Medicare. The average claim showed an increase for males under age 50; otherwise, there was a general decrease. Claim costs for females showed a significant decrease at ages below 60. For ages 20-59 the claim costs for males are lower than those for females, while above age 59 the relation is reversed. For children, frequencies remained unchanged while claim averages and claim costs decreased.

A graduation of the crude 1966-67 data shown in Table 16 appears in Table 17. Table 18 shows a comparison of the ungraduated data for policies without a deductible, with a \$25 deductible, and with a \$50 deductible. The volume of data on claims for policies with deductibles was less than 20 per cent of that for policies without deductibles. As a result of this small volume, there are many statistical aberrations, and therefore comparison of current and previous experience has been omitted for policies with deductibles. When comparisons are made of the claim frequencies, claim averages, and claim costs of policies without a deductible, with a \$25 deductible, and a \$50 deductible, certain anomalies may be observed. As was pointed out on page 156 of the *1963 Reports*, these anomalies probably arise from the heterogeneity of the data.

An analysis by duration was made of the experience of policies without a deductible. The effect of selection on early claim costs as compared with claim costs for duration 3 and later may be seen from the following tabulation:

Duration	Males	Females	All Adults	Children	Total
1.....	79%	87%	84%	94%	86%
2.....	90	94	92	98	93
3 and later.....	100%	100%	100%	100%	100%
All durations.....	96%	97%	97%	98%	97%

DEDUCTIBLE AMOUNTS

Thirteen companies contributed data to this section of the study, which covers experience under individually underwritten policies with deductible amounts of \$25, \$50, and \$100.

In hospital and surgical expense policies, any deductible amount is generally subtracted from the sum of all benefits (except maternity) otherwise payable at the time of a claim. This eliminates those claims for total amounts less than the deductible and reduces the other claims to the extent of the deductible amount.

Number of claims and annual claim frequencies by attained age are shown in Table 19. Claim frequencies were obtained by dividing the

TABLE 17
 1966-67 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 GRADUATED FREQUENCY OF SURGERY;
 GRADUATED AVERAGE CLAIM AND CLAIM COST PER \$100 OF
 MAXIMUM SURGICAL BENEFIT STANDARD SCHEDULE
 NO DEDUCTIBLE

Attained Age	Frequency	Average Claim	Claim Cost
Male			
15-19 .....	.108	\$12.10	\$1.31
20-24 .....	.093	12.70	1.18
25-29 .....	.085	13.40	1.14
30-34 .....	.083	14.30	1.19
35-39 .....	.086	15.50	1.33
40-44 .....	.089	17.10	1.52
45-49 .....	.093	19.20	1.79
50-54 .....	.097	21.80	2.11
55-59 .....	.102	24.90	2.54
60-64 .....	.108	28.50	3.08
65-69 .....	.115	32.60	3.75
70-74 .....	.123	37.20	4.58
75-79 .....	.132	42.30	5.58
Female			
15-19 .....	.100	\$14.20	\$1.42
20-24 .....	.098	15.00	1.47
25-29 .....	.102	16.70	1.70
30-34 .....	.113	19.40	2.19
35-39 .....	.122	23.60	2.88
40-44 .....	.129	25.10	3.24
45-49 .....	.126	25.40	3.20
50-54 .....	.118	25.30	2.99
55-59 .....	.106	25.10	2.66
60-64 .....	.103	26.30	2.71
65-69 .....	.103	28.00	2.88
70-74 .....	.105	30.60	3.21
75-79 .....	.108	34.50	3.73
Child			
All ages .....	.104	\$11.75	\$1.22

TABLE 18
 1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 FREQUENCY OF SURGERY; AVERAGE CLAIM AND CLAIM COST
 PER \$100 OF MAXIMUM SURGICAL SCHEDULE
 STANDARD SCHEDULE

ATTAINED AGE	NO DEDUCTIBLE			.\$25 DEDUCTIBLE			.\$50 DEDUCTIBLE		
	Fre- quency	Aver- age Claim	Claim Cost	Fre- quency	Aver- age Claim	Claim Cost	Fre- quency	Aver- age Claim	Claim Cost
Male									
15-19 . . . . .	.1599	\$11.92	\$1.91	.0593	\$20.66	\$1.23	.0568	\$23.52	\$1.34
20-24 . . . . .	.0872	12.96	1.13	.0451	19.23	.87	.0410	21.93	.90
25-29 . . . . .	.0805	13.49	1.09	.0428	19.64	.84	.0316	22.17	.70
30-34 . . . . .	.0818	14.30	1.17	.0440	21.05	.93	.0377	22.77	.86
35-39 . . . . .	.0861	15.26	1.31	.0449	22.21	1.00	.0389	23.70	.92
40-44 . . . . .	.0898	17.32	1.56	.0552	24.65	1.36	.0432	26.40	1.14
45-49 . . . . .	.0913	19.37	1.77	.0580	26.47	1.54	.0502	27.02	1.36
50-54 . . . . .	.0977	22.36	2.18	.0623	30.87	1.92	.0529	31.20	1.65
55-59 . . . . .	.1035	25.20	2.61	.0818	32.28	2.64	.0620	33.31	2.07
60-64 . . . . .	.1095	30.34	3.32	.0884	40.80	3.61	.0731	38.29	2.80
65-69 . . . . .	.1248	34.78	4.34	.0948	41.61	3.94	.0861	45.11	3.88
70-74 . . . . .	.1259	37.11	4.67	.1145	44.15	5.06	.0839	47.77	4.01
75-79 . . . . .	.1317	38.85	5.12	.1132	47.92	5.42	.1030	46.10	4.75
Female									
15-19 . . . . .	.1214	\$14.22	\$1.73	.0377	\$20.13	\$.76	.0640	\$20.10	\$1.29
20-24 . . . . .	.0947	14.75	1.40	.0589	20.55	1.21	.0505	21.30	1.08
25-29 . . . . .	.1020	17.15	1.75	.0648	23.68	1.53	.0582	25.41	1.48
30-34 . . . . .	.1148	21.04	2.42	.0821	27.00	2.22	.0744	28.84	2.15
35-39 . . . . .	.1222	23.41	2.86	.0857	29.19	2.50	.0761	30.96	2.36
40-44 . . . . .	.1285	25.66	3.30	.0950	30.96	2.94	.0865	31.97	2.77
45-49 . . . . .	.1273	25.70	3.27	.1001	29.82	2.98	.0889	32.22	2.86
50-54 . . . . .	.1181	25.53	3.02	.0864	32.41	2.80	.0773	31.90	2.47
55-59 . . . . .	.1054	25.08	2.64	.0796	34.46	2.74	.0708	34.56	2.45
60-64 . . . . .	.1042	27.24	2.84	.0805	37.10	2.99	.0727	36.60	2.66
65-69 . . . . .	.1072	29.58	3.17	.0960	36.89	3.54	.0795	38.17	3.03
70-74 . . . . .	.1080	31.14	3.36	.0962	43.48	4.18	.0757	40.86	3.09
75-79 . . . . .	.1079	33.17	3.58	.0914	44.86	4.10	.0913	44.85	4.09
Child									
All ages . . . . .	.1041	\$11.75	\$1.22	.0568	\$17.89	\$1.02	.0452	\$18.59	\$.84

NOTE.—For policies with a deductible, average claim and claim cost reflect eligible medical expenses before application of the deductible; frequency involves only claims where the total eligible medical expenses exceed the policy deductible.

TABLE 19
 1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 CLAIM FREQUENCY OF HOSPITAL AND SURGICAL EXPENSE POLICIES
 WITH A DEDUCTIBLE

ATTAINED AGE	\$25 DEDUCTIBLE		\$50 DEDUCTIBLE		\$100 DEDUCTIBLE	
	Number of Claims	Claim Frequency	Number of Claims	Claim Frequency	Number of Claims	Claim Frequency
Male						
15-19.....	35	.075	100	.082	9	.052
20-24.....	789	.078	862	.060	66	.051
25-29.....	1,090	.071	916	.051	56	.037
30-34.....	873	.079	884	.058	47	.037
35-39.....	695	.081	858	.062	63	.047
40-44.....	755	.096	959	.071	76	.059
45-49.....	902	.114	1,051	.083	95	.071
50-54.....	964	.122	1,168	.097	104	.074
55-59.....	1,038	.151	1,113	.112	151	.113
60-64.....	947	.164	1,027	.129	167	.129
65-69.....	682	.171	669	.142	186	.181
70-74.....	567	.198	429	.154	105	.204
75-79.....	537	.243	378	.213	68	.221
Total.....	9,874	.....	10,414	.....	1,193	.....
Female						
15-19.....	81	.106	170	.102	8	.048
20-24.....	1,310	.106	1,587	.079	83	.057
25-29.....	1,485	.106	1,640	.086	81	.057
30-34.....	1,204	.126	1,554	.103	122	.102
35-39.....	1,163	.135	1,558	.107	123	.095
40-44.....	1,378	.147	1,932	.121	158	.106
45-49.....	1,855	.163	2,245	.128	193	.110
50-54.....	1,903	.152	2,074	.118	225	.113
55-59.....	1,684	.145	1,875	.117	232	.102
60-64.....	1,537	.152	1,535	.120	271	.119
65-69.....	1,331	.178	1,049	.130	255	.140
70-74.....	969	.180	736	.132	170	.163
75-79.....	832	.213	652	.172	137	.235
Total.....	16,732	.....	18,607	.....	2,058	.....
Child						
All ages....	7,491	.084	9,715	.061	555	.046

NOTE.—These frequencies involve only claims where the total eligible medical expenses exceed the policy deductible.

number of claims in excess of the deductible by the number of lives exposed. For homogeneous data we would expect the claim frequencies to decrease as the deductible amount increases.

Since it is easier to satisfy a given deductible under a policy providing large rather than small benefits, claim frequencies for a given deductible tend to vary with the amount of the benefit provided. We might expect that for homogeneous data the claim frequencies in Table 19, which are for all benefits combined, will exceed the corresponding frequencies of hospitalization, which do not include nonhospitalized surgical benefits and outpatient nonsurgical benefits. The very few exceptions to this relation between corresponding frequencies in Table 19 and Table 2 are probably due to statistical fluctuations and heterogeneous data.

To obtain the claim cost for a particular combination of benefits involving a deductible, it is necessary to reflect the savings resulting from the deductible amount. The technique used to obtain the claim cost is shown on page 101 of the *1967 Reports*.

MATERNITY EXPENSE BENEFIT

Twelve companies contributed data on 46,519 claims to this section of the study, which covers experience under basic hospital-surgical policies that provide benefits for childbirth or miscarriage. The policies included in the experience covered pregnancy which commenced after thirty days from date of issue or maternities which occurred after ten months from date of issue. Maternity benefits provided by the policies varied considerably, as shown by the following table:

ANALYSIS OF DATA BY TYPE OF MATERNITY BENEFIT

Maternity Benefit Provided in Policy	No. Claims in Study (All Durations)
10 times daily hospital benefit.....	25,256
5 times combined daily hospital benefit of husband and wife..	15,969
8 times daily hospital benefit.....	2,799
Full hospital and surgical benefits.....	730
12 times daily hospital benefit after second policy year.....	544
6 times daily hospital benefit.....	518
Flat \$50.....	245
15 times daily hospital benefit after second policy year.....	184
8 times daily hospital benefit in first policy year; 10 times in second year; 12 times thereafter.....	151
10 times daily hospital benefit but not more than \$100.....	123
Total.....	46,519

Frequencies of maternity by attained age and duration are shown in Table 20. The maternity claim frequencies of the 1956 Intercompany Hospital Table are shown for comparative purposes. The frequencies for all durations combined are close to those of the 1956 table. The frequencies of 1966-67 are slightly lower than those reported for the 1964-65 experience, which in turn were slightly lower than those for the 1962-63 experience.

As expected, claim frequencies on the maternity benefit are highest in the second policy year, after which they consistently decrease by duration. The lower claim frequencies for duration 1 as compared with duration 2 can be attributed to the initial waiting period of ten months following date of issue. On the assumption that issues are spread uniformly throughout the year, the effect of the ten-month waiting period on the frequencies for calendar year duration 1 can be approximately offset by multiplying the frequencies shown by 1.53.

MAJOR MEDICAL EXPENSE BENEFITS

Data for this section of the study were submitted in five-year attained age groups by sex (male, female, and child) and duration (1, 2, 3, 4, 5, and later) for each combination of the following variables:

1. Calendar year of experience
2. Renewal provision (Guaranteed Renewable or Cancellable)
3. Type (Family or Individual)
4. Coinsurance percentage
5. Deductible
6. Maximum benefit
7. Hospital room and board limit
8. Period to satisfy deductible
9. Benefit period

The data submitted were number of lives exposed, number of claims incurred, and amount paid on claims incurred.

Eleven companies contributed data on 34,573 claims to this section of the study. In order that the experience tables be based on a sufficient amount of data to make them meaningful, it was necessary to consider deductible, coinsurance percentage, hospital room and board limit, and renewal provision as the only variables. Data for policies with coinsurance percentages other than 75 per cent were combined with those for 75 per cent coinsurance policies by multiplying amounts paid on the former by the ratio of 75 to the specified coinsurance percentage. As in the previous study, most of the data were for policies with \$500 de-

TABLE 20
 1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 MATERNITY CLAIM FREQUENCY
 EXPERIENCE BY CALENDAR-YEAR DURATION

ATTAINED AGE	DURATION 1		DURATION 2		DURATION 3		DURATION 4		DURATION 5 AND LATER		ALL DURATIONS		1956 INTERCOMPANY HOSPITAL TABLE FREQUENCY
	Number of Claims	Frequency	Number of Claims	Frequency	Number of Claims	Frequency	Number of Claims	Frequency	Number of Claims	Frequency	Number of Claims	Frequency	
20-24	7,451	.264	6,068	.308	2,910	.288	1,683	.275	1,707	.282	19,819	.283	.285
25-29	3,919	.199	3,850	.239	2,556	.219	1,936	.204	4,124	.163	16,385	.199	.196
30-34	1,061	.104	1,115	.125	989	.128	682	.113	2,804	.093	6,651	.106	.117
35-39	394	.051	406	.059	317	.051	266	.051	1,319	.042	2,702	.047	.060
40-44	111	.016	116	.017	100	.016	64	.012	417	.012	808	.013	.016
45-49	22	.003	26	.004	15	.002	10	.002	81	.002	154	.002	.....
Total	12,958	.....	11,581	.....	6,887	.....	4,641	.....	10,452	.....	46,519	.....	.....

ductible, 75 or 80 per cent coinsurance, and no hospital room and board limit or a \$25 hospital room and board limit.

Table 21 shows the combined experience of durations 3 and later for plans with \$500 deductible, no hospital room and board limit, and 75 per cent coinsurance (including adjusted data for plans with other coinsurance percentages). About 94 per cent of the claims in this experience are on guaranteed renewable policies. An analysis showed that experience on cancellable policies was sufficiently similar to experience on guaranteed renewable policies to allow the combination of both sets of data to be used in constructing the table. Approximately 75 per cent of the claims in the data are on policies with a \$10,000 maximum benefit, while about 19 per cent are on policies with a \$7,500 maximum benefit and 5 per cent correspond to a \$5,000 maximum benefit.

The 1966-67 experience is compared to the 1964-65 experience (*1967 Reports*, pp. 104-5) and the 1962-63 experience (*1965 Reports*, p. 113). Claim costs have increased, on the average, about 20-25 per cent since the previous (1964-65) study. Claim frequencies have increased 14-20 per cent since the previous study, while average claim sizes have increased by a smaller percentage. For ages 20-49, the claim costs for males are lower than for females, while above age 49 the relation is reversed.

A graduation of the crude claim costs shown in Table 21 is presented in Table 22.

Table 23 compares the experience of durations 1 and 2 to that for durations 3 and later on the plans included in Table 21. The results show a marked variation in claim costs by duration. The data for durations 3, 4, and 5 and later were combined in Table 21, since the experience at those durations indicated no apparent pattern of selection.

The variations in experience for each company which contributed data for Table 21 are indicated in Table 24. It should be noted that the contribution of Company E included all the data for the \$10,000 maximum benefit. Also, the average adult age for durations 3 and later in the data contributed by Company E was 61.2, while for the other companies the average ranged from 41.9 to 46.8.

Table 25 shows the combined experience of durations 3 and later for guaranteed renewable plans with \$500 deductible, a \$25 hospital room and board limit, and 75 per cent coinsurance (including adjusted data for plans with other coinsurance percentages). About 72 per cent of the claims in this experience were on policies with a \$10,000 maximum benefit, while about 20 per cent represented a \$7,500 maximum benefit and about 8 per cent corresponded to a \$12,500 maximum benefit.

TABLE 21

1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 MAJOR MEDICAL EXPENSE BENEFIT--\$500 DEDUCTIBLE
 75 PER CENT COINSURANCE;* NO HOSPITAL ROOM AND BOARD LIMIT
 DURATIONS 3 AND LATER

ATTAINED AGE	NUMBER OF LIVES EXPOSED	NUMBER OF CLAIMS	AMOUNT PAID	CLAIM FREQUENCY	AVERAGE CLAIM	CLAIM COST	RATIO TO 1964-65			RATIO TO 1962-63		
							Claim Frequency	Average Claim	Claim Cost	Claim Frequency	Average Claim	Claim Cost
Male												
15-19.....	18	0	\$ 0	.0000		\$ 0.00						
20-24.....	1,094	21	13,475	.0192	\$ 642	12.32	1.11	1.40	1.55	1.49	.91	1.34
25-29.....	2,356	33	23,615	.0140	716	10.02	.81	1.33	1.08	1.13	1.11	1.26
30-34.....	3,607	76	58,225	.0211	766	16.14	1.21	1.58	1.91	1.51	1.27	1.91
35-39.....	5,304	138	98,865	.0260	716	18.64	1.20	.95	1.14	1.44	.96	1.40
40-44.....	6,863	244	192,637	.0356	790	28.07	1.15	1.11	1.27	1.44	.98	1.40
45-49.....	7,191	314	269,088	.0437	857	37.42	1.18	.89	1.05	1.58	.82	1.30
50-54.....	7,533	456	463,678	.0605	1,017	61.55	1.19	1.11	1.32	1.37	1.04	1.43
55-59.....	8,147	616	658,047	.0756	1,068	80.77	1.18	.99	1.16	1.25	.89	1.11
60-64.....	8,383	851	977,608	.1015	1,149	116.62	1.19	1.05	1.24	1.40	.95	1.33
65-69.....	6,507	790	924,593	.1214	1,170	142.09	1.15	1.03	1.18	1.38	1.02	1.41
70-74.....	5,729	841	1,086,241	.1468	1,292	189.60	1.12	1.05	1.18	1.74	2.34	4.08
75 and over.....	5,666	1,001	1,441,025	.1767	1,440	254.33	1.17	1.12	1.31	1.32	.87	1.14
All ages.....	68,398	5,381	\$6,207,097				1.16	1.06	1.23	1.41	1.02	1.44

NOTE.—Average claim and claim cost reflect eligible expenses after application of the deductible; frequency involves only claims where total eligible expenses exceed the deductible.

* Includes policies with 80 per cent coinsurance, for which amounts paid have been multiplied by .9375.

TABLE 21—Continued

ATTAINED AGE	NUMBER OF LIVES EXPOSED	NUMBER OF CLAIMS	AMOUNT PAID	CLAIM FREQUENCY	AVERAGE CLAIM	CLAIM COST	RATIO TO 1964-65			RATIO TO 1962-63		
							Claim Frequency	Average Claim	Claim Cost	Claim Frequency	Average Claim	Claim Cost
Female												
15-19.....	33	0	\$ 0	.0000		\$ 0.00						
20-24.....	970	23	15,936	.0237	\$ 693	16.43	1.23	1.07	1.32	1.57	.85	1.33
25-29.....	2,759	68	57,283	.0247	842	20.76	.88	1.05	.93	1.11	1.51	1.69
30-34.....	4,039	126	109,780	.0312	871	27.18	.99	1.34	1.33	1.27	.98	1.24
35-39.....	5,836	221	226,555	.0379	1,025	38.82	1.04	1.44	1.50	1.25	1.37	1.72
40-44.....	7,443	388	319,896	.0521	824	42.98	1.24	1.08	1.35	1.22	1.17	1.44
45-49.....	8,046	482	407,415	.0599	845	50.64	1.17	1.04	1.21	1.21	.92	1.11
50-54.....	9,716	593	542,619	.0610	915	55.85	.98	1.07	1.05	1.31	.96	1.26
55-59.....	12,004	916	954,190	.0763	1,042	79.49	1.23	1.08	1.33	1.52	.89	1.36
60-64.....	13,835	1,055	1,110,791	.0763	1,053	80.29	1.24	1.16	1.45	1.41	1.05	1.48
65-69.....	12,982	1,187	1,334,743	.0914	1,124	102.81	1.10	1.17	1.29	.96	1.07	1.03
70-74.....	11,426	1,274	1,542,147	.1115	1,210	134.97	1.24	1.20	1.50	1.07	1.98	2.12
75 and over.....	12,173	1,784	2,306,399	.1466	1,293	189.47	1.08	.97	1.05	.95	.80	.76
All ages.....	101,262	8,117	\$8,927,754				1.14	1.09	1.25	1.13	1.01	1.14
Child												
All ages.....	53,996	598	\$ 408,758	.0111	\$ 684	\$ 7.57	1.21	.99	1.19	1.68	1.09	1.82

TABLE 22
1966-67 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$500 DEDUCTIBLE
75 PER CENT COINSURANCE
NO HOSPITAL ROOM AND BOARD LIMIT
GRADUATED CLAIM COSTS FOR
DURATIONS 3 AND LATER

Attained Age	Male	Claim Cost
15-19		\$ 9.51
20-24		10.61
25-29		11.36
30-34		15.17
35-39		19.16
40-44		27.43
45-49		38.62
50-54		60.22
55-59		82.40
60-64		115.30
65-69		142.44
	Female	
15-19		\$ 8.73
20-24		15.12
25-29		20.92
30-34		28.13
35-39		37.80
40-44		43.33
45-49		49.98
50-54		57.74
55-59		77.14
60-64		81.94
65-69		102.21
	Child	
All ages		\$ 7.57

The 1966-67 experience is compared to experience in the previous study on policies with the same deductible, hospital room and board limit, and coinsurance percentages, but including experience on cancellable policies (*1967 Reports*, p. 109). Claim costs are lower for males and higher for females than those in the previous study, but it is emphasized that the previous study was based on a very limited amount of data, and the data in the previous study included experience on cancellable policies,

TABLE 23
1966-67 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$500 DEDUCTIBLE
75 PER CENT COINSURANCE*
NO HOSPITAL ROOM AND BOARD LIMIT
RATIOS OF ACTUAL TO EXPECTED EXPERIENCE
FOR DURATIONS 1 AND 2

SEX	DURATION	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED†		
			Claim Frequency	Average Claim	Claim Cost
Male	{1	646	.79	.74	.58
	{2	1,075	.93	.82	.77
Female	{1	919	.78	.71	.55
	{2	1,576	.90	.73	.66
All adults	{1	1,565	.79	.72	.57
	{2	2,651	.91	.77	.70
Child	{1	103	1.09	.49	.54
	{2	86	1.11	.73	.81

* Includes policies with 80 per cent coinsurance, for which amounts paid have been multiplied by .9375.
† Expected based on experience for durations 3 and later.

while this study does not. Experience on cancellable policies with \$500 deductible and a \$25 hospital room and board limit is discussed later in this report.

A graduation of the crude claim costs shown in Table 25 is presented in Table 26.

Variations in experience for each company which contributed data for Table 25 are shown in Table 27. The average adult age in this experience for each company ranged from 41.5 to 47.3.

In addition to the experience tables, analyses in the form of actual to expected ratios were made for each of the following variables: de-

TABLE 24
 1966-67 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 MAJOR MEDICAL EXPENSE BENEFIT
 \$500 DEDUCTIBLE
 75 PER CENT COINSURANCE*
 NO HOSPITAL ROOM AND BOARD LIMIT
 DURATIONS 3 AND LATER
 RATIOS OF ACTUAL TO EXPECTED EXPERIENCE
 BY CONTRIBUTING COMPANY

SEX	COMPANY	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED†		
			Claim Frequency	Average Claim	Claim Cost
Male	A	444	.93	1.14	1.07
	B	242	.87	.94	.82
	C	107	.86	.93	.79
	D	327	.95	1.09	1.03
	E	4,261	1.03	.98	1.01
Female	A	463	.86	1.17	1.01
	B	290	.87	.93	.81
	C	114	.78	1.16	.90
	D	418	1.04	1.15	1.20
	E	6,832	1.02	.98	1.00
All adults	A	907	.89	1.16	1.04
	B	532	.87	.93	.81
	C	221	.82	1.05	.85
	D	745	1.00	1.12	1.12
	E	11,093	1.02	.98	1.00
Child	A	188	1.13	1.00	1.14
	B	89	.92	.90	.83
	C	42	.88	1.10	.96
	D	93	.79	1.10	.87
	E	186	1.09	.97	1.07

* Includes policies with 80 per cent coinsurance, for which amounts paid have been multiplied by .9375.
 † Expected based on experience of all companies combined.

TABLE 25
 1966-67 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 MAJOR MEDICAL EXPENSE BENEFIT--\$500 DEDUCTIBLE
 75 PER CENT COINSURANCE;* \$25 HOSPITAL ROOM AND BOARD LIMIT
 GUARANTEED RENEWABLE; DURATIONS 3 AND LATER

ATTAINED AGE	NUMBER OF LIVES EXPOSED	NUMBER OF CLAIMS	AMOUNT PAID	CLAIM FREQUENCY	AVERAGE CLAIM	CLAIM COST	RATIO TO 1964-65†		
							Claim Frequency	Average Claim	Claim Cost
Male									
15-19	10	0	\$ 0	.0000		\$ 0.00			
20-24	516	11	5,462	.0213	\$ 497	10 59	3 74	3.79	14.12
25-29	1,118	24	25,150	.0215	1,048	22 50	3 31	1 58	5 23
30-34	1,915	30	14,578	.0157	486	7 61	74	1 08	7 9
35-39	2,987	66	59,269	.0221	898	19 84	76	1 35	1 03
40-44	3,536	113	75,803	.0320	671	21 44	1 25	76	94
45-49	3,307	114	90,970	.0345	798	27 51	77	96	74
50-54	2,868	144	157,685	.0502	1,095	54 98	1 18	96	1 14
55-59	2,395	128	139,079	.0534	1,087	58 07	81	93	76
60-64	1,502	117	142,052	.0779	1,214	94 58	92	96	89
65-69	268	8	4,346	.0299	543	16 22	29	28	08
All ages	20,422	755	\$714,394				.93	.93	.87
Female									
15-19	11	1	\$ 1,029	.0909	\$1,029	\$93.55			
20-24	475	18	7,354	.0379	409	15 48	1 32	33	43
25-29	1,276	32	11,638	.0251	364	9 12	89	83	73
30-34	2,151	61	59,421	.0284	974	27 62	86	1 96	1 69
35-39	3,169	128	100,882	.0404	788	31 83	97	1 11	1 08
40-44	3,577	149	131,653	.0417	884	36 81	83	1 41	1 17
45-49	3,422	194	161,108	.0567	831	47 08	1 13	1 13	1 27
50-54	2,880	169	137,068	.0587	811	47 59	1 02	91	93
55-59	2,441	153	171,552	.0627	1,121	70 28	1 21	1 22	1 47
60-64	1,602	89	114,924	.0556	1,291	71 74	1 02	1 44	1 46
65-69	269	11	9,369	.0409	852	34 83	1 01	43	43
All ages	21,273	1,005	\$905,998				1.01	1.17	1.18
Child									
All ages	31,074	306	\$176,802	.0099	\$ 578	\$ 5.69	.98	.99	.97

* Includes policies with 80 per cent coinsurance, for which amounts paid have been multiplied by .9375.
 † 1964-65 data contained experience on cancellable policies and guaranteed renewable policies.

ductible, hospital room and board limit, maximum benefit, renewal provision, and calendar year of experience. Differences in experience for benefit period, period for satisfaction of the deductible and coinsurance percentage, appeared to arise mainly from variations among companies, and the actual effect of the variables themselves could not be isolated.

TABLE 26
1966-67 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$500 DEDUCTIBLE
75 PER CENT COINSURANCE
\$25 HOSPITAL ROOM AND BOARD LIMIT
GUARANTEED RENEWABLE
GRADUATED CLAIM COSTS FOR
DURATIONS 3 AND LATER

Attained Age		Claim Cost
	Male	
20-24		\$12.85
25-29		13.46
30-34		13.61
35-39		16.86
40-44		22.21
45-49		32.19
50-54		48.26
55-59		65.67
60-64		87.40
	Female	
20-24		\$10.79
25-29		13.66
30-34		25.45
35-39		31.90
40-44		37.45
45-49		45.61
50-54		50.69
55-59		67.06
60-64		73.32
	Child	
All ages		\$ 5.69

It is emphasized that the analysis of each variable ignored the effects of the other variables and of variations in company experience. Tables 28-32 show the results of these analyses. The basis of expected experience is shown with each table. Expected results were calculated by using separate factors for each combination of duration, five-year attained age group, and sex.

Table 28 compares experience for various deductible amounts. Claim

TABLE 27
 1966-67 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 MAJOR MEDICAL EXPENSE BENEFIT
 \$500 DEDUCTIBLE
 \$25 HOSPITAL ROOM AND BOARD LIMIT
 75 PER CENT COINSURANCE*
 GUARANTEED RENEWABLE
 DURATIONS 3 AND LATER
 RATIOS OF ACTUAL TO EXPECTED EXPERIENCE
 BY CONTRIBUTING COMPANY

SEX	COMPANY	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED †		
			Claim Frequency	Average Claim	Claim Cost
Male	A	54	1.46	.95	1.39
	B	135	.78	.97	.77
	C	202	1.09	1.03	1.12
	D	354	1.04	1.02	1.06
	E	10	.56	.31	.17
Female	A	77	1.43	1.70	2.42
	B	198	.82	.93	.76
	C	284	1.06	.81	.85
	D	417	.99	1.04	1.03
	E	29	1.32	.55	.73
All adults	A	131	1.44	1.43	2.07
	B	333	.81	.95	.76
	C	486	1.07	.90	.96
	D	771	1.01	1.03	1.04
	E	39	.98	.49	.48
Child	A	35	1.40	.91	1.27
	B	58	.78	1.12	.88
	C	85	1.04	.78	.81
	D	123	1.02	1.15	1.18
	E	5	1.00	.29	.29

NOTE.—Company codes in this table do not correspond to those used in Table 24.

* Includes policies with 80 per cent coinsurance, for which amounts paid have been multiplied by .9375.

† Expected based on experience of all companies combined.

frequencies decrease and average claims increase as the deductible increases. In general, claim costs decrease with increasing deductibles; the apparent inconsistency for males and children between the \$750 deductible and the \$1,000 deductible ratios may be due to the effects of other variables, company variations, or statistical fluctuations possibly caused by a few very large claims in the \$1,000 deductible category.

TABLE 28
 1966-67 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 MAJOR MEDICAL EXPENSE BENEFIT
 75 PER CENT COINSURANCE*
 NO HOSPITAL ROOM AND BOARD LIMIT
 RATIOS OF ACTUAL TO EXPECTED EXPERIENCE
 ON POLICIES WITH DEDUCTIBLES OF
 \$300, \$750, AND \$1,000

SEX	DEDUCTIBLE	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED †		
			Claim Frequency	Average Claim	Claim Cost
Male	\$ 300	133	1.58	.90	1.43
	750	248	.61	1.17	.71
	1,000	359	.56	1.36	.76
Female	\$ 300	193	1.56	.84	1.30
	750	369	.69	1.04	.72
	1,000	389	.49	1.15	.57
All adults	\$ 300	326	1.57	.86	1.35
	750	617	.66	1.09	.71
	1,000	748	.52	1.26	.66
Child	\$ 300	50	1.92	.66	1.27
	750	11	.42	1.25	.53
	1,000	11	.19	3.05	.57

* Includes policies with 80 per cent coinsurance for which amounts paid have been multiplied by .9375.
 † Expected based on experience on policies with \$500 deductible.

It should be noted that all the data for the \$750 deductible category was contributed by one company, and the average male age in this data is 57.3. The average male age in the \$1,000 deductible category is 54.9.

Table 29 compares experiences on policies with different hospital room and board limits. Increasing the limit from \$25 to \$30 appears to have no noticeable effect on claim frequencies, but average claims are increased 9-18 per cent. In contrast with the results in the previous study, claim frequencies appear to be considerably lower on policies containing hospital room and board limits than on policies with no such

limit. This result is what would be expected, since it is more difficult to reach the deductible with the limit present. An inside limit on hospital room and board might be expected to reduce average claim sizes, since not all the hospital charges would be eligible expenses. This effect may be partially offset by the fact that only more serious disabilities will reach the deductible. The results in Table 29 may also be strongly influenced

TABLE 29
1966-67 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
75 PER CENT COINSURANCE*
\$500 DEDUCTIBLE
RATIOS OF ACTUAL TO EXPECTED EXPERIENCE
ON GUARANTEED RENEWABLE POLICIES
WITH HOSPITAL ROOM AND BOARD
LIMITS OF \$25 AND \$30

SEX	HOSPITAL ROOM AND BOARD LIMIT	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED †		
			Claim Frequency	Average Claim	Claim Cost
Male	{ \$25	755	.79	.99	.78
	{ 30	437	.79	1.08	.86
Female	{ \$25	1,005	.88	.96	.85
	{ 30	644	.82	1.13	.93
All adults	{ \$25	1,760	.84	.97	.82
	{ 30	1,081	.81	1.11	.90
Child	{ \$25	306	.89	.87	.77
	{ 30	141	.87	1.01	.88

NOTE.—This table is derived from experience in durations 3 and later only.

* Includes policies with 80 per cent coinsurance, for which amounts paid have been multiplied by .9375.

† Expected based on experience on policies with no hospital room and board limit.

by the effects of variables which are not being considered. The policies with inside limits generally have longer benefit periods than those with no limit, a factor which would tend to increase average claims. In the experience for no room and board limit, over 75 per cent of the data is from one company whose policies have a two-year benefit period under which a claim cannot be renewed by repeated satisfaction of the deductible unless a six-month period elapses in which the covered person incurs no expenses in connection with the disability which caused the original claim. None of the data in the experience on policies with hospital room

and board limits were contributed by that company. Finally, the data on the policies with inside limits generally represent more modern policy forms than the no-limit data; these newer forms frequently contain benefits not included in the older forms, such as convalescent nursing home expense, charges of practical nurses, hospital charges for therapy, and the

TABLE 30
1966-67 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$500 DEDUCTIBLE
NO HOSPITAL ROOM AND BOARD LIMIT
75 PER CENT COINSURANCE*
RATIOS OF ACTUAL TO EXPECTED EXPERIENCE
ON POLICIES WITH MAXIMUM BENEFITS OF
\$5,000, \$7,500, and \$10,000

SEX	MAXIMUM BENEFIT	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED†		
			Claim Frequency	Average Claim	Claim Cost
Male.....	\$ 5,000	270	.93	.73	.68
	7,500	1,092	.92	1.07	.98
	10,000	5,740	1.02	1.00	1.02
Female.....	\$ 5,000	474	1.04	.82	.85
	7,500	1,259	.90	1.10	.99
	10,000	8,879	1.01	1.00	1.01
All adults.....	\$ 5,000	744	1.00	.78	.78
	7,500	2,351	.91	1.09	.99
	10,000	14,619	1.02	1.00	1.01
Child.....	\$ 5,000	32	.74	.69	.52
	7,500	401	.97	1.03	1.00
	10,000	354	1.07	1.02	1.08

* Includes policies with 80 per cent coinsurance, for which amounts paid have been multiplied by .9375.

† Expected based on experience of all maximum benefits combined.

like. These additional benefits would also tend to increase average claims. For many of these same reasons, it is possible that the effect of the change from a \$25 limit to a \$30 limit is exaggerated somewhat in Table 29.

Table 30 compares experience on policies with different maximum benefits. Average claims for the \$7,500 maximum benefit are considerably higher than those for the \$5,000 maximum benefit. Results for the \$10,000 maximum do not appear to be consistent with the other maximums. It should be noted, however, that all the data for the \$10,000 maximum

TABLE 31
 1967 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 MAJOR MEDICAL EXPENSE BENEFIT
 \$500 DEDUCTIBLE
 75 PER CENT COINSURANCE*
 NO HOSPITAL ROOM AND BOARD LIMIT
 RATIOS OF ACTUAL TO EXPECTED EXPERIENCE

SEX	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED †		
		Claim Frequency	Average Claim	Claim Cost
Male.....	3,381	1.06	1.08	1.14
Female.....	5,048	1.02	1.02	1.04
All adults.	8,429	1.04	1.04	1.08
Child.....	415	1.20	1.04	1.25

* Includes policies with 80 per cent coinsurance, for which amounts paid have been multiplied by .9375.

† Expected based on experience in calendar year 1966.

TABLE 32
 1966-67 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 MAJOR MEDICAL EXPENSE BENEFIT
 \$500 DEDUCTIBLE
 75 PER CENT COINSURANCE*
 \$25 HOSPITAL ROOM AND BOARD LIMIT
 CANCELLABLE POLICIES
 RATIO OF ACTUAL TO EXPECTED EXPERIENCE

SEX	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED †		
		Claim Frequency	Average Claim	Claim Cost
Male.....	501	1.46	1.30	1.91
Female.....	694	1.51	1.12	1.69
All adults.	1,195	1.49	1.20	1.79
Child.....	211	1.73	1.58	2.73

* Includes policies with 80 per cent coinsurance, for which amounts paid have been multiplied by .9375.

† Expected based on experience on guaranteed renewable policies with \$500 deductible and \$25 hospital room and board limit, adjusted to 75 per cent coinsurance.

were contributed by one company, and that company's policy forms specify the nonrenewable two-year benefit period described in the discussion of Table 29.

Experience during calendar year 1967 on policies with a \$500 deductible and no hospital room and board limit is compared to experience on the same policies during 1966 in Table 31. Adult claim costs were 8 per cent higher in 1967 than they were in 1966, while child claim costs increased 25 per cent in the same period of time.

For policies with \$500 deductible and a \$25 hospital room and board limit, experience on cancellable policies was considerably different from experience on guaranteed renewable policies. Table 32 shows a comparison between the two sets of data. The result of the comparison indicates why experience on cancellable policies was not included in constructing Table 25.