

TRANSACTIONS OF SOCIETY OF ACTUARIES 1967 REPORTS

II. EXPERIENCE UNDER INDIVIDUAL MEDICAL EXPENSE POLICIES, 1964-65

THIS report presents an analysis of morbidity experience under individual medical expense policies during the calendar years 1964 and 1965. The experience on lives covered under family and individual policies was combined. No differentiation was made by the types of renewal provision either contained in the contracts or followed in their administration. 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.

Policies without a deductible were analyzed separately from those with a deductible, and, as to the latter, account was taken of the amount of the 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 includes 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).

CONTRIBUTING COMPANIES

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

- 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
- Travelers Insurance Company
- Union Mutual Life Insurance Company
- Western and Southern Life Insurance Company
- Woodmen Accident and Life Company

HOSPITAL ROOM AND BOARD BENEFIT

Seventeen companies contributed experience to this section of the study. The distribution of claims by maximum benefit period is as shown in the tabulation on page 78.

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 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 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 50-150-day periods to a 90-day period, and those for periods over 150 days to a 365-day period. Table 3 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 Benefit Period Number of Days	Daily Hospital Benefit In Force on Hospital- ization Claims
28	\$ 12,414
30	2,333,195
31	191,275
35	824,794
40	2,616
42	284,396
45	117,341
50	39,785
52	3,650
60	41,929
75	1,372
90	2,580,203
100	496,171
120	1,184,167
150	94,378
180	232,966
240	96,700
365	1,758,529
500	1,987,383
Total	\$12,283,264

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. Below age 55 the claim costs for males are lower than for females, while above age 55 the relation is reversed.

TABLE 1
 1964-65 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...	.1191	\$ 5.34	\$ 5.96	\$ 6.09	\$.636	\$.710	\$.725
20-24...	.0712	5.71	6.02	6.84	.407	.429	.487
25-29...	.0690	5.66	6.08	6.78	.391	.420	.468
30-34...	.0737	5.88	6.52	6.61	.433	.481	.487
35-39...	.0877	6.47	7.04	7.56	.567	.617	.663
40-44...	.0946	7.27	7.67	7.67	.688	.726	.726
45-49...	.1080	7.85	8.39	8.82	.848	.906	.953
50-54...	.1258	8.59	9.29	9.19	1.081	1.169	1.156
55-59...	.1419	9.48	10.39	10.43	1.345	1.474	1.480
60-64...	.1588	10.04	10.99	10.93	1.594	1.745	1.736
65-69...	.1677	10.79	11.65	12.27	1.809	1.954	2.058
70-74...	.1972	11.47	13.32	15.53	2.262	2.627	3.063
75-79...	.2389	12.09	13.77	14.50	2.888	3.290	3.464
Female							
15-19...	.1323	\$ 4.76	\$ 5.04	\$ 4.95	\$.630	\$.667	\$.655
20-24...	.1001	5.50	5.73	5.76	.551	.574	.577
25-29...	.1095	6.18	6.69	6.44	.677	.733	.705
30-34...	.1278	6.53	7.21	6.94	.835	.921	.887
35-39...	.1367	7.15	7.45	7.48	.977	1.018	1.023
40-44...	.1520	7.70	8.09	8.17	1.170	1.230	1.242
45-49...	.1531	8.00	8.50	8.40	1.225	1.301	1.286
50-54...	.1475	8.63	9.10	9.21	1.273	1.342	1.358
55-59...	.1395	9.15	9.96	9.91	1.276	1.389	1.382
60-64...	.1398	9.97	10.75	10.85	1.394	1.503	1.517
65-69...	.1561	10.66	11.63	12.67	1.664	1.815	1.978
70-74...	.1727	11.57	10.32	16.40	1.998	1.782	2.832
75-79...	.2083	12.57	14.87	16.10	2.618	3.097	3.354
Child							
All ages...	.0865	\$ 4.18	\$ 4.30	\$ 4.37	\$.362	\$.372	\$.378

TABLE 2
1964-65 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
FREQUENCY OF HOSPITALIZATION; AVERAGE CLAIM AND
CLAIM COST PER \$1 OF DAILY HOSPITAL BENEFIT
NO DEDUCTIBLE

ATTAINED AGE	FREQUENCY OF HOSPITALIZATION	AVERAGE CLAIM FOR A MAXIMUM BENEFIT PERIOD OF:			CLAIM COST FOR A MAXIMUM BENEFIT PERIOD OF:		
		30 Days	90 Days	365 Days	30 Days	90 Days	365 Days
Male							
15-19 . . .	.1191	\$ 5.38	\$ 5.76	\$ 6.27	\$.641	\$.686	\$.747
20-24 . . .	.0712	5.55	6.05	7.06	.395	.431	.503
25-29 . . .	.0690	5.42	5.65	7.40	.374	.390	.511
30-34 . . .	.0737	5.85	6.10	7.00	.431	.450	.516
35-39 . . .	.0877	6.34	6.77	8.40	.556	.594	.737
40-44 . . .	.0946	7.13	7.41	7.97	.674	.701	.754
45-49 . . .	.1080	7.67	8.24	9.56	.828	.890	1.032
50-54 . . .	.1258	8.19	8.86	9.88	1.030	1.115	1.243
55-59 . . .	.1419	9.18	10.07	10.47	1.303	1.429	1.486
60-64 . . .	.1588	9.62	10.69	11.72	1.528	1.698	1.861
65-69 . . .	.1677	10.30	11.45	14.35	1.727	1.920	2.406
70-74 . . .	.1972	10.86	12.36	13.39	2.142	2.437	2.641
75-79 . . .	.2389	11.80	13.73	14.74	2.819	3.280	3.521
Female							
15-19 . . .	.1323	\$ 4.71	\$ 5.00	\$ 4.94	\$.623	\$.662	\$.654
20-24 . . .	.1001	5.22	5.41	5.96	.523	.542	.597
25-29 . . .	.1095	5.91	6.29	6.56	.647	.689	.718
30-34 . . .	.1278	6.43	6.61	7.26	.822	.845	.928
35-39 . . .	.1367	6.89	7.14	7.87	.942	.976	1.076
40-44 . . .	.1520	7.42	7.84	8.53	1.128	1.192	1.297
45-49 . . .	.1531	7.71	8.14	8.76	1.180	1.246	1.341
50-54 . . .	.1475	8.29	8.85	9.84	1.223	1.305	1.451
55-59 . . .	.1395	8.87	9.65	10.54	1.237	1.346	1.470
60-64 . . .	.1398	9.56	10.48	11.29	1.336	1.465	1.578
65-69 . . .	.1561	10.22	11.46	12.15	1.595	1.789	1.897
70-74 . . .	.1727	11.18	13.10	14.00	1.931	2.262	2.418
75-79 . . .	.2083	12.27	14.89	16.31	2.556	3.102	3.397
Child							
All ages . . .	.0865	\$ 4.08	\$ 4.23	\$ 4.45	\$.353	\$.366	\$.385

Table 2 shows the experience on policies with 30-, 90-, and 365-day maximum benefit periods. The experience under these policies follows the same pattern shown in Table 1.

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

Table 4 compares the experience shown in Table 3 for policies with no deductible with the 1962-63 Intercompany Experience and with the 1956 Intercompany Hospital Table. For males and females, the frequencies and claim costs for the 1964-65 experience are higher than those for 1962-63, but the average claims have generally remained at the same level. All categories have increased for children. Ratios of 1964-65 experience to 1962-63 experience for all ages combined are shown in the following tabulation:

	Fre- quencies	Average Claims	Claim Costs
Males.....	105%	99%	104%
Females.....	103	99	101
Children.....	102	102	104

An analysis by duration was made of the experience on policies with no deductible. Ratios of actual claim costs to claim costs for duration 3 and later are shown in the following tabulation:

Duration	Males	Females	All Adults	Children	Total
1.....	56%	65%	61%	110%	63%
2.....	76	81	79	104	79
3 and later.....	100	100	100	100	100
All durations	85%	89%	87%	104%	87%

TABLE 3

1964-65 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 . . . . .	.1191	\$ 5.80	\$.691	.0626	\$10.10	\$.632	.0705	\$ 5.44	\$.384
20-24 . . . . .	.0712	6.25	.445	.0616	6.74	.415	.0524	5.59	.293
25-29 . . . . .	.0690	6.23	.430	.0590	7.12	.420	.0501	6.03	.302
30-34 . . . . .	.0737	6.39	.471	.0639	7.42	.474	.0530	6.37	.338
35-39 . . . . .	.0877	7.08	.621	.0700	6.58	.461	.0651	6.53	.425
40-44 . . . . .	.0946	7.61	.720	.0917	9.27	.850	.0643	7.80	.502
45-49 . . . . .	.1080	8.44	.912	.0905	8.66	.784	.0796	8.72	.694
50-54 . . . . .	.1258	9.16	1.152	.1155	9.45	1.091	.0941	9.24	.869
55-59 . . . . .	.1419	10.29	1.460	.1417	10.35	1.467	.1043	9.22	.962
60-64 . . . . .	.1588	10.92	1.734	.1554	11.78	1.831	.1207	10.49	1.266
65-69 . . . . .	.1677	11.87	1.991	.1599	12.68	2.028	.1222	11.93	1.458
70-74 . . . . .	.1972	13.41	2.644	.1830	14.71	2.692	.1601	13.41	2.147
75-79 . . . . .	.2389	13.67	3.266	.2339	15.60	3.649	.1773	14.84	2.631
Female									
15-19 . . . . .	.1323	\$ 4.91	\$.650	.0933	\$ 6.42	\$.599	.0850	\$ 4.61	\$.392
20-24 . . . . .	.1001	5.66	.567	.0895	6.46	.578	.0763	5.68	.433
25-29 . . . . .	.1095	6.44	.705	.0956	7.93	.758	.0833	6.02	.501
30-34 . . . . .	.1278	6.94	.887	.1279	7.24	.926	.0921	6.36	.586
35-39 . . . . .	.1367	7.40	1.012	.1326	7.78	1.032	.1063	7.38	.784
40-44 . . . . .	.1520	8.03	1.221	.1498	8.24	1.234	.1154	7.35	.848
45-49 . . . . .	.1531	8.37	1.281	.1519	8.43	1.281	.1280	7.71	.987
50-54 . . . . .	.1475	9.06	1.336	.1462	10.66	1.558	.1149	9.06	1.041
55-59 . . . . .	.1395	9.79	1.366	.1378	10.45	1.440	.1072	9.48	1.016
60-64 . . . . .	.1398	10.69	1.494	.1340	10.89	1.459	.1092	10.24	1.118
65-69 . . . . .	.1561	11.70	1.826	.1617	12.79	2.068	.1070	10.39	1.112
70-74 . . . . .	.1727	13.90	2.401	.1797	13.88	2.494	.1327	13.07	1.734
75-79 . . . . .	.2083	14.42	3.004	.1968	14.57	2.867	.1553	14.77	2.294
Child									
All ages . . . . .	.0865	\$ 4.28	\$.370	.0750	\$ 4.73	\$.355	.0618	\$ 4.23	\$.261

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

TABLE 4
 1964-65 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 COMPARISON WITH 1962-63 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	1964-65 INTERCOMPANY EXPERIENCE			RATIO OF 1964-65 EXPERIENCE TO 1962-63 EXPERIENCE			RATIO OF 1964-65 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.....	.1191	\$ 5.80	\$.691	1.19	1.08	1.28	1.52	.78	1.18
20-24.....	.0712	6.25	.445	1.01	1.02	1.03	.91	.84	.76
25-29.....	.0690	6.23	.430	1.05	.99	1.04	.91	.82	.75
30-34.....	.0737	6.39	.471	1.03	.96	.99	.99	.80	.78
35-39.....	.0877	7.08	.621	1.07	.98	1.04	1.10	.80	.87
40-44.....	.0946	7.61	.720	1.02	.98	1.00	1.06	.76	.81
45-49.....	.1080	8.44	.912	1.02	.99	1.01	1.08	.75	.81
50-54.....	.1258	9.16	1.152	1.02	.98	1.00	1.09	.74	.82
55-59.....	.1419	10.29	1.460	1.04	.98	1.02	1.06	.82	.87
60-64.....	.1588	10.92	1.734	1.05	.97	1.03	1.03	.84	.88
65-69.....	.1677	11.87	1.991	1.04	1.00	1.04	1.01	.86	.86
70-74.....	.1972	13.41	2.644	1.10	.99	1.09	1.14	.78	.88
75-79.....	.2389	13.67	3.266	1.04	1.00	1.04	1.36	.59	.80
Female									
15-19.....	.1323	\$ 4.91	\$.650	1.20	.99	1.19	1.41	.68	.96
20-24.....	.1001	5.66	.567	1.03	1.00	1.03	1.01	.77	.77
25-29.....	.1095	6.44	.705	1.00	.99	.99	.98	.83	.81
30-34.....	.1278	6.94	.887	1.04	.98	1.02	1.05	.84	.89
35-39.....	.1367	7.40	1.012	.99	.97	.96	1.05	.84	.88
40-44.....	.1520	8.03	1.221	1.02	1.00	1.02	1.10	.86	.94
45-49.....	.1531	8.37	1.281	1.01	.98	.98	1.05	.84	.88
50-54.....	.1475	9.06	1.336	1.01	.98	1.00	.97	.84	.83
55-59.....	.1395	9.79	1.366	1.01	.99	1.00	.88	.86	.76
60-64.....	.1398	10.69	1.494	1.01	.99	1.01	.86	.86	.75
65-69.....	.1561	11.70	1.826	1.05	1.00	1.06	.93	.85	.80
70-74.....	.1727	13.90	2.401	1.06	.97	1.03	1.00	.81	.81
75-79.....	.2083	14.42	3.004	1.05	.97	1.01	1.19	.62	.74
Child									
All ages....	.0865	\$ 4.28	\$.370	1.02	1.02	1.04	Not available		

TABLE 5
 GRADUATED 1964-65 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.....	.1109	\$ 5.79	\$.642
20-24.....	.0806	6.13	.494
25-29.....	.0698	6.27	.438
30-34.....	.0736	6.51	.479
35-39.....	.0844	7.02	.592
40-44.....	.0954	7.64	.729
45-49.....	.1090	8.40	.916
50-54.....	.1251	9.23	1.155
55-59.....	.1410	10.16	1.433
60-64.....	.1560	11.01	1.718
65-69.....	.1721	12.02	2.069
70-74.....	.1995	13.11	2.615
75-79.....	.2358	13.81	3.256
Female			
15-19.....	.1246	\$ 4.88	\$.608
20-24.....	.1093	5.68	.621
25-29.....	.1113	6.39	.711
30-34.....	.1247	6.95	.867
35-39.....	.1381	7.44	1.027
40-44.....	.1492	7.95	1.186
45-49.....	.1516	8.43	1.278
50-54.....	.1468	9.04	1.327
55-59.....	.1409	9.78	1.378
60-64.....	.1423	10.72	1.525
65-69.....	.1549	11.96	1.853
70-74.....	.1758	13.49	2.372
75-79.....	.2053	14.57	2.991
Child			
All ages.....	.0865	\$ 4.28	\$.370

Table 5 contains a graduation of the crude frequencies and average claims of Table 3 for policies with no deductible. Claim costs in Table 5 are derived as a product of these functions.

MISCELLANEOUS HOSPITAL EXPENSE BENEFIT

Sixteen companies contributed to this section of the study. Although there were over 735,000 claims, much of the data lacked sufficient homogeneity to incorporate into tables which would be meaningful and useful. It was deemed necessary, as was the case with the 1960-61 and 1962-63 studies, to build the study around the \$100 maximum benefit.

Table 6 shows the average claim for a \$100 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 7 shows the graduated frequencies of hospitalization, the graduated average claims, and the claim costs for a \$100 maximum benefit. The frequencies of hospitalization are the same as those shown in Table 5, and the average claims are the same as those shown in Table 6. The claim cost is the product of the frequency and the average claim.

Table 8 shows a comparison of the actual 1964-65 experience for a \$100 maximum benefit on policies with no deductible with the corresponding 1962-63 experience and with the 1956 Intercompany Hospital Table. The frequencies of hospitalization are the same as those shown in Table 4. The claim costs for the 1964-65 experience are about 9 per cent higher than those for the 1962-63 experience. About half of this increase comes from higher frequencies of hospitalization, and about half comes from higher average claim amounts.

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 \$100 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. The \$100 maximum benefit cell had the largest number of claims and the largest number of contributing companies, and, of those cells with a large number of claims, it had the smallest proportion of experience from its largest single contributor.

Table 10 indicates the range in the level of average claims experience for the \$100 maximum benefit amount among companies offering that maximum. The level of the ratios of actual to tabular for males and females for any single company is quite consistent but varies considerably from one company to another.

TABLE 6
 1964-65 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
 INPATIENT ONLY; AVERAGE CLAIM
 NO DEDUCTIBLE—\$100 MAXIMUM BENEFIT

ATTAINED AGE	NO. CLAIMS	AVERAGE CLAIM	
		Actual	Graduated
Male			
15-19.....	449	\$66.37	\$66.50
20-24.....	3,323	71.31	71.12
25-29.....	2,457	73.37	73.03
30-34.....	1,801	73.34	74.46
35-39.....	1,761	76.87	76.49
40-44.....	1,779	78.57	78.51
45-49.....	2,235	79.95	80.10
50-54.....	3,023	82.15	82.00
55-59.....	3,632	83.47	83.35
60-64.....	3,658	83.74	83.94
65-69.....	2,653	84.63	84.50
70-74.....	2,306	84.46	84.50
75-79.....	1,179	84.33	84.50
Total.....	30,256		
Female			
15-19.....	896	\$65.76	\$65.96
20-24.....	4,296	73.30	73.16
25-29.....	2,750	76.53	76.49
30-34.....	2,401	79.97	79.56
35-39.....	2,680	80.01	81.00
40-44.....	3,731	82.69	82.40
45-49.....	4,872	82.83	82.78
50-54.....	6,097	82.69	82.95
55-59.....	6,446	83.51	83.14
60-64.....	5,859	83.03	83.14
65-69.....	4,813	83.51	83.14
70-74.....	3,766	83.33	83.14
75-79.....	1,822	81.58	83.14
Total.....	50,429		
Child			
All ages.....	14,435	\$63.28	\$63.28

TABLE 7
 1964-65 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 GRADUATED FREQUENCY OF HOSPITALIZATION
 GRADUATED AVERAGE CLAIM AND CLAIM COST
 \$100 MAXIMUM MISCELLANEOUS HOSPITAL
 EXPENSE BENEFIT
 INPATIENT ONLY; NO DEDUCTIBLE

Attained Age	Frequency	Average Claim	Claim Cost
Male			
15-19 .....	.1109	\$66.50	\$ 7.37
20-24 .....	.0806	71.12	5.73
25-29 .....	.0698	73.03	5.10
30-34 .....	.0736	74.46	5.48
35-39 .....	.0844	76.49	6.46
40-44 .....	.0954	78.51	7.49
45-49 .....	.1090	80.10	8.73
50-54 .....	.1251	82.00	10.26
55-59 .....	.1410	83.35	11.75
60-64 .....	.1560	83.94	13.09
65-69 .....	.1721	84.50	14.54
70-74 .....	.1995	84.50	16.86
75-79 .....	.2358	84.50	19.93
Female			
15-19 .....	.1246	\$65.96	\$ 8.22
20-24 .....	.1093	73.16	8.00
25-29 .....	.1113	76.49	8.51
30-34 .....	.1247	79.56	9.92
35-39 .....	.1381	81.00	11.19
40-44 .....	.1492	82.40	12.29
45-49 .....	.1516	82.78	12.55
50-54 .....	.1468	82.95	12.18
55-59 .....	.1409	83.14	11.71
60-64 .....	.1423	83.14	11.83
65-69 .....	.1549	83.14	12.88
70-74 .....	.1758	83.14	14.62
75-79 .....	.2053	83.14	17.07
Child			
All ages .....	.0865	\$63.28	\$ 5.47

TABLE 8
 1964-65 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 COMPARISON WITH 1962-63 INTERCOMPANY EXPERIENCE
 AND 1956 INTERCOMPANY HOSPITAL TABLE
 \$100 MAXIMUM MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
 INPATIENT ONLY
 NO DEDUCTIBLE

ATTAINED AGE	1964-65 INTERCOMPANY EXPERIENCE			RATIO OF 1964-65 EXPERIENCE TO 1962-63 EXPERIENCE			RATIO OF 1964-65 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.....	1191	\$66.37	\$ 7.90	1.19	1.08	1.28	1.52	1.06	1.61
20-24.....	.0712	71.31	5.08	1.01	1.05	1.07	.91	1.12	1.02
25-29.....	.0690	73.37	5.06	1.05	1.05	1.10	.91	1.09	1.00
30-34.....	.0737	73.34	5.41	1.03	1.03	1.06	.99	1.04	1.03
35-39.....	.0877	76.87	6.74	1.07	1.05	1.12	1.10	1.05	1.15
40-44.....	.0946	78.57	7.43	1.02	1.04	1.07	1.06	1.02	1.09
45-49.....	.1080	79.95	8.63	1.02	1.03	1.04	1.08	1.00	1.08
50-54.....	.1258	82.15	10.33	1.02	1.04	1.06	1.09	.99	1.08
55-59.....	.1419	83.47	11.84	1.04	1.05	1.09	1.06	.97	1.03
60-64.....	.1588	83.74	13.30	1.05	1.03	1.09	1.03	.94	.97
65-69.....	.1677	84.63	14.19	1.04	1.03	1.07	1.01	.91	.92
70-74.....	.1972	84.46	16.66	1.10	1.05	1.15	1.14	.88	1.01
75-79.....	.2389	84.33	20.15	1.04	1.06	1.10	1.36	.85	1.16
Female									
15-19.....	.1323	\$65.76	\$ 8.70	1.20	1.08	1.30	1.41	1.05	1.49
20-24.....	.1001	73.30	7.34	1.03	1.08	1.11	1.01	1.15	1.16
25-29.....	.1095	76.53	8.38	1.00	1.05	1.05	.98	1.14	1.12
30-34.....	.1278	79.97	10.22	1.04	1.07	1.11	1.05	1.14	1.20
35-39.....	.1367	80.01	10.94	.99	1.03	1.02	1.05	1.09	1.14
40-44.....	.1520	82.69	12.57	1.02	1.05	1.07	1.10	1.08	1.18
45-49.....	.1531	82.83	12.68	1.01	1.05	1.05	1.05	1.04	1.09
50-54.....	.1475	82.69	12.20	1.01	1.03	1.05	.97	1.00	.97
55-59.....	.1395	83.51	11.65	1.01	1.05	1.06	.88	.97	.86
60-64.....	.1398	83.03	11.61	1.01	1.05	1.06	.86	.93	.80
65-69.....	.1561	83.51	13.04	1.05	1.03	1.09	.93	.90	.84
70-74.....	.1727	83.33	14.39	1.06	1.07	1.13	1.00	.87	.87
75-79.....	.2083	81.58	16.99	1.05	1.04	1.09	1.19	.82	.98
Child									
All ages.....	.0865	\$63.28	\$ 5.47	1.02	1.09	1.12	Not available		

Table 11 shows that the average claim increases more rapidly by age as the maximum 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 shows the experience of one company for a number of maximum benefit amounts issued with \$0 and \$50 deductibles. As expected,

TABLE 9
1964-65 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
\$ 50.....	4,342	6,454	3,235	93.1	5	.490	.497	.645
60.....	3,080	6,843	1,197	93.5	5	.684	.687	.858
70.....	123	131	17	58.3	4	.783	.773	.840
75.....	5,703	8,823	2,751	99.7	3	.546	.553	.824
80.....	334	450	177	35.3	6	.866	.868	.983
90.....	5,741	14,030	3,886	99.5	5	.988	.978	1.103
100.....	30,399	50,609	14,435	71.9	13	1.000	1.000	1.000
113.....	271	396	0	100.0	1	.592	.586	.....
120.....	6,183	14,659	4,491	92.7	8	1.254	1.242	1.248
125.....	831	1,094	429	100.0	1	1.099	1.088	.639
150.....	26,536	46,261	14,283	78.8	11	1.274	1.293	1.140
160.....	1,715	3,299	1,790	97.1	5	1.427	1.419	1.336
180.....	127	255	133	63.9	5	1.522	1.577	1.260
200.....	28,344	49,935	15,331	73.3	11	1.464	1.475	1.217
225.....	179	327	212	54.7	3	1.798	1.746	1.358
240.....	6,186	10,734	7,054	97.0	6	1.636	1.691	1.395
250.....	22,458	39,101	10,450	95.3	6	1.552	1.552	1.174
300.....	25,468	43,306	13,658	83.3	11	1.631	1.625	1.215
320.....	6,010	8,131	5,422	100.0	1	1.907	1.952	1.498
360.....	71	139	48	58.5	2	1.728	1.888	1.414
375.....	83	97	26	63.6	3	2.080	2.068	1.471
400.....	4,329	5,376	3,041	87.4	6	1.963	2.053	1.533
480.....	284	163	107	100.0	1	2.216	2.142	1.779
500.....	1,045	1,283	495	65.7	4	2.167	2.219	1.746
550.....	127	213	102	100.0	1	2.185	2.011	1.668
600.....	273	259	77	51.9	2	2.502	2.353	1.741
1,225.....	21,477	37,281	9,868	100.0	1	1.946	1.853	1.208
Total.....	201,719	349,649	112,715	.....	.....	.....	.....	.....

* Tabular based on graduated average claim for \$100 maximum benefit shown in Table 6.

the average claim before application of the deductible is generally larger on policies with the deductible, and the difference appears to become greater as the maximum amount of benefit increases.

The experience of several companies with an outpatient benefit is compared in Table 13 with their corresponding experience under the inpatient-only benefit for the \$100 and \$200 maximum benefit amounts. If outpatient claims are included, the average claims for children are reduced considerably, while the average claims for females are reduced only

TABLE 10
1964-65 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
INPATIENT ONLY
VARIATION IN AVERAGE CLAIM BY CONTRIBUTING COMPANY
NO DEDUCTIBLE—\$100 MAXIMUM BENEFIT

COMPANY	NUMBER OF CLAIMS			RATIO OF ACTUAL TO TABULAR*		
	Male	Female	Child	Male	Female	Child
A.....	1,133	2,624	1,071	1.065	1.068	1.147
B.....	267	332	255	1.021	1.026	1.051
C.....	302	384	70	1.107	1.079	1.162
D.....	59	142	76	1.165	1.137	1.195
E.....	154	234	35	1.093	1.073	1.211
F.....	10	6	1	.925	.990	.794
G.....	80	187	78	1.004	1.003	1.047
H.....	301	439	125	1.057	1.048	1.081
I.....	2,821	3,727	1,022	.871	.870	.870
J.....	153	287	134	1.081	1.059	1.159
K.....	255	428	378	1.099	1.155	1.187
L.....	3,387	4,538	1,322	1.000	1.001	1.058
M.....	21,477	37,281	9,868	1.007	1.003	.974
Total...	30,399	50,609	14,435	1.000	1.000	1.000

* Tabular based on graduated average claim for \$100 maximum benefit shown in Table 6.

slightly. Including outpatient claims reduces the average claims for males much more under the \$200 maximum benefit than under the \$100 maximum benefit.

The claim cost for the miscellaneous hospital expense inpatient benefit can be modified to include outpatient benefits as well, by multiplying the claim cost for inpatient benefits by the product of a times b , where a is the ratio of the number of all claims to the number of inpatient claims and b is the ratio of the average claim on all claims to the average claim on inpatient claims. The a and b ratios are obtained from Table 13.

Table 14 shows for one company the ratios of average claim on all

TABLE 11

1964-65 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.....	177	1.036	1.200	1.268	1.313	1.348	1.528
20-24.....	2,318	1.020	1.204	1.298	1.357	1.396	1.580
25-29.....	1,695	1.027	1.209	1.295	1.340	1.369	1.432
30-34.....	1,207	1.010	1.208	1.312	1.378	1.425	1.598
35-39.....	1,183	1.017	1.245	1.374	1.452	1.507	1.715
40-44.....	1,124	1.005	1.240	1.381	1.470	1.528	1.713
45-49.....	1,522	1.009	1.246	1.386	1.475	1.538	1.748
50-54.....	2,216	1.008	1.273	1.440	1.553	1.636	1.980
55-59.....	2,772	1.000	1.277	1.456	1.582	1.678	2.117
60-64.....	2,722	.998	1.283	1.478	1.623	1.732	2.199
65-69.....	1,920	1.005	1.303	1.506	1.651	1.758	2.228
70-74.....	1,722	.993	1.295	1.504	1.651	1.762	2.251
75-79.....	841	.999	1.306	1.536	1.717	1.857	2.382
Total.....	21,419						
Female							
15-19.....	589	1.000	1.151	1.223	1.268	1.293	1.362
20-24.....	3,031	1.011	1.194	1.287	1.341	1.375	1.474
25-29.....	1,859	1.016	1.220	1.333	1.397	1.438	1.550
30-34.....	1,643	1.010	1.246	1.383	1.466	1.518	1.637
35-39.....	1,677	1.007	1.247	1.393	1.482	1.540	1.661
40-44.....	2,487	1.007	1.266	1.424	1.526	1.594	1.791
45-49.....	3,489	1.001	1.266	1.435	1.543	1.614	1.828
50-54.....	4,666	.999	1.263	1.428	1.536	1.611	1.851
55-59.....	5,115	1.009	1.276	1.446	1.560	1.639	1.903
60-64.....	4,517	.999	1.274	1.453	1.575	1.660	1.968
65-69.....	3,622	1.004	1.288	1.475	1.608	1.702	2.025
70-74.....	3,046	.995	1.274	1.467	1.605	1.706	2.158
75-79.....	1,455	.973	1.235	1.419	1.559	1.665	2.066
Total.....	37,196						
Child							
All ages.....	9,868	.974	1.073	1.118	1.144	1.160	1.208

* Tabular based on graduated average claim for \$100 maximum benefit shown in Table 6.

TABLE 12

1964-65 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											
	\$90 Deductible		\$120 Deductible		\$150 Deductible		\$200 Deductible		\$240 Deductible		\$320 Deductible	
	\$0	\$50	\$0	\$50	\$0	\$50	\$0	\$50	\$0	\$50	\$0	\$50
	Male											
15-19					1.362		1.648					
20-24	1.083		1.262		1.322	(1.536)	1.584	1.521	1.563	1.591	1.744	2.120
25-29	1.061	(.948)	1.293	(1.268)	1.283	(1.438)	1.583	(1.785)	1.513	1.754	1.798	2.164
30-34	1.050	(1.141)	1.295	1.299	1.299	(1.495)	1.584	(1.580)	1.622	1.718	1.943	2.195
35-39	1.020	(1.122)	1.287	1.354	1.413	1.420	1.673	1.515	1.689	1.751	1.992	2.153
40-44	1.007	(1.073)	1.309	1.349	1.366	1.513	1.670	(2.034)	1.647	1.808	1.945	2.163
45-49	.990	1.026	1.242	1.304	1.429	(1.495)	1.739	1.558	1.707	1.823	2.082	2.471
50-54	.974	1.038	1.270	1.285	1.401	1.395	1.706	1.972	1.737	1.972	2.083	2.196
55-59	.984	1.014	1.224	1.239	1.349	1.545	1.759	2.054	1.794	1.949	2.214	2.348
60-64	.975	.962	1.262	1.215	1.427	1.497	1.799	1.975	1.843	2.045	2.341	(2.103)
65-69	.973	1.004	1.247	1.329	1.436	1.542	1.774	2.008				
70-74	.973	.989	1.241	1.300	1.454	(1.558)	1.830					
75-79	.969	.947	1.251	1.251	1.421		1.887					
	Female											
15-19			(1.155)		1.427		1.641		(1.833)		(1.407)	
20-24	1.003	(1.179)	1.237	1.263	1.349	1.407	1.559	1.827	1.477	1.744	1.674	1.773
25-29	1.016	1.065	1.263	1.308	1.442	1.612	1.637	1.786	1.574	1.917	1.855	1.992
30-34	1.001	1.023	1.216	1.305	1.379	1.398	1.732	1.820	1.705	1.892	1.950	2.271
35-39	1.012	1.005	1.267	1.245	1.435	1.533	1.703	1.684	1.761	1.894	2.004	2.319
40-44	.998	1.000	1.249	1.348	1.422	1.368	1.717	1.834	1.751	1.898	2.016	2.278
45-49	.977	1.022	1.259	1.279	1.387	1.570	1.771	1.760	1.781	1.797	2.026	2.123
50-54	.976	1.021	1.246	1.289	1.374	1.551	1.720	1.931	1.731	1.825	2.111	2.285
55-59	.965	.967	1.254	1.265	1.413	1.473	1.709	1.864	1.754	1.808	2.155	2.195
60-64	.963	.980	1.239	1.227	1.380	1.483	1.775	1.692	1.886	1.656	2.040	2.460
65-69	.976	.954	1.242	1.289	1.423	1.421	1.780	2.126				
70-74	.964	.984	1.246	1.226	1.407	1.409	1.759	(1.820)				
75-79	.970	.993	1.238	1.272	1.453	(1.583)	1.650					
	Child											
All ages	1.103	1.161	1.260	1.363	1.309	1.456	1.451	1.572	1.399	1.604	1.498	1.794

* Tabular based on graduated average claim for \$100 maximum benefit shown in Table 6.

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

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

claims to average claim on inpatient-only claims. These ratios under \$0 deductible policies generally decrease as the maximum benefit amounts increase. Any decrease is insignificant for the \$50 deductible.

Table 15 shows for all companies studied the variation in actual to tabular claims by period studied for the \$100, \$200, and \$300 maximum benefit amounts on policies with no deductible. There has been a clear and relatively steady increase in these ratios since 1960 for each maximum benefit amount studied, with the greatest increase occurring under the higher maximum benefit amounts. Part of this increase is due to greater frequencies of hospitalization, and part is due to higher average claims.

TABLE 13
 1964-65 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 MISCELLANEOUS HOSPITAL EXPENSE BENEFIT
 VARIATION IN AVERAGE CLAIM WITH OR WITHOUT OUTPATIENT BENEFIT
 NO DEDUCTIBLE

COMPANY	NUMBER OF CLAIMS						RATIO OF AVERAGE CLAIM ON ALL CLAIMS TO AVERAGE CLAIM ON INPATIENT ONLY CLAIMS		
	Inpatient Only			Inpatient and Outpatient			Male	Female	Child
	Male	Female	Child	Male	Female	Child			
\$100 Maximum Benefit									
A.....	1,133	2,624	1,071	1,516	3,232	2,023	.804	.860	.621
B.....	267	332	255	341	371	442	.834	.915	.681
D.....	59	142	76	80	171	140	.802	.878	.661
I.....	2,821	3,727	1,022	2,918	3,808	1,271	.969	.983	.854
J.....	153	287	134	233	410	259	.716	.839	.617
K.....	255	428	378	391	534	711	.740	.841	.629
Total..	4,688	7,540	2,936	5,479	8,526	4,846	.890	.919	.694
\$200 Maximum Benefit									
A.....	3,353	7,335	3,231	5,344	9,608	6,279	.681	.801	.598
B.....	217	247	208	302	291	366	.768	.877	.653
D.....	504	887	434	807	1,180	747	.684	.795	.652
J.....	25	20	7	42	43	14	.667	.805	.609
K.....	221	466	353	369	616	629	.656	.798	.638
Total..	4,320	8,955	4,233	6,864	11,738	8,035	.684	.803	.609

TABLE 14
 1964-65 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				
	\$60	\$90	\$120	\$240	\$320	\$60	\$90	\$120	\$240	\$320
	Male									
15-19				.591						
20-24	.726	.686	.620	.566	.627				.986	.904
25-29	.743	.726	.660	.638	.662		(.892)	(.908)	.935	.924
30-34	.772	.709	.677	.609	.685		(1.000)	.947	.983	.941
35-39	.782	.761	.705	.688	.700	(1.000)	(1.000)	.976	.947	.951
40-44	.845	.776	.747	.684	.740	(1.000)	(.978)	.990	.958	.945
45-49	.828	.829	.784	.722	.810	(1.002)	1.000	1.000	.963	.967
50-54	.907	.865	.842	.818	.827	(1.000)	.973	1.000	.979	.963
55-59	.930	.877	.878	.837	.833	1.000	.977	.964	.987	.979
60-64	.920	.898	.881	.864	.906	1.001	.984	.990	.978	(1.000)
65-69	.932	.906	.892	.861		.977	.982	.969		
70-74	.929	.931	.923	.897		.996	.986	.959		
75-79	.956	.933	.932	.826		.978	1.000	1.000		
Total	.902	.852	.803	.681	.688	.993	.985	.974	.965	.949
	Female									
15-19			(.876)	.721	(.804)					
20-24	.885	.832	.783	.753	.786		(.952)	.917	.998	.989
25-29	.895	.845	.805	.799	.801	(1.000)	.976	1.000	.985	.987
30-34	.847	.884	.817	.810	.843	(1.000)	1.000	.987	1.000	.962
35-39	.853	.856	.806	.811	.837	1.000	.986	.992	.984	.963
40-44	.890	.887	.856	.810	.871	.965	.976	.973	.990	.972
45-49	.907	.893	.860	.826	.861	.994	1.003	.993	.992	.983
50-54	.867	.885	.840	.823	.839	.977	.978	.991	.960	.971
55-59	.915	.878	.859	.811	.868	1.000	.977	.963	.970	.956
60-64	.929	.897	.879	.824	.908	1.001	.966	.979	.981	.965
65-69	.920	.909	.885	.828		.972	.977	.965		
70-74	.935	.911	.895	.839		.977	.980	.974		
75-79	.941	.929	.902	.846		.991	.973	.977		
Total	.915	.892	.857	.801	.832	.986	.979	.977	.984	.974
	Child									
All ages	.645	.640	.614	.598	.620	.979	.949	.954	.958	.961

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

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

SURGICAL EXPENSE BENEFIT

Eighteen companies contributed experience covering over \$37,000,000 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 (*TSA, 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 data pre-

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

MAXIMUM BENEFIT	STUDY PERIOD		
	1960-61	1962-63	1964-65
\$100.....	1.000	1.050	1.105
\$200.....	1.000	1.091	1.219
\$300.....	1.000	1.110	1.228

* Tabular in all periods is based on 1964-65 graduated average amount of claims for \$100 maximum benefit shown in Table 6, and the results were adjusted to a base period of 1960-61.

viously published for the 1962-63 experience, as well as a comparison with the 1956 Intercompany Surgical Table adjusted to a standardized basis, as shown on page 155 of *TSA, 1963 Reports*. For adults the frequencies were slightly higher than those in the previous study, and the average claims were slightly lower. The decrease in average claims was somewhat more pronounced for females than for males, so that, while male claim costs remained relatively stable, the female claim costs showed a slight decrease. For children, frequencies and claim costs decreased.

A graduation of the crude 1964-65 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 the data on claims for policies with deductibles was less

TABLE 16
1964-65 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
COMPARISON WITH 1962-63 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	1964-65 INTERCOMPANY EXPERIENCE			RATIO OF 1964-65 EXPERIENCE TO 1962-63 EXPERIENCE			RATIO OF 1964-65 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 . . . . .	.1666	\$11.72	\$1.95	1.33	.94	1.25	2.06	.69	1.41
20-24 . . . . .	.0882	12.71	1.12	.99	.97	.96	1.13	.73	.83
25-29 . . . . .	.0796	13.01	1.04	.99	.97	.96	1.07	.74	.79
30-34 . . . . .	.0830	13.95	1.16	1.00	.99	.99	1.12	.77	.87
35-39 . . . . .	.0900	15.28	1.38	1.05	.96	1.02	1.22	.82	1.01
40-44 . . . . .	.0860	17.26	1.48	.99	.99	.98	1.15	.90	1.03
45-49 . . . . .	.0924	18.66	1.72	1.01	.93	.95	1.19	.88	1.04
50-54 . . . . .	.0977	22.59	2.21	1.02	.98	1.00	1.18	.94	1.11
55-59 . . . . .	.1048	25.61	2.68	1.00	1.02	1.03	1.16	1.00	1.17
60-64 . . . . .	.1108	31.70	3.51	1.05	.96	1.01	1.14	1.09	1.24
65-69 . . . . .	.1185	33.41	3.96	1.04	.96	.99	1.21	1.13	1.37
70-74 . . . . .	.1165	39.76	4.63	1.03	1.01	1.04	1.19	1.35	1.60
75-79 . . . . .	.1272	37.48	4.77	1.11	.88	.97	1.29	1.27	1.64
Female									
15-19 . . . . .	.1224	\$13.83	\$1.69	1.25	.87	1.08	1.46	.67	.98
20-24 . . . . .	.0941	15.73	1.48	1.01	.89	.90	1.02	.75	.76
25-29 . . . . .	.1075	18.07	1.94	.99	.91	.90	1.01	.80	.80
30-34 . . . . .	.1202	22.23	2.67	1.02	.96	.97	1.08	.89	.96
35-39 . . . . .	.1280	23.99	3.07	1.02	.94	.96	1.15	.88	1.01
40-44 . . . . .	.1306	27.13	3.54	1.02	.95	.97	1.16	.93	1.08
45-49 . . . . .	.1272	26.97	3.43	1.02	.95	.97	1.16	.93	1.08
50-54 . . . . .	.1153	26.24	3.03	1.01	.97	.98	1.10	.92	1.02
55-59 . . . . .	.1065	26.13	2.78	1.03	.97	.99	1.05	.94	.99
60-64 . . . . .	.0996	28.64	2.85	.99	.96	.96	1.00	1.01	1.02
65-69 . . . . .	.1040	30.42	3.16	1.03	.95	.97	1.06	1.09	1.15
70-74 . . . . .	.0971	34.72	3.37	.98	1.01	.99	.99	1.24	1.23
75-79 . . . . .	.1075	31.36	3.37	1.13	.83	.93	1.09	1.12	1.23
Child									
All ages . . . . .	.1039	\$12.35	\$1.28	.94	1.00	.93	Not applicable		

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

TABLE 17
 1964-65 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 . . . . .	.1100	\$11.72	\$1.29
20-24 . . . . .	.0892	12.20	1.09
25-29 . . . . .	.0820	13.01	1.07
30-34 . . . . .	.0837	13.95	1.17
35-39 . . . . .	.0865	15.45	1.34
40-44 . . . . .	.0902	17.26	1.56
45-49 . . . . .	.0943	19.85	1.87
50-54 . . . . .	.0987	23.00	2.27
55-59 . . . . .	.1037	26.40	2.74
60-64 . . . . .	.1095	30.25	3.31
65-69 . . . . .	.1155	34.40	3.97
70-74 . . . . .	.1230	39.10	4.81
75-79 . . . . .	.1325	45.00	5.96
Female			
15-19 . . . . .	.1000	\$13.83	\$1.38
20-24 . . . . .	.0941	15.60	1.47
25-29 . . . . .	.1072	18.07	1.94
30-34 . . . . .	.1210	22.23	2.69
35-39 . . . . .	.1280	25.70	3.29
40-44 . . . . .	.1306	27.13	3.54
45-49 . . . . .	.1272	26.97	3.43
50-54 . . . . .	.1153	26.24	3.03
55-59 . . . . .	.1065	26.13	2.78
60-64 . . . . .	.1026	27.70	2.84
65-69 . . . . .	.1013	30.42	3.08
70-74 . . . . .	.1028	34.72	3.57
75-79 . . . . .	.1075	40.30	4.33
Child			
All ages . . . . .	.1039	\$12.35	\$1.28

TABLE 18
 1964-65 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	Average Claim	Claim Cost	Fre- quency	Average Claim	Claim Cost	Fre- quency	Average Claim	Claim Cost
Male									
15-19 . . . . .	.1666	\$11.72	\$1.95	.0395	\$23.44	\$.93	.0513	\$24.48	\$1.26
20-24 . . . . .	.0882	12.71	1.12	.0483	18.33	.89	.0380	18.96	.72
25-29 . . . . .	.0796	13.01	1.04	.0450	17.63	.79	.0343	22.61	.78
30-34 . . . . .	.0830	13.95	1.16	.0431	19.20	.83	.0340	24.09	.82
35-39 . . . . .	.0900	15.28	1.38	.0451	20.01	.90	.0407	24.03	.98
40-44 . . . . .	.0860	17.26	1.48	.0582	21.02	1.22	.0388	28.46	1.10
45-49 . . . . .	.0924	18.66	1.72	.0524	24.09	1.26	.0445	27.02	1.20
50-54 . . . . .	.0977	22.59	2.21	.0625	25.94	1.62	.0538	29.80	1.60
55-59 . . . . .	.1048	25.61	2.68	.0774	30.01	2.32	.0601	37.00	2.22
60-64 . . . . .	.1108	31.70	3.51	.0865	41.39	3.58	.0684	45.43	3.11
65-69 . . . . .	.1185	33.41	3.96	.0941	38.51	3.62	.0682	44.18	3.01
70-74 . . . . .	.1165	39.76	4.63	.1011	39.27	3.97	.0931	45.28	4.22
75-79 . . . . .	.1272	37.48	4.77	.1423	41.96	5.97	.0766	50.02	3.83
Female									
15-19 . . . . .	.1224	\$13.83	\$1.69	.0446	\$16.32	\$.73	.0632	\$20.72	\$1.31
20-24 . . . . .	.0941	15.73	1.48	.0583	21.66	1.26	.0559	21.54	1.20
25-29 . . . . .	.1075	18.07	1.94	.0651	23.92	1.56	.0575	26.61	1.53
30-34 . . . . .	.1202	22.23	2.67	.0862	26.09	2.25	.0655	31.52	2.06
35-39 . . . . .	.1280	23.99	3.07	.0964	30.07	2.90	.0735	33.27	2.45
40-44 . . . . .	.1306	27.13	3.54	.0905	31.77	2.88	.0833	33.63	2.80
45-49 . . . . .	.1272	26.97	3.43	.0968	32.13	3.11	.0900	33.12	2.98
50-54 . . . . .	.1153	26.24	3.03	.0886	31.60	2.80	.0722	35.22	2.54
55-59 . . . . .	.1065	26.13	2.78	.0785	29.62	2.33	.0676	37.27	2.52
60-64 . . . . .	.0996	28.64	2.85	.0743	35.20	2.62	.0645	37.22	2.40
65-69 . . . . .	.1040	30.42	3.16	.0793	33.85	2.68	.0641	38.12	2.44
70-74 . . . . .	.0971	34.72	3.37	.0748	29.27	2.19	.0763	40.31	3.08
75-79 . . . . .	.1075	31.36	3.37	.0898	32.33	2.90	.0787	42.08	3.31
Child									
All ages . . . . .	.1039	\$12.35	\$1.28	.0746	\$13.06	\$.97	.0487	\$19.20	\$.94

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.

than 10 per cent of that for policies without deductibles. Because of this small volume, there are many statistical variations, and, therefore, no comparison of current and previous experience is shown for policies with deductibles. When comparisons are made between the claim frequencies, average claims, and claim costs of policies without a deductible, with a \$25 deductible, and with a \$50 deductible, certain anomalies may be observed. As was pointed out on page 156 of the *TSA, 1963 Reports*, these anomalies are probably the result of heterogeneous data.

An analysis by duration was made of the experience on policies with no deductible. Actual claim costs related to claim costs for duration 3 and later are shown in the following tabulation:

Duration	Males	Females	All Adults	Children	Total
1.....	85%	90%	88%	91%	89%
2.....	98	103	101	102	101
3 and later.....	100	100	100	100	100
All durations.....	96%	98%	97%	97%	97%

DEDUCTIBLE AMOUNTS

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 has the effect of eliminating those claims for total amounts less than the deductible and of reducing larger claims to the extent of the deductible amount.

Annual claim frequencies were obtained by dividing the number of claims in excess of the deductible by the number of lives exposed. Claim frequencies corresponding to deductible amounts of \$25 and \$50 are shown in Table 19. 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 benefits provided. The frequencies shown in Table 19 are for all benefits combined. For homogeneous data we might expect such a claim frequency to exceed the corresponding frequency of hospitalization, because of claims which exceed the deductible by reason of surgical benefits where hospitalization is not involved and by reason of outpatient nonsurgical benefits. There are very few exceptions to this relation between corresponding frequencies in Table 19 and Table 3, and these probably reflect statistical fluctuations and heterogeneous data.

TABLE 19
1964-65 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
CLAIM FREQUENCY OF POLICIES WITH A DEDUCTIBLE

ATTAINED AGE	\$25 DEDUCTIBLE		\$50 DEDUCTIBLE	
	Number of Claims	Claim Frequency	Number of Claims	Claim Frequency
Male				
15-19.....	64	.070	63	.069
20-24.....	1,533	.073	488	.058
25-29.....	1,372	.068	632	.056
30-34.....	965	.072	686	.056
35-39.....	829	.078	819	.069
40-44.....	935	.101	815	.069
45-49.....	906	.101	941	.083
50-54.....	1,053	.122	1,057	.098
55-59.....	1,052	.147	906	.107
60-64.....	891	.155	683	.125
65-69.....	789	.165	532	.125
70-74.....	584	.180	447	.171
75-79.....	514	.243	275	.177
Total.....	11,487		8,344	
Female				
15-19.....	151	.096	94	.085
20-24.....	2,150	.099	955	.079
25-29.....	1,818	.105	1,178	.086
30-34.....	1,518	.134	1,255	.098
35-39.....	1,501	.140	1,482	.112
40-44.....	1,842	.155	1,761	.118
45-49.....	2,152	.162	2,024	.126
50-54.....	2,149	.154	1,863	.119
55-59.....	1,810	.149	1,439	.112
60-64.....	1,453	.144	1,025	.112
65-69.....	1,513	.166	845	.115
70-74.....	1,088	.187	629	.134
75-79.....	705	.209	463	.161
Total.....	19,850		15,013	
Child				
All ages.....	9,218	.083	8,423	.065

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

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. This is indicated in the following example, for a female age x under a policy with no outpatient benefits:

Benefits:

\$ 10 daily hospital benefit for a maximum hospital confinement of 90 days.

\$100 maximum miscellaneous hospital expense benefit.

\$200 maximum surgical schedule—standard schedule.

\$100 maternity benefit.

\$ 50 deductible, but not applicable to maternity benefit.

Let r_x^h represent frequency of hospitalization under a \$50 deductible plan.

h_x represent the average duration of hospitalization under a \$50 deductible plan with a 90-day maximum.

m_x represent the average miscellaneous hospital expense benefit covered under a \$50 deductible plan with a \$100 maximum benefit.

r_x^s represent the frequency of surgery under a \$50 deductible plan.

s_x represent the average amount of surgical claim covered under a \$50 deductible plan, per \$100 maximum surgical schedule—standard schedule.

r_x^m represent the maternity claim rate.

r_x^d represent the claim frequency under a \$50 deductible plan, excluding maternity claims.

The claim cost for all the benefits is given by the following expression:

$$(r_x^h)(10 h_x + m_x) + 2(r_x^s)(s_x) - 50 r_x^e + 100 r_x^m.$$

MATERNITY EXPENSE BENEFIT

Twelve companies contributed data on 46,996 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 pregnancies which commenced after 30 days from date of issue or maternities which occurred after 10 months from date of issue. Maternity benefits provided by the policies varied considerably, as shown by the table at the top of page 102.

Frequencies of maternity by attained age and duration are shown in Table 20. Most of the data were submitted with the first four durations shown separately. However, one company submitted data with only the first two durations shown separately. The experiences for these two kinds of data are shown separately as well as on a combined basis, and the maternity claim frequencies of the 1956 Intercompany Hospital Table are shown for comparative purposes. The frequencies for durations 5 and

ANALYSIS OF DATA BY TYPE OF MATERNITY BENEFIT

Maternity Benefit Provided in Policy	Claims in Study (All Durations)
10 times daily hospital benefit	26,339
5 times combined daily hospital benefit of husband and wife	13,451
8 times daily hospital benefit but not more than \$75 or \$100	1,771
Flat \$50	1,449
Full hospital and surgical benefits	3,693
10 times daily hospital benefit but not more than \$75 or \$100	264
8 times daily hospital benefit in first policy year; 10 times in second year; 12 times thereafter	29
Total	46,996

TABLE 20
1964-65 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
MATERNITY CLAIM FREQUENCY
EXPERIENCE BY CALENDAR-YEAR DURATION

ATTAINED AGE	Experience of Companies Which Submitted Data with the First Four Durations Shown Separately										1956 INTER-COMPANY HOSPITAL TABLE FREQUENCY
	Duration 1		Duration 2		Duration 3		Duration 4		Duration 5 and Later		
20-24	6,712	.286	3,974	.337	2,189	.316	1,234	.301	1,221	.261	.285
25-29	3,150	.210	2,346	.253	1,757	.250	1,310	.237	2,659	.185	.196
30-34	989	.112	793	.134	652	.141	527	.137	1,745	.107	.117
35-39	388	.054	335	.067	253	.064	201	.060	808	.048	.060
40-44	126	.019	123	.025	81	.019	62	.018	275	.015	.016
45-49	23	.004	27	.006	16	.004	9	.003	49	.003	.....
Total	11,388	.....	7,598	.....	4,948	.....	3,343	.....	6,757	.....	.....
Experience of Company Which Submitted Data with the First Two Durations Shown Separately											
	Duration 1		Duration 2		Duration 3 and Later						
20-24	2,439	.287	1,450	.374	1,887	.378	.....	.....	.....	.....	.285
25-29	727	.197	623	.246	2,566	.215	.....	.....	.....	.....	.196
30-34	267	.107	208	.124	1,558	.129	.....	.....	.....	.....	.117
35-39	108	.047	95	.058	728	.054	.....	.....	.....	.....	.060
40-44	38	.014	28	.014	217	.013	.....	.....	.....	.....	.016
45-49	4	.002	1	.000	18	.001	.....	.....	.....	.....	.....
Total	3,583	.....	2,405	.....	6,974	.....	.....	.....	.....	.....	.....
Combined Experience of All Companies											
	Duration 1		Duration 2		Duration 3 and Later						
20-24	9,151	.286	5,424	.347	6,531	.316	.....	.....	.....	.....	.285
25-29	3,877	.207	2,969	.252	8,292	.213	.....	.....	.....	.....	.196
30-34	1,256	.111	1,001	.132	4,482	.121	.....	.....	.....	.....	.117
35-39	496	.053	430	.065	1,990	.053	.....	.....	.....	.....	.060
40-44	164	.017	151	.022	635	.015	.....	.....	.....	.....	.016
45-49	27	.003	28	.004	92	.002	.....	.....	.....	.....	.....
Total	14,971	.....	10,003	.....	22,022	.....	.....	.....	.....	.....	.....

later are close to those of the 1956 table. The frequencies of 1964-65 are slightly lower than those reported for the 1962-63 experience.

As expected, claim frequencies on the maternity benefit are highest in calendar duration 2, 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 10 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

Eleven companies contributed data on 27,923 claims to this section of the study. The volume of claims was almost twice as large as that under the 1962-63 experience.

In order to pool sufficient data for meaningful experience tables and to parallel the studies of 1960-61 and 1962-63 experience, it was necessary to consider deductible amount, coinsurance percentage, and hospital room and board limit as the only variables. Data for policies providing 80 per cent coinsurance were combined with those for 75 per cent coinsurance policies by multiplying the claim amounts paid on the former by .9375. As in the previous studies, most of the data were for policies providing a \$500 deductible amount, 75 or 80 per cent coinsurance, and no hospital room and board limit. The only other combination with data sufficient to consider for detailed analysis was a \$500 deductible amount, 75 or 80 per cent coinsurance, and a \$25 hospital room and board limit.

Table 21 shows the combined experience of durations 3 and later for plans with a \$500 deductible amount, no hospital room and board limit, and 75 per cent coinsurance (including adjusted data for 80 per cent coinsurance plans). The 1964-65 experience is compared to the 1962-63 experience and the 1960-61 experience. Claim frequencies are considerably higher in the 1964-65 experience than those in either previous study at nearly all ages. Average claims are generally lower in the 1964-65 experience, and claim costs are significantly higher than those in the previous studies at most ages.

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 with that for durations 3 and later on the plans included in Table 21. The results show a marked variation in claim costs by duration for adults. The small number of claims prevents a valid interpretation of the results for children.

TABLE 21

1964-65 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 MAJOR MEDICAL EXPENSE BENEFIT—\$500 DEDUCTIBLE AMOUNT
 75 PER CENT COINSURANCE;* NO HOSPITAL ROOM AND BOARD LIMIT
 DURATIONS 3 AND LATER

ATTAINED AGE	No. LIVES EXPOSED	No. CLAIMS	AMOUNT PAID	CLAIM FREQUENCY	AVERAGE CLAIM	CLAIM COST	RATIO TO 1962-63			RATIO TO 1960-61		
							Claim Frequency	Average Claim	Claim Cost	Claim Frequency	Average Claim	Claim Cost
Male												
15-19.....	28	1	\$ 85	.0357	\$ 85	\$ 3.04				.82	.09	.07
20-24.....	1,441	25	11,475	.0173	459	7.96	1.34	.65	.87	2.47	1.11	2.76
25-29.....	2,721	47	25,293	.0173	538	9.31	1.40	.84	1.16	1.00	.53	.53
30-34.....	4,378	76	36,924	.0174	486	8.46	1.24	.81	1.00	1.30	.45	.58
35-39.....	6,544	142	107,146	.0217	755	16.38	1.21	1.02	1.23	1.16	.78	.91
40-44.....	7,459	231	164,921	.0310	714	22.13	1.24	.88	1.10	1.38	.95	1.31
45-49.....	7,148	265	254,029	.0371	959	35.58	1.34	.92	1.23	1.19	.95	1.13
50-54.....	7,038	358	328,290	.0509	917	46.68	1.15	.94	1.08	1.27	.97	1.23
55-59.....	6,534	419	454,280	.0641	1,084	69.48	1.06	.91	.96	1.31	1.16	1.51
60-64.....	5,494	470	515,657	.0855	1,097	93.79	1.18	.90	1.07	1.11	.83	.92
65-69.....	4,292	454	518,071	.1058	1,141	120.72	1.20	1.00	1.20	1.30	.71	.93
70-74.....	3,406	447	548,530	.1312	1,227	160.98	1.56	2.22	3.46	†	†	†
75 and over...	3,279	496	636,530	.1513	1,283	194.12	1.13	.77	.87	†	†	†
Total.....	59,762	3,431	\$3,601,231									

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

† Not available.

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.

TABLE 21—Continued

ATTAINED AGE	No. LIVES EXPOSED	No. CLAIMS	AMOUNT PAID	CLAIM FREQUENCY	AVERAGE CLAIM	CLAIM COST	RATIO TO 1962-63			RATIO TO 1960-61		
							Claim Frequency	Average Claim	Claim Cost	Claim Frequency	Average Claim	Claim Cost
Female												
15-19.....	160	1	\$ 113	.0063	\$ 113	\$.71	1.40	.41	.57			
20-24.....	1,356	26	16,862	.0192	649	12.46	1.27	.80	1.01	.92	1.80	1.66
25-29.....	3,144	88	70,404	.0280	800	22.40	1.26	1.44	1.82	1.23	1.16	1.43
30-34.....	4,699	148	95,974	.0315	648	20.41	1.28	.73	.93	1.12	.95	1.06
35-39.....	6,817	248	176,679	.0364	712	25.92	1.20	.95	1.15	1.25	1.29	1.61
40-44.....	7,554	317	241,105	.0420	761	31.96	.99	1.08	1.07	1.24	.94	1.16
45-49.....	7,455	382	311,605	.0512	816	41.78	1.03	.88	.92	1.06	1.09	1.16
50-54.....	8,014	497	426,917	.0620	859	53.26	1.33	.90	1.20	1.21	.75	.91
55-59.....	8,155	506	486,773	.0620	962	59.64	1.23	.83	1.02	1.29	1.13	1.45
60-64.....	7,978	490	443,013	.0614	904	55.51	1.13	.90	1.02	1.17	.86	1.00
65-69.....	7,766	645	621,270	.0831	963	80.03	.88	.91	.80	1.34	.85	1.13
70-74.....	6,409	574	576,895	.0896	1,005	90.05	.86	1.64	1.41	†	†	†
75 and over...	6,589	892	1,186,817	.1354	1,331	180.22	.88	.82	.72	†	†	†
Total.....	76,096	4,814	\$4,654,427									
Child												
All ages.....	61,848	568	\$ 391,140	.0092	\$ 689	\$ 6.34	1.39	1.10	1.52	2.56	.91	2.33

The data for durations 3, 4, and 5 and later indicated no consistent pattern by duration.

The 1964-65 experience appeared to vary widely by company. Table 24 compares the experience of the six companies which contributed to the results in Table 21.

Table 25 shows experience on plans with a \$500 deductible amount, a

TABLE 22
1964-65 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$500 DEDUCTIBLE AMOUNT
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		\$ 5.41
20-24		8.08
25-29		8.83
30-34		8.99
35-39		15.95
40-44		22.49
45-49		35.07
50-54		47.08
55-59		69.27
60-64		93.92
65-69		120.71
	Female	
15-19		\$ 7.65
20-24		14.34
25-29		18.84
30-34		21.71
35-39		25.90
40-44		33.03
45-49		42.61
50-54		51.30
55-59		56.30
60-64		61.79
65-69		77.50
	Child	
All ages		\$ 6.34

\$25 hospital room and board limit, and 75 per cent coinsurance (including adjusted data for 80 per cent coinsurance plans). The small volume of data underlying this table limits its value. The table is presented only to indicate variation in experience by age and sex. The inconsistency of the results as compared to those in Table 21 is attributed to the paucity of data in Table 25 and variations in company experience.

In addition to the experience tables, an analysis in the form of actual

TABLE 23
1964-65 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$500 DEDUCTIBLE AMOUNT
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	1,432	.41	.79	.33
	{2	1,639	.53	.88	.47
Female.....	{1	2,109	.64	.83	.53
	{2	2,438	.79	.94	.74
All adults..	{1	3,541	.52	.80	.42
	{2	4,077	.66	.90	.60
Child.....	{1	93	.80	.85	.68
	{2	132	.92	.60	.55

* 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.

to expected ratios was made of the following variables: deductible amount, hospital room and board limit, maximum benefit, and calendar year of experience. It is emphasized that the analysis of each variable ignored the effects of the other variables and of variations in company experience. Tables 26-30 show the results of these analyses. The expected figures used in these tables are based on the experience on policies with a \$500 deductible amount and no room and board limit; and they have been calculated using factors for each combination of duration, five-year age group, and sex.

Table 26 compares experiences for various deductible amounts. For adults, claim frequencies and claim costs decrease and average claims increase as the deductible amount increases. Insufficient data make a comparison of experience for children unreliable.

Table 27 compares experiences on policies with a \$25 and a \$30 hospital room and board limit with that on policies having no limit. The results indicate that claim frequencies are little affected by the hospital room and board limit. Claim costs appear higher for policies with a \$30 room and board limit than for policies with a \$25 limit. The fact that claim costs for policies with no room and board limit do not appear greater than those for policies with a limit on this type of expense, as would be expected, seems to result from variations in company experience.

TABLE 24
1964-65 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$500 DEDUCTIBLE AMOUNT—75 PER CENT COINSURANCE*
NO HOSPITAL ROOM AND BOARD LIMIT
DURATIONS 3 AND LATER
RATIOS OF ACTUAL TO EXPECTED EXPERIENCE
BY CONTRIBUTING COMPANY

COM- PANY	SEX	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED†		
			Claim Frequency	Average Claim	Claim Cost
A.....	Male	378	1.06	1.03	1.10
	Female	395	.99	1.22	1.21
	Child	127	1.13	1.17	1.32
B.....	Male	244	.92	.97	.90
	Female	276	.85	.94	.80
	Child	93	.97	1.22	1.18
C.....	Male	2,126	1.02	.99	1.01
	Female	3,326	1.03	.98	1.01
	Child	92	1.11	.77	.85
D.....	Male	470	1.02	1.10	1.11
	Female	555	1.00	1.02	1.02
	Child	180	1.03	.97	1.00
E.....	Male	142	.79	.80	.63
	Female	168	.79	.98	.78
	Child	44	.69	.99	.68
F.....	Male	71	.76	.96	.74
	Female	94	.90	.92	.82
	Child	32	.78	.64	.50

* 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

1964-65 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES
 MAJOR MEDICAL EXPENSE BENEFIT
 \$500 DEDUCTIBLE AMOUNT
 75 PER CENT COINSURANCE*
 \$25 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
Male						
20-24.....	527	3	\$ 394	.0057	\$ 131	\$.75
25-29.....	765	5	3,311	.0065	662	4.30
30-34.....	1,455	31	13,962	.0213	450	9.59
35-39.....	2,344	68	45,062	.0290	663	19.23
40-44.....	2,605	67	59,501	.0257	888	22.82
45-49.....	2,320	104	86,502	.0448	832	37.27
50-54.....	2,051	87	98,766	.0424	1,135	48.12
55-59.....	1,585	104	121,738	.0656	1,171	76.81
60-64.....	924	78	98,234	.0844	1,259	106.26
65-69.....	67	7	13,801	.1045	1,972	206.07
Total..	14,643	554	\$541,271	.....	.....	.....
Female						
20-24.....	417	12	\$ 14,997	.0288	\$1,250	\$ 36.00
25-29.....	882	25	11,036	.0283	441	12.48
30-34.....	1,673	55	27,349	.0329	497	16.35
35-39.....	2,343	98	69,263	.0418	707	29.55
40-44.....	2,576	129	81,198	.0501	629	31.51
45-49.....	2,348	118	87,001	.0503	737	37.07
50-54.....	1,898	109	97,427	.0574	894	51.32
55-59.....	1,501	78	71,845	.0520	921	47.89
60-64.....	826	45	40,458	.0545	899	49.00
65-69.....	74	3	5,968	.0405	1,989	80.55
Total..	14,538	672	\$506,542	.....	.....	.....
Child						
All ages....	21,293	215	\$124,871	.0101	\$ 581	\$ 5.87

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

Table 28 compares the experience of one company on policies having a \$25 hospital room and board limit, coinsurance of 100 per cent on hospital room and board expenses, and 80 per cent on all other eligible expenses, with policies having no room and board limit and 75 per cent coinsurance. All eligible expenses are used toward satisfaction of the deductible amount.

The comparison of experience by size of maximum benefit in Table 29 again indicates the effect of variations in company experience. Claim frequencies would be expected to remain the same, and average claims and claim costs would be expected to increase, as the maximum benefit increases.

TABLE 26
1964-65 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 DEDUCTIBLE AMOUNTS OF
\$300, \$750, AND \$1,000

AMOUNT OF DE- DUCTIBLE	SEX	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED †		
			Claim Frequency	Average Claim	Claim Cost
\$300	Male	187	1.65	.98	1.61
	Female	209	1.44	.95	1.36
	All adults	396	1.53	.96	1.48
	Child	104	2.01	.65	1.30
\$750	Male	198	.65	1.01	.65
	Female	300	.71	1.15	.82
	All adults	498	.69	1.09	.75
	Child	5	.37	3.64	1.34
\$1,000 . . .	Male	273	.57	1.17	.67
	Female	285	.45	1.15	.52
	All adults	558	.50	1.17	.59
	Child	10	.21	2.51	.52

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

† Expected based on experience on policies with a \$500 deductible amount.

TABLE 27
 1964-65 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 MAJOR MEDICAL EXPENSE BENEFIT
 \$500 DEDUCTIBLE AMOUNT
 75 PER CENT COINSURANCE*
 RATIOS OF ACTUAL TO EXPECTED EXPERIENCE
 ON POLICIES WITH ROOM AND BOARD LIMITS OF \$25 AND \$30

ROOM AND BOARD LIMIT	SEX	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED†		
			Claim Frequency	Average Claim	Claim Cost
\$25	Male	959	.97	1.06	1.03
	Female	1,313	1.06	.94	1.00
	All adults	2,272	1.02	.99	1.01
	Child	396	1.01	.97	.98
\$30	Male	361	.94	1.18	1.12
	Female	613	1.03	1.07	1.10
	All adults	974	1.00	1.11	1.10
	Child	139	1.02	1.03	1.04

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

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

TABLE 28
 1964-65 EXPERIENCE UNDER INDIVIDUALLY
 UNDERWRITTEN POLICIES
 MAJOR MEDICAL EXPENSE BENEFIT
 \$500 DEDUCTIBLE AMOUNT
 \$25 HOSPITAL ROOM AND BOARD LIMIT
 COINSURANCE OF 100 PER CENT ON HOSPITAL ROOM AND BOARD AND 80 PER CENT ON ALL OTHER ELIGIBLE EXPENSES
 RATIOS OF ACTUAL TO EXPECTED EXPERIENCE
 (Experience of One Company)

SEX	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED*		
		Claim Frequency	Average Claim	Claim Cost
Male	433	.97	1.09	1.06
Female	503	.97	1.09	1.06
All adults	936	.97	1.09	1.06
Child	141	1.03	1.11	1.15

* Expected based on experience on policies with no room and board limit and 75 per cent coinsurance (including adjusted data on 80 per cent coinsurance plans).

TABLE 29
1964-65 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$500 DEDUCTIBLE AMOUNT
75 PER CENT COINSURANCE*
NO HOSPITAL ROOM AND BOARD LIMIT
RATIOS OF ACTUAL TO EXPECTED EXPERIENCE
ON POLICIES WITH MAXIMUM BENEFITS OF
\$5,000, \$7,500, AND \$10,000

MAXIMUM BENEFIT	SEX	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED†		
			Claim Frequency	Average Claim	Claim Cost
\$5,000	Male	294	.86	.74	.64
	Female	509	1.04	.87	.91
	All adults	803	.97	.82	.79
	Child	44	.95	.99	.94
\$7,500	Male	1,489	.97	1.06	1.03
	Female	1,766	.95	1.01	.96
	All adults	3,255	.96	1.03	.99
	Child	558	.99	1.03	1.02
\$10,000	Male	4,719	1.02	1.00	1.02
	Female	7,086	1.01	1.01	1.02
	All adults	11,805	1.01	1.00	1.02
	Child	191	1.03	.92	.94

* 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.

Table 30 compares the experience for calendar years 1964 and 1965 on policies with a \$500 deductible amount and no room and board limit. Adult claim frequencies and claim costs are significantly higher in 1965 than they were in 1964, while average claims are slightly lower. For children, the results are not as pronounced, and average claim is virtually unchanged. Since only three companies have contributed data for each of the calendar years 1960-65, a meaningful comparison of the experience for each of these years was not possible.

TABLE 30
1964-65 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$500 DEDUCTIBLE AMOUNT
75 PER CENT COINSURANCE*
NO ROOM AND BOARD LIMIT
RATIOS OF ACTUAL TO EXPECTED EXPERIENCE
FOR YEARS OF EXPERIENCE 1964 AND 1965

YEAR OF EXPERIENCE	SEX	ACTUAL NUMBER OF CLAIMS	RATIO OF ACTUAL TO EXPECTED†		
			Claim Frequency	Average Claim	Claim Cost
1964	Male	2,962	.81	1.02	.83
	Female	4,243	.91	1.03	.94
	All adults	7,205	.87	1.02	.89
	Child	431	.96	1.00	.96
1965	Male	3,540	1.24	.98	1.22
	Female	5,118	1.09	.97	1.05
	All adults	8,658	1.14	.98	1.12
	Child	362	1.04	1.01	1.05

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

† Expected based on experience of both years combined.