### TRANSACTIONS OF SOCIETY OF ACTUARIES 1981 REPORTS

### REPORT OF THE COMMITTEE ON EXPERIENCE UNDER INDIVIDUAL HEALTH INSURANCE

### I. EXPERIENCE UNDER INDIVIDUAL MEDICAL EXPENSE POLICIES, 1977–78

### INDEX OF TABLES ON 1977-78 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES

#### HOSPITAL ROOM AND BOARD BENEFIT

Table

- Frequency of Hospitalization, Average Claim, and Claim Cost for Benefit Periods of 31, 90, and 365 Days
- 2. Frequency of Hospitalization, Average Claim, and Claim Cost for 90-Day Benefit Period by Amount of Deductible
- 3. Ratios of 1977-78 Experience to 1975-76 Experience and 1956 Intercompany Hospital Table for Frequency of Hospitalization, Average Claim, and Claim Cost for 90-Day Benefit Period
- Graduated Frequency of Hospitalization, Average Claim, and Claim Cost for 90-Day Benefit Period

#### MISCELLANEOUS HOSPITAL EXPENSE BENEFIT

- 5. Average Amount of Inpatient Claim for \$200 Maximum Benefit
- Graduated Frequency of Inpatient Hospitalization, Average Claim, and Claim Cost for \$200 Maximum Benefit
- 7. Comparison of Frequency of Inpatient Hospitalization, Average Claim, and Claim Cost with 1956 Intercompany Table for \$200 Maximum Benefit
- 8. Variation in Average Inpatient Hospital Claim by Maximum Benefit Amount
- 9. Variation in Average Inpatient Hospital Claim by Maximum Benefit Amount— Experience of One Company
- Variation in Average Inpatient Hospital Claim by Contributing Company for \$200 Maximum Benefit
- 11. Variation in Average Inpatient Hospital Claim by Maximum Benefit Amount, Amount of Deductible, and Age
- 12. Variation of Average Inpatient and Outpatient Hospital Claim to Average Inpatient Hospital Claim by Company for \$100, \$200, and \$300 Maximum Benefit Amounts
- Ratios of Average Inpatient and Outpatient Hospital Claim to Average Inpatient Hospital Claim by Maximum Benefit Amount, Amount of Deductible, and Age
- 14. [Not published in this report]

#### SURGICAL EXPENSE BENEFIT

15. 1977-78 Surgical Experience and Ratio to 1975-76 Experience and 1956 Intercompany Surgical Table for Frequency of Surgery, Average Claim, and Claim Cost

Table

- 16. Graduated Frequency of Surgery, Average Claim, and Claim Cost
- 17. Frequency of Surgery, Average Claim, and Claim Cost by Amount of Deductible
- Percentage Comparison of Frequency of Surgery and Average Claim by Deductible

#### DEDUCTIBLE AMOUNT

 Claim Frequencies of Hospital and Surgical Expense Policies with a Deductible

#### MATERNITY EXPENSE BENEFIT

20. Maternity Claim Frequency by Calendar-Year Duration

#### MAJOR MEDICAL EXPENSE BENEFITS

Experience on Policies with \$500 Fixed Deductible, 75 Percent Coinsurance, and No Hospital Room and Board Limit

- 21. Claim Frequency, Average Claim, and Claim Cost: Comparison with 1975–76 and 1973–74 Experience
- 22. Graduated Claim Costs
- Ratios of Claim Frequency, Average Claim, and Claim Cost by Contributing Company

Experience on Policies with \$500 Fixed Deductible, 75 Percent Coinsurance, and \$25 Hospital Room and Board Limit

- 24. Claim Frequency, Average Claim, and Claim Cost: Comparison with 1975-76 and 1973-74 Experience
- 25. Graduated Claim Costs
- Ratios of Claim Frequency, Average Claim, and Claim Cost by Contributing Company

Experience on Policies with \$500 Fixed Deductible, 75 Percent Coinsurance, and \$30 Hospital Room and Board Limit

- Claim Frequency, Average Claim, and Claim Cost: Comparison with 1975– 76 and 1973–74 Experience
- 28. Graduated Claim Costs
- 29. Ratios of Claim Frequency, Average Claim, and Claim Cost by Duration
- 30. Ratios of Claim Frequency, Average Claim, and Claim Cost by Contributing Company

Experience on Policies with \$750 Fixed Deductible, 75 Percent Coinsurance, and \$35 Hospital Room and Board Limit

31. Claim Frequency, Average Claim, and Claim Cost: Comparison with 1975-76 and 1973-74 Experience

Table

- 32. Graduated Claim Costs
- 33. Ratios of Claim Frequency, Average Claim, and Claim Cost by Contributing Company

Ratios of Actual to Expected Claims for Selected Variables

- 34. Ratios by Hospital Room and Board Limit for \$500 Fixed Deductible
- 35. Ratios by Maximum Benefit for \$500 Fixed Deductible, \$25 Hospital Room and Board Limit
- Ratios by Maximum Benefit for \$500 Fixed Deductible, \$30 Hospital Room and Board Limit
- Ratios by Year of Experience for \$500 Deductible, No Hospital Room and Board Limit
- 38. Ratios by Year of Experience for \$500 Fixed Deductible, \$25 Hospital Room and Board Limit
- 39. Ratios by Year of Experience for \$500 Fixed Deductible, \$30 Hospital Room and Board Limit
- 40. Ratios by Year of Experience for \$750 Fixed Deductible, \$35 Hospital Room and Board Limit

### SUMMARY OF EXPERIENCE UNDER INDIVIDUAL MEDICAL EXPENSE POLICIES, 1977–78

This report presents an analysis of morbidity experience under individual medical expense policies in force during the 1977 and 1978 calendar years. Results of data submitted by eight 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

The mix of contributions to this experience study continues to change. Change has taken place in the number of contributing companies, the volume of the individual contributions, and the distribution of the business included in each contribution, e.g., by duration, to mention a few specific items.

This report presents an analysis of morbidity experience under individual medical expense policies during the two calendar years 1977 and

1978. The six previous studies appear in the 1979, 1977, 1974, 1972, 1969, and 1967 Reports. This report covers two years of experience, as did the previous report.

The experience on lives covered under family and individual policies was combined. No differentiation was made by type of renewal provision. 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 that 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.
- 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.)
- 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).

Care must be used in the analysis of experience over the age of 65 for all medical expense coverages, since the impact of the existence of medicare may cause discontinuities in experience trends by age.

#### CONTRIBUTING COMPANIES

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

Continental Assurance Company
John Hancock Mutual Life Insurance Company
Metropolitan Life Insurance Company
Mutual Life Insurance Company of New York
New York Life Insurance Company
Provident Mutual Life Insurance Company of Philadelphia
Prudential Insurance Company of America
Woodmen Accident and Life Company

#### HOSPITAL ROOM AND BOARD BENEFIT

Six companies contributed experience that was used in this section of the study. A distribution of claims by maximum benefit period is shown in the following tabulation.

MAXIMUM DURATION OF	DAILY HOSPITAL BENEFIT IN FORCE ON HOSPITALIZATION CLAIMS								
DAILY HOSPITAL BENEFIT (Days)	No Deductible	\$25 Deductible	\$50 Deductible	\$100 Deductible					
28	\$ 1,132	\$ 0	\$ 0	\$ 0					
31	114,660	0	0	0					
35	168,375	0	17,057	0					
12	99,445	0	0	0					
5	20,990	1,532	4,922	140					
0	825	16,263	245	0					
00	16,667	0	0	0					
20	951,278	57,458	296,686	38,415					
50	8,950	0	0	0					
80	2,458	0	0	0					
40	2,050	0	0	0					
65	286,778	238,512	539,907	81,365					
Total	\$1,673,608	\$313,765	\$858,817	\$119,920					

The frequency of hospitalization is based on the combined experience for all maximum benefit periods and is defined as the amount of daily hospital benefit in force on hospitalization claims divided by the amount of hospital benefit exposed.

The average claim per \$1 of daily hospital benefit is defined as the amount paid for hospital room and board divided by the amount of daily hospital benefit in force on 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

TABLE I

1977–78 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	FREQUENCY OF		E CLAIM FOR A M BENEFIT PE		1	Cost for At m Benefit Pi	
AGE	HOSPITAL -	31 Days	90 Days	365 Days	31 Days	90 Days	365 Days
				Male	4	<b></b>	*-
5–19	.2099	\$ 7.54	\$ 7.71	1	\$1.583	\$1.618	
20-24	.0519	7.97	6.21	\$ 7.75	.414	.322	\$ .402
25–29	.0789	5.69	6.54	6.13	.449	.516	.484
30–34	.0957	8.68	6.63	7.05	.831	.634	.675
35–39	.1103	7.31	6.65	7.94	.806	.733	.876
<del>10-44</del>	1228	7.56	7.17	9.15	.928	.880	1.124
15-49	.1660	8.14	7.49	8.39	1.351	1.243	1.393
50–54	.1960	7.94	8.20	9.36	1.556	1.607	1.835
55–59	.2221	8.96	8.77	9.31	1.990	1.948	2.068
60–64	.2249	9.73	9.40	10.15	2.188	2.114	2.283
55–69	.2045	11.95	12.27	11.31	2.444	2.509	2.313
70–74	.3569	10.82	11.89	11.44	3.862	4.244	4.083
75–79	.3615	12.26	13.22	9.36	4.432	4.779	3.384
				Female			_
15–19	.1643	\$25.67	\$ 3.83	\$ 1.00	\$4.218	\$ .629	\$ .164
20–24	.0586	5.31	5.32	4.25	.311	.312	.249
25–29	.0790	8.99	5.18	6.86	.710	.409	.542
30–34	.1155	6.05	6.12	6.80	.699	707	.785
35–39	.1413	6.98	5.61	7.08	.986	793	1.000
10-44	.1437	7.17	7.80	7.51	1.030	1.121	1.079
15-49	.1571	7.69	8.72	10.22	1.208	1.370	1.606
50–54	.1511	7.90	8.65	8.22	1.194	1.307	1.242
55–59	1492	9.45	10.20	8.80	1.410	1.522	1.313
60–64	.1634	9.66	11.23	10.15	1.578	1.835	1.659
5 <b>5–</b> 69	.1846	11.66	11.49	11.29	2.152	2.121	2.084
70–74	.3106	10.64	11.70	11.79	3.305	3.634	3.662
75–79	.3058	12.29	13.15	15.27	3.758	4.021	4.670
		<u> </u>		Child	4		
All ages	1286	\$ 5.05	\$ 4.73	\$ 5.35	\$ .649	\$ .608	\$ .685

TABLE 2

1977–78 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	No	DEDUCTII	BLE	\$2	5 DEDUCTII	BLE	\$50	DEDUCTION OF THE PROPERTY OF T	BLE
AGE	Fre-	Average	Claim	Fre-	Average	Claim	Fre-	Average	Claim
	quency	Claim	Cost	quency	Claim	Cost	quency	Claim	Cost
					Male				
15–19	.2099	\$ 7.75	\$1.627	.1861	\$ 7.31	\$1.360	.0555	\$13.22	\$ .734
20–24	.0519	6.25	.324	.0647	6.31	.408	.0606	5.60	.339
25–29	.0789	6.46	.510	.0646	5.36	.346	.0549	5.80	.318
30–34	.0957	6.70	.641	.0763	5.21	.398	.0601	6.06	.364
35–39	.1103	6.85	.756	.0923	6.37	.588	.0772	7.79	.601
40–44	.1228	7.52	.923	.0866	5.67	.491	.0916	6.30	.577
45–49	.1660	7.63	1.267	.1155	6.35	.733	.0959	7.20	.690
50–54	.1960	8.31	1.629	.1315	8.62	1.134	.1138	8.43	.959
55–59	.2221	8.85	1.966	.1519	7.49	1.138	.1326	8.14	1.079
60–64	.2249	9.54	2.146	.1838	9.13	1.678	.1535	10.27	1.576
65–69	.2045	13.30	2.720	.1990	10.23	2.036	.2176	11.35	2.470
70–74	.3569	12.10	4.318	.2657	11.59	3.079	.3152	11.73	3.697
75–79	.3615	13.68	4.945	.3087	10.73	3.312	.3031	13.63	4.131
		•			Female	-			
15–19	.1643	\$ 6.44	\$1.058	.1334	\$ 4.33	\$ .578	.1032	\$ 3.91	\$ .404
20–24	.0536	5.27	.309	.0999	3.75	.375	.0871	4.46	.388
25–29	0790	5.97	.472	.1324	4.93	.653	.0983	5.63	.553
30–34	.1155	6.27	.724	.1347	5.15	.694	.1195	5.44	.650
35–39	.1413	6.39	.903	.1521	6.52	.992	.1375	6.48	.891
40–44	.1437	7.53	1.082	.1696	6.49	1.101	.1574	6.61	1.040
45–49	.1571	8.96	1.408	.1942	7.67	1.490	.1558	7.09	1.105
50–54	.1511	8.31	1.256	.1837	7.35	1.350	.1524	8.19	1.248
55–59	.1492	9.52	1.420	.1742	8.37	1.458	.1447	8.57	1.240
60–64	.1634	10.44	1.706	.1623	8.56	1.389	.1383	8.79	1.216
65–69	.1846	12.54	2.315	.1954	10.09	1.972	.1861	10.37	1.930
70–74	.3106	11.68	3.628	.2280	11.34	2.586	.2699	11.58	3.125
75–79	.3058	13.38	4.092	.2758	12.58	3.470	.2749	13.95	3.835
		<u> </u>	-		Child			-	
All ages	.1286	\$ 4.82	\$ .620	.0718	\$ 4.11	\$ .295	.0631	\$ 4.51	\$ .285

a 31-day period, those for 60–180 days 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 on the basis of the conversion tables shown on page 137 of TSA, 1963 Reports. Annual claim costs were obtained by multiplying the frequencies of hospitalization by the corresponding average amount of claims.

Table 1 shows, for policies with no deductible, the frequency of hospitalization, the average claim, and the average claim cost per \$1 of daily hospital benefit for adjusted maximum benefit periods of 31, 90, and 365 days. Contrary to what would be expected if the data were homogeneous, the claim costs for many age groups decrease as the adjusted maximum benefit period increases. In general, the claim costs for each adjusted maximum benefit period increase as the age increases. Claim costs for females are lower than those for males above age 50. In contrast to the last two studies, the relationship between male and female claim costs under age 50 is not clear: for some cells costs for males are higher; for others, costs for females are higher. In those previous studies, female claim costs were generally higher for these younger ages.

Table 2 shows data for an adjusted maximum benefit period of 90 days on policies with no deductible, a \$25 deductible, and a \$50 deductible. If the data in Table 2 were completely homogeneous, the frequency of hospitalization would be expected to become smaller, the average claim larger, and the claim cost smaller as the amount of the deductible increases. These relationships are generally, but not always, true between the experience included under the \$25 deductible and \$50 deductible, where 99 and 86 percent of the experience, respectively, were contributed by one company. Although they hold for male frequency between the no-deductible experience and that for the deductible plan, results are mixed for male average claim costs and for female experience. This probably reflects variation in individual company experience, since 98 percent of the no-deductible experience was contributed by two companies that had no experience in the \$25 deductible plans and little experience in the \$50 deductible plans.

Table 3 compares the experience shown in Table 2 for policies with no deductible with the 1975–76 intercompany experience and with the 1956 Intercompany Hospital Table (this table was originally published in the 1957 Proceedings of the National Association of Insurance Commissioners; all values used in this study are also included in TSA, IX, 334).

Ratios of the 1977–78 experience to the 1975–76 experience for all ages combined (based on the 1977–78 distribution of no-deductible exposures by age) are shown in the following tabulation.

	Frequency	Average Claim	Claim Cost
Male	113%	95%	107%
Female	83	100	83
Child	182	106	193

An analysis by duration was made of the 1977–78 experience on policies with no deductible. Ratios of experience by duration to that for duration 3 and later (where each duration is based on the same distribution of nodeductible exposures by age) are shown in the following tabulation.

	MALES			FEMALES			CHILDREN		
DURATION	Fre-	Average	Claim	Fre-	Average	Claim	Fre-	Average	Claim
	quency	Claim	Cost	quency	Claim	Cost	quency	Claim	Cost
and later	19%	85%	16%	40%	58%	23%	30%	99%	30%
	33	73	24	54	66	35	60	103	62
	100	100	100	100	100	100	100	100	100
All	85%	99%	84%	91%	97%	89%	79%	100%	80%

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.

#### MISCELLANEOUS HOSPITAL EXPENSE BENEFIT

Six companies contributed to this study.

Table 5 shows the average amount of 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. The last column in this table shows the ratio of actual average claims to the corresponding averages for 1975–76.

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 1977–78 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; as a result, the arithmetic mean of the values for a \$150 and a \$250 maximum benefit was used. The frequencies of hospitalization for the 1977–78 experience are the same as those shown in Table 3.

TABLE 3

# 1977–78 Experience under Individually Underwritten Policies Comparison with 1975–76 Intercompany Experience and 1956 Intercompany Hospital Table Frequency of Hospitalization, Average Claim, and Claim Cost per \$1 of Daily Hospital Benefit for Adjusted Maximum Benefit Period of 90 Days No Deductible

#### RATIO OF 1977-78 RATIO OF 1977-78 1977-78 INTERCOMPANY EXPERIENCE TO EXPERIENCE TO EXPERIENCE ATTAINED 1975-76 Experience 1956 INTERCOMPANY TABLE AGE Fre-Average Claim Fre. Average Claim Fre-Average Claim quency Claim Cost quency Claim Cost quency Claim Cost Male 7.75 15-19. .2099 \$1.627 3.89 1.56 6.07 1.93 1.04 2.01 20-24 0519 6.25 .324 97 .83 .83 .86 .67 .56 25-29 .07896.46 .510 1.12 1.05 1.18 1.04 86 .89 30-34 .0957 6.70 .641 1.19 .92 1.09 1.28 1.08 .84 35-39 .1103 6.85 .756 .91 1.06 1.39 77 1.16 1.07 40-44 .1228 7.52 .923 1.04 .92 .96 1.38 .76 1.05 45-49 .90 .1660 7.63 1.267 1.33 1.20 1.66 .68 1.13 50-54 1.29 .94 .1960 8.31 1.629 1.21 1.70 .68 1.16 55-59 2221 8.85 1.966 1.29 .89 1.15 .71 1.66 1.18 60-64 9.54 .91 .2249 2.146 1.18 1.07 1.46 74 1.08 65-69 .2045 13.30 2.720 .80 1.08 .86 1.23 .96 1.18 70-74 .3569 12.10 .92 4.318 1.14 1.05 2.06 .70 1.44 75-79 . . . . . . . .3615 13.86 4.945 .99 .99 .98 2.06 .59 1.22 Female 15-19 \$ 6.44 \$1.058 1.15 .54 1.76 1.57 .1643 .47 .89 .59 20-24 5.27 .309 .57 .98 .56 .72 .0586.42 25-29 .0790 5.97 .472 .98 .71 .77 .55 .63 .62 .76 .72 30-34 .1155 6.27 .724 .72 1.00 .72 95 35-39 . 6.39 .903 .90 1.08 .73 .79 .1413 .90 .81 40-44 7.53 1.082 79 .99 .81 1.04 .84 .1437 .78 45-49 .1571 8.96 1.408 .89 1.14 1.01 1.08 .90 .97 50-54. .15118.31 1.256 .90 .98 .88 .99 .78 .77 55-59 .1492 9.52 1.420 .90 1.01 .91 .94 .83 .78 60-64 1.706 .1634 10.44 1.12 1.14 1.00 .84 1.02.84 1.05 .92 1.00 65-69 .1846 12.54 2.315 .88 .91 1.10 70-74 . . .3106 11.68 3.628 1.18 .90 1.06 1.80 .68 1.22 75–79 . . . . . . . .3058 13.38 4.092 1.11 .96 1.07 1.75 .57 1.00 Child \$ 4.82 All ages . . . . . .1286 \$ .620 1.82 1.06 1.93 Not applicable

TABLE 4

# 1977–78 Experience under Individually Underwritten Policies Graduated 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	.0309	\$ 5.98	\$ .185
20–24	.0544	6.25	.340
25–29	.0762	6.47	.493
30–34,	.0936	6.61	.619
35–39	.1101	6.78	.746
10–44	.1328	7.10	.943
15–49	.1646	7.55	1.243
50–54	.1950	8.10	1.580
5–59	.2135	8.73	1.864
0–64	.2204	9.53	2.100
55–69	.2352	10.61	2.495
70–74	.2815	11.87	3.341
75–79	.3601	13.29	4.786
		Female	
15–19	.0263	\$ 5.59	\$ .147
20–24	.0568	5.28	.300
25–29	.0862	5.31	.458
30–34	.1142	5.70	.651
35–39	.1363	6.38	.870
10-44	.1488	7.35	1.094
15–49	.1500	8.30	1.245
50–54	.1504	9.17	1.379
55–59		10.15	1.523
60–64		11.01	1.787
55–69		11.60	2.270
70–74		12.20	3.061
75–79	.3142	13.02	4.091
		Child	
All ages	.1286	\$ 4.82	\$ .620

TABLE 5

### 1977–78 Experience under Individually Underwritten Policies Miscellaneous Hospital Expense Benefit

### MISCELLANEOUS HOSPITAL EXPENSE BENEFIT INPATIENT ONLY

### Average Amount of Claim No Deductible—\$200 Maximum Benefit

Attained Age	NUMBER OF CLAIMS	Averagi	e Ctaim	RATIO TO 1975–76 (ACTUAL
Ave	OF CLAIMS	Actual	Graduated	CLAIMS)
		Ma	ile	<u> </u>
20–24	3	\$162.00	\$165.72	.931
25–29	32	186.09	177.42	1.029
3034 . , ,	59	182.63	184.24	.988
35–39	93	180.89	187.94	.973
10-44	96	190.88	189.92	.999
15-49	93	194.74	191,24	1.007
50–54	148	189.99	192.57	.985
5559	215	198.27	194.22	1.036
60-64	310	194.65	196.12	.989
6569	205	197.17	197.87	1.014
70–74	228	197.80	198.68	1.025
75–79	230	198.22	197.39	1.012
All ages	1,712			
		Fen	nale	
20–24	4	\$138.00	\$143.89	.782
25–29	28	191.68	179.81	.980
30–34	96	192.58	196.08	.988
35–39	107	202.40	200.21	1.077
40-44	112	187.08	198.16	.960
45-49	153	194.27	194.39	.996
50–54	212	196.09	191.82	1.011
55–59	357	197.75	191,86	1.007
60–64	557	194.08	194.40	1.001
65–69	353	194.04	197.81	1.006
70–74	443	197.36	198.94	1.014
75–79	651	195.16	193.12	1.016
All ages	3,073			
		CH	nild	
All ages	197	\$168.81	\$168.81	.988

TABLE 6

# 1977-78 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	
0–24	.0607	\$165.72	\$10.06
5–29	.0751	177.42	13.32
0–34	.0924	184.24	17.02
5–39	.1101	187.94	20.69
0-44	.1323	189.92	25.13
5-49	.1633	191.24	31.23
0–54	.1922	192.57	37.01
5–59	.2125	194.22	41.27
0–64	.2243	196.12	43.99
5–69	.2454	197.87	48.56
0–74	.2950	198.68	58.61
5–79	.3497	197.39	69.03
		Female	
0–24	.0631	\$143.89	\$ 9.08
5–29	.0834	179.81	15.00
034	.1119	196.08	21.94
5–39	.1351	200.21	27.05
0-44	.1467	198.16	29.07
5–49	.1516	194.39	29.47
0–54		191.82	28.83
5–59	.1518	191.86	29.12
0–64	.1667	194.40	32.41
5–69	.2006	197.81	39.68
0–74	.2525	198.94	50.23
5–79	.3048	193.12	58.86
		Child	
II ages	.1286	\$168.81	\$21.71

TABLE 7

1977–78 Experience under Individually Underwritten Policies
Comparison with 1956 Intercompany Hospital Table
\$200 Maximum Miscellaneous Hospital Expense Benefit
Inpatient Only—No Deductible

Attained	1977–78 Intercompany Experience			1956 Intercompany Table			RATIO OF 1977–78 EXPERIENCE TO 1956 TABLE		
AGF	Fre- quency	Average Claim	Claim Cost	Fre- quency	Average Claim	Claim Lost	Fre- quency	Average Claim	Claim Cost
					Male	·····	L		
20–24	.0519	\$162.00	\$ 8.41	.0779	\$ 87.77	5 6.84	.67	1.85	1.23
25–29	.0789	186.09	14.68	.0758	93.32	7.07	1.04	1.99	2.08
30-34	.0957	182.63	17.48	.0747	98.87	7.39	1.28	1.85	2.37
35-39	.1103	180.89	19.95	.0797	104.42	8.32	1.39	1.73	2.40
4()44	.1228	190.88	23.44	.0889	109.97	9.78	1.38	1.74	2.40
45–49	.1660	194.74	32.33	.1003	115.52	11.59	1.66	1.69	2.79
50-54	1960	189.99	37.24	.1150	121.07	13.92	1.70	1.57	2.68
55-59	.2221	198.27	44.04	.1339	126.62	16.95	1.66	1.57	2.60
6064	.2249	194.65	43.78	.1536	132.17	20.30	1.46	1.47	2.16
65–69	.2045	197.17	40.32	.1665	137.72	22.93	1.23	1.43	1.76
70–74	.3569	197.80	70.59	.1728	143.27	24.76	2.06	1.38	2.85
75–79	.3615	198.22	71.66	.1751	148.82	26.06	2.06	1.33	2.75
					Female				1.1
20–24	.0586	\$138.00	\$ 8.09	.0993	\$ 87.77	\$ 8.72	.59	1.57	.93
25–29	.0790	191.68	15.14	.1116	93.32	10.41	.71	2.05	1.45
30–34	.1155	192.58	22.24	.1215	98.87	12.01	.95	1.95	1.85
35–39	.1413	202.40	28.60	.1306	104.42	13.64	1.08	1.94	2.10
40–44	.1437	187.08	26.88	.1385	109.97	15.23	1.04	1.70	1.77
45-49	.1571	194.27	30.52	.1455	115.52	16.81	1.08	1.68	1.82
50–54	.1511	196.09	29.63	.1519	121.07	18.39	.99	1.62	1.61
5559	.1492	197.75	29.50	.1577	126.62	19.97	.94	1.56	1.48
60–64	.1634	194.08	31.71	.1630	132.17	21.54	1.00	1.47	1.47
65–69	.1846	194.04	35.82	.1682	137.72	23.16	1.10	1.41	1.55
70–74	.3106	197.36	61.30	.1728	143.27	24.76	1.80	1.38	2.48
75–79	.3058	195.16	59.68	.1751	148.82	26.06	1.75	1.31	2.29

Table 8 shows the relationship of average claims for other maximum benefit amounts (for which there were one thousand or more claims) to those for the \$200 maximum benefit amount. It also indicates the number of companies contributing to each cell.

Table 9 displays the experience of one company for reference purposes; this experience is included in Table 8. Table 10 indicates the range in the level of average claim experience (for the \$200 maximum benefit amount) among the contributing companies. Table 11 presents the experience of one company and shows the variation in average claim by maximum benefit and deductible amount.

Table 12 compares the combined inpatient and outpatient experience of several companies that include an outpatient benefit with their corresponding experience limited to the inpatient benefits only. Comparisons are shown for \$100, \$200, and \$300 maximum benefit amounts.

Table 13 shows the ratios of average claim on inpatient-only claims for one company with an outpatient benefit.

TABLE 8

1977–78 Experience under Individually Underwritten Policies
Miscellaneous Hospital Expense Benefit
Inpatient Only
Variation in Average Claim by Maximum Benefit Amount
No Deductible

BENEFIT		mber of Cla	R OF CLAIMS		Number of Con- tributors	RATIO OF ACTUAL TO TABULAR*		
AMOUNT	Male	Female	Child	Con- tributor	WITH CLAIMS	Male	Female	Child
50	1,809	3,447	0	98.5%	3	.254	.254	.000
60	721	1,874	207	91.4	3	.342	.323	.365
75	1,795	3,090	0	99.9	2	.384	.384	.000
90	1,534	3,911	52	99.9	2	.482	.479	.523
100	3,217	5,211	140	67.6	5	.515	.510	.568
120	1,221	3,089	155	92.9	4	.628	.634	.646
150	1,678	3,236	209	53.8	4	.751	.754	.634
200	1,712	3,073	197	59.5	5	1.000	1.000	1.000
240	911	1,448	436	88.4	4	1.204	1.193	1.252
300	6,201	12,714	846	69.6	4	1.370	1.444	1.495
320	671	805	86	99.9	2	1.575	1.556	1.714
400	619	793	109	89.1	3	1.815	1.842	1.566
600	6,626	10,098	2,055	98.2	3 3	2.249	2.306	2.282
1,000	306	576	158	99.6	2 1	2.879	2.987	2.155

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

TABLE 9

### 1977–78 Experience under Individually Underwritten Policies Miscellaneous Hospital Expense Benefit Inpatient Only

### Variation in Average Claim by Maximum Benefit Amount No Deductible

(Experience of One Company)

MAXIMUM Benefit	N	lumber of Claim	48	,	ADUATED RATIO	
Amount	Male	Female	Child	Male	Female	Child
\$ 60	697	1,845	18	.329	.312	.494
90	1,533	3,911	52	.449	.450	.527
100	426	1,024	18	.556	.569	.568
120	1,144	2.979	24	.655	.676	.619
150	801	1,897	57	.749	.775	.684
160	301	419	32	.842	.870	.765
180	6	10	0	.938	.968	.866
200	929	1,967	70	1.042	1.073	.988
240	883	1,402	186	1.156	1.189	1.136
250	220	464	8	1.285	1.323	1.312
300	5,203	10.793	796	1.433	1.479	1.518
320	670	805	86	1.604	1.662	1.758
400	563	728	64	1.801	1.877	2.035
480	32	13	2	2.029	2.129	2.351
500	90	153	13	2.292	2.424	2.710
600	6,580	10.010	2.027	2.416	2.510	2.320

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

TABLE 10

### 1977–78 Experience under Individually Underwritten Policies Miscellaneous Hospital Expense Benefit Inpatient Only

Variation in Average Claim by Contributing Company No Deductible—\$200 Maximum Benefit

	N	UMBER OF CLAIM	15	RATIO OF ACTUAL TO TABULAR*			
COMPANY	Male	Female	Child	Male	Female	Child	
	227	362	0	1.007	1.003	000	
	929	1,967	70	1.018	1.014	1.136	
	64	88	36	.802	.862	.671	
	3	7	1	1.010	.981	1.185	
	489	649	90	.986	.983	1.024	
Total	1.712	3,073	197	1.000	1.000	1.000	

Note.—Company codes in this table do not correspond to those used in other tables.

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

TABLE 11

### 1977~78 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)

			RAT	по оғ Асти	AL TO TABU	LAR"			
			-	Maximum Be	nefit Amour	nt			
ATTAINED AGE	5	150	\$:	200	\$2	240	\$3	320	
	Dedu	sctible	Dedi	uctible	Dedu	ctible	Deductible		
	\$0	\$50	\$0	\$50	\$0	\$50	\$0	\$50	
				M	ale	<del></del>			
30–34	.829	1	1.009	Ī					
35–39	.774		1.024		1.217		1.601	 	
40-44	.750		1.008	1	1.218	1.149	1.522	\	
45–49	.784		1.011	1	1.220	1.143	1.582		
50–54	.778		1.029		1.189	1.218	1.596	1.575	
55–59	.766	.772	1.079		1.217	1.224	1.625	1.588	
60–64	.770	.765	1.020	.973	1.197	1.171	1.536	1.498	
65–69	.845	.751	1.014	1.011					
70–74	.764	.736	1.008	1.007					
75–79	.739	.780	1.005	1.013			<i></i>		
All ages	.774	.764	1.018	1.006	1.208	1.190	1.574	1.554	
				Fen	nale				
30–34	.807		.996					<i>.</i>	
35–39	.719		1.050		1.167	1.194	1.542	<i></i>	
40-44	.760		.973	1	1.191	1.211	1.482	1.615	
45–49	.760		1.025		1.196	1.175	1.552	1.532	
50-54	.781	.770	1.066	.992	1.226	1.186	1.590	1.649	
55–59	.794	.757	1.048	1.042	1.214	1.217	1.593	1.527	
60-64	.771	.768	1.026	1.041	1.197	1.163	1.551	1.546	
65–69	.803	.747	.988	.981					
7074	.747	.759	.999	.997					
75–79	.778	.776	1.013	1.032					
All ages	.774	.763	1.014	1.015	1.201	1.187	1.556	1.569	
				Cł	nild		•		
All ages	.871	.846	1.136		1.294	1.446	1.714	1.724	

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

TABLE 12

## 1977–78 Experience under Individually Underwritten Policies Miscellaneous Hospital Expense Benefit Variation in Average Claim with and without Outpatient Benefit No Deductible

COMPANY	1	BER OF CL			NTAGE OF (		RATIO OF AVERAGE CLAIM ON ALL CLAIMS TO AVERAGE CLAIM ON INPATIENT-ONLY CLAIMS				
	Male	Female	Child	Male	Female	Child	Male	Female	Child		
				\$100	Max:mum I	Benefit		<u> </u>			
A	2,520	3,931	153	11.0%	11.8%	48.4%	.953	.955	.774		
В	463	1.133	41	8.0	9.6	56.1	.967	.971	.756		
C	67	99	20	.0	.0	.0	1.000	1.000	1.000		
D	10	9	0	.0	11.1		1.000	.929			
E	475	613	23	.8	.3	.0	1.000	1.000	1.000		
Total	3,535	5,785	237	9.0%	9.9%	40.9%	.960	.960	.821		
		-									
A	275	451	0	17.5%	19.7%		.885	.882			
В	1,066	2,258	167	12.9	12.9	58.1%	.931	.931	.620		
C	64	88	36	.0	.0	.0	1.000	1.000	1.000		
D	3	8	1	.0	12.5	.0	1.000	.933	1.000		
E	492	654	94	.6	0.8	4.3	.995	.997	.977		
Total	1,900	3,459	298	9.9%	11.2%	33.9%	.943	.938	.798		
		5300 Maximum Benefit									
A	1,267	2,258	0	29.0%	19.3%	I	.773	.858			
B		970	2,341	33.8	18.2	66.0%	.719	.891	.486		
C , , ,	82	72	41	.0	.0	.0	1.000	1.000	1.000		
D	20	32	30	15.0	15.6	70.0	.879	.881	.436		
Total	9,228	3,332	2,412	32.8%	18.5%	64.9%	.728	.871	.496		

Note.—Company codes in this table do not correspond to those used in other tables.

TABLE 13

### 1977–78 Experience under Individually Underwritten Policies Miscellaneous Hospital Expense Benefit Variation in Average Claim

### WITH AND WITHOUT OUTPATIENT BENEFIT BY MAXIMUM BENEFIT AMOUNT, DEDUCTIBLE, AND AGE

(Experience of One Company)

		T		f Average C e Claim on			s					
ATTAINED		\$0 Dedu	ctible			\$50 Dec	ductible					
Age		Maximum Ber	efit Amou	ınt		daximum Be	Benefit Amount					
	\$150	\$200	\$240	\$320	\$150	\$200	\$240	\$320				
	· · · · · · · · · · · · · · · · · · ·			М	ale							
3034	.974		.823									
35–39	.984	1	.881	1	.792		.842	l				
10-44	.890		.928	1	.815	1.000	.797	<i>.</i>				
15-49	.924	1	.753	1	.899	.982	.826					
50–54	.902	1	.869	<i></i>	.945	.962	.852	.895				
55–59	.887	1.000	.924	1	.914	.974	.934	.951				
60-64	.938	1.000	.938	.874	.899	.964	.941	.936				
55-69	.945	.951	.942	1.000	1							
70–74	.947	1.000	.976	.984	1	<i></i>	]					
75–79	.984	.995	982	1.000								
		Female										
30–34	.782	1	.931		[		[	[				
35–39	.918	1	.906		.916	1.000	.818					
10-44	.901	1	.957		.903	1.000	.862	.960				
15-49	.952		.920	1	.903	.967	.861	1.000				
50-54	.884	.970	.892	.946	.923	.973	.899	1.000				
55–59	.920	.948	.930	.890	.928	.940	.886	.987				
60-64	.925	.945	.907	.924	.917	.925	.911	.913				
55–69	.945	1.000	.925	1.000	1	1						
70–74	.949	1.000	.942	1.000	<i></i>							
75–79	.968	.966	.946	.974								
				Cl	nild							
All ages	.705	.843	.620		.679	.882	.574	.787				

#### SURGICAL EXPENSE BENEFIT

Six companies contributed experience to this section of the study. The distribution of claims by amount of deductible was as follows:

Deductible	Amount Paid (000,000)	Percentage Dis- tribution
None	\$ 9.5	54%
\$ 25	1.9	11
50	5.3	30
100	.9	5
Total	\$17.6	100%

A description of the data used, methods of calculation, and techniques used in standardizing the heterogeneous surgical schedules was presented with the 1960–61 study (1963 Reports, pp. 150–60).

Table 15 shows undergraduated frequencies, average claims, and claim costs per \$100 of maximum surgical benefit for no-deductible policies. Also shown in that table is a comparison with similar data previously published for the 1975–76 experience and the 1956 Intercompany Surgical Table adjusted to a standardized basis.

For no-deductible policies, the claim cost for adults of all ages showed an increase of 9 percent for the 1977–78 experience over the 1975–76 experience. The 1975–76 period had shown a 9 percent increase over the 1973–74 experience period. Claim costs for males increased dramatically, while those for females generally decreased. For children, the 1977–78 experience showed a decrease of 13 percent in claim cost as compared with the 1975–76 experience. The 1975–76 period had shown a 6 percent increase over the 1973–74 experience period.

A graduation of the crude 1977–78 experience is presented in Table 16. In Table 17 ungraduated data are shown for policies with a deductible. One company accounted for about 99, 86, and 99 percent of the paid claims for the \$25, \$50, and \$100 deductible experience, respectively. A comparison of the percentage changes in frequency and average claim from the 1975–76 experience to the 1977–78 experience for adults and children for the \$25 deductible, \$50 deductible, and \$100 deductible plans is shown below.

Ĺ	\$25 Deductible			\$:	50 Deductib	le	\$100 Deductible			
i	Fre-	Average	Claim	Fre-	Average	Claim	Fre-	Average	Claim	
	quency	Claim	Cost	quency	Claim	Cost	quency	Claim	Cost	
Adults	0%	6%	6%	-2%	- 1%	- 3%	4%	- 4%	- 1%	
Children	-7	I	-6	-3	0	3	-18	- 5	-22	

TABLE 15

## 1977–78 Experience under Individually Underwritten Policies Comparison with 1975–76 Intercompany Experience and 1956 Intercompany Surgical Table

### FREQUENCY OF SURGERY, AVERAGE CLAIM, AND CLAIM COST PER \$100 OF MAXIMUM SURGICAL BENEFIT STANDARD SCHEDULE—NO DEDUCTIBLE

ATTAINED		8 Interco Experienci		E	TIO OF 1977 EPERIENCE T -76 EXPERI	го	E:	tio of 1977 KPERIENCE (956 Table)	го	
Age	Fre- quency	Average Claim	Claim Cost	Fre- quency	Average Claim	Claim Cost	Fre- quency	Average Claim	Claim Cost	
		·			Male					
15–19	.1419	\$23.94	\$3.40	2.10	2.30	4.83	1.76	1.40	2.46	
20–24	.0730	14.59	1.07	1.01	1.05	1.06	.94	.84	.79	
25–29	.0937	19.01	1.78	1.26	1.22	1.54	1.26	1.07	1.35	
30–34	.1061	20.21	2.14	1.33	1.11	1.48	1.44	1.12	1.61	
35–39	.1030	22.71	2.34	1.30	1.11	1.44	1.40	1.22	1.71	
40-44	.1089	23.27	2.53	1.31	1.07	1.40	1.45	1.20	1.74	
45–49	.1413	24.69	3.49	1.55	1.00	1.55	1.81	1.17	2.12	
50–54	.1551	26.62	4.13	1.57	.99	1.55	1.87	1.10	2.06	
55–59	.1736	29.22	5.07	1.51	.96	1.45	1.93	1.14	2.20	
60-64	.1531	33.99	5.20	1.33	.96	1.28	1.57	1.17	1.84	
65–69	.1273	42.66	5.43	1.40	1.06	1.48	2.00	1.45	2.90	
70–74	.1976	39.82	7.87	1.12	1.00	1.12	2.00	1.35	2.70	
75–79	.1803	44.48	8.02	1.01	1.07	1.08	1.84	1.51	2.78	
		Female								
15–19	.1032	\$25.38	\$2.62	1.34	1.78	2.39	1.23	1.28	1.57	
20–24	.0710	16.77	1.19	.72	.98	.71	.76	.79	.60	
25–29	.0903	21.56	1.95	.77	1.01	.78	.84	.95	.80	
30–34	.1184	28.63	3.39	.87	1.08	.94	1.07	1.14	1.22	
35–39	.1187	29.24	3.47	.89	1.08	.96	1.07	1.07	1.14	
4044	.1126	30.48	3.43	.77	1.08	.83	1.01	1.05	1.06	
45-49	.1256	30.98	3.89	.87	1.12	.97	1.14	1.06	1.21	
5054	.1162	29.28	3.40	.86	1.11	.95	1.10	1.03	1.13	
55-59	.1074	31.44	3.38	.89	1.08	.96	1.06	1.13	1.20	
60–64	.1110	34.20	3.80	1.15	1.12	1.29	1.13	1.21	1.56	
65–69	.0895	38.11	3.41	.76	1.07	.81	.91	1.37	1.25	
70–74	.1369	37.58	5.14	1.03	1.01	1.04	1.41	1.34	1.89	
75–79	.1344	42.09	5.66	1.05	1.08	1.13	1.37	1.50	2.06	
		•	•	•	All Adults					
All ages	.1172	\$29.46	\$3.45	1.04	1.05	1.09	No	t applica	ble	
					Child		•			
All ages	.0701	\$14.82	\$1.04	.81	1.07	.87	No	t applica	ble	

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

TABLE 16

### 1977–78 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	.0643	\$11.62	\$ .75
20–24	.0766	15.27	1.17
25–29	.0884	18.20	1.61
30–34	.0997	20.38	2.03
35–39	.1112	21.98	2.44
<b>40–4</b> 4	.1242	23.34	2.90
45–49	.1379	24.92	3.44
50–54	.1492	27.17	4.05
55–59	.1555	30.31	4.71
60–64	.1570	34.26	5.38
65–69	.1574	38.58	6.07
70–74	.1600	42.84	6.85
75–79	.1656	46.90	7.77
!		Female	
15–19	.0517	\$10.46	\$ .54
20–24	.0759	17.32	1.31
25–29	.0946	22.63	2.14
30–34	.1075	26.40	2.84
35–39	.1151	28.68	3.30
40–44		29.81	3.51
45–49	.1169	30.33	3.55
50–54	.1138	30.90	3.52
55–59	.1103	32.06	3.54
60–64	.1087	33.95	3.69
65–69		36.39	4.02
70–74		39.15	4.59
75–79	.1301	42.21	5.49
		Child	
All ages	.0701	\$14.82	\$1.04

TABLE 17

### 1977–78 Experience under Individually Underwritten Policies Frequency of Surgery, Average Claim, and Claim Cost per \$100 of Maximum Surgical Benefit Standard Schedule

### POLICIES WITH A DEDUCTIBLE

ATTAINED	\$2	5 DEDUCTII	BLE.	\$5	0 DEDUCTII	BLE	\$10	0 DEDUCTI	BLE		
AGE	Fre-	Average	Claim	Fre-	Average	Claim	Fre-	Average	Claim		
	quency	Claim	Cost	quency	Claim	Cost	quency	Claim	Cost		
			-		Male		•	•	<u> </u>		
15–19	.1550	\$21.10	\$3.27	.0510	\$19.68	\$1.00	.1222	\$33.00	\$4.03		
20–24	.0533	21.72	1.16	.0490	23.03	1.13	.0336	24.76	.83		
25–29	.0580	19.97	1.16	.0463	22.90	1.06	.0458	27.04	1.24		
3034	.0597	20.02	1.20	.0479	24.47	1.17	.0380	23.00	.87		
35–39	.0693	26.72	1.85	.0537	24.36	1.31	.0467	27.85	1.30		
40–44	.0562	26.29	1.48	.0541	27.83	1.51	.0475	32.66	1.55		
45–49	.0742	28.55	2.12	.0617	31.38	1.94	.0527	31.14	1.64		
50–54	.0889	35.14	3.12	.0648	37.20	2.41	.0626	33.15	2.08		
55–59	.0891	36.74	3.27	.0837	34.65	2.90	.0633	38.96	2.47		
60–64	.1108	44.23	4.90	.0954	42.32	4.04	.0917	43.51	3.99		
65–69	.1094	55.42	6.06	.1345	49.53	6.66	.1309	51.94	6.80		
70–74	.1590	58.84	9.36	.1652	46.77	7.73	.1355	41.94	5.68		
75–79	.1682	51.95	8.74	.1385	53.66	7.43	.0914	51.22	4.68		
		Female									
15–19	.0758	\$20.64	\$1.56	.0465	\$17.08	\$ .79	.0645	\$19.56	\$1.26		
20–24	.0733	24.04	1.76	.0658	24.12	1.59	.0667	26.48	1.77		
25–29	.0998	28.61	2.86	.0798	27.73	2.21	.0659	30.38	2.00		
30–34	.1021	31.97	3.26	.0978	31.04	3.04	.0855	33.14	2.83		
35–39	.1192	32.46	3.87	.1062	34.53	3.67	.1148	34.92	4.01		
40–44	.1300	32.28	4.20	.1156	35.74	4.13	.1083	44.12	4.78		
45–49	.1392	34.02	4.74	.1067	34.36	3.67	.1064	40.01	4.26		
50–54	.1160	36.45	4.23	.1048	34.15	3.58	.0933	39.78	3.71		
55–59	.1090	36.23	3.95	.0930	36.92	3.43	.0818	36.26	2.97		
60-64	.0982	38.35	3.77	.0909	38.65	3.51	.0702	29.74	2.06		
65–69	.1023	42.15	4.31	.0982	38.07	3.74	.0781	63.52	4.96		
70–74	.1025	49.58	5.08	.1146	44.67	5.12	.1250	46.10	5.76		
75–79	.1215	54.45	6.62	.1079	51.92	5.60	.0888	45.36	4.03		
		•			All Adults			L.ur			
All ages	.0925	\$33.76	\$3.12	.0763	\$31.81	\$2.43	.0706	\$34.74	\$2.45		
					Child				L		
All ages	.0576	\$18.76	\$1.80	.0487	\$20.28	\$ .99	.0316	\$23.12	\$ .73		

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

In Table 18, data for "deductible" policies are compared with no-deductible forms. Overall, the general pattern—decreasing frequency and increasing average claim as the deductible increases—conforms to expected results. However, a considerable amount of variation exists for individual age groups and for average claims in general, as a result of different companies contributing in different degrees to the experience for different deductibles and statistical fluctuation. Male experience appears to be impacted more by various deductibles than does female experience.

An analysis by duration was made of no-deductible policies. The effect of selection on early claim costs compared with claim costs for durations 3 and later is seen in the tabulation that follows.

Duration	Males	Females	All Adults	Children	Total
and later	39% 54 100	64% 72 100	51% 63 100	68% 93 100	52% 65 100
All	95%	99%	97%	97%	97%

#### DEDUCTIBLE AMOUNTS

Six companies contributed data to this section of the study, which covers experience under individually underwritten hospital and surgical expense policies with first-dollar 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 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.

To obtain the claim cost for a particular combination of benefits in-

TABLE 18

### 1977–78 Experience under Individually Underwritten Policies Comparison of Frequency of Surgery and Average Claim per \$100 of Maximum Surgical Benefit Standard Schedule

### DEDUCTIBLE POLICIES AS A PERCENTAGE OF NO-DEDUCTIBLE POLICIES

		FREQU	JENCY			Averag	E CLAIM			
Attained	No	\$25	\$50	\$100	No	\$25	\$50	\$100		
AGE	Deduct-	Deduct-	Deduct-	Deduct-	Deduct-	Deduct-	Deduct-	Deduct-		
	ible	ible*	ible*	ible*	ible	ible*	ible*	ible*		
				Ma	ale					
20–24	100%	73%	67%	46%	100%	149%	158%	170%		
25–29	100	62	49	49	100	105	120	142		
30–34	100	56	45	36	100	99	121	114		
35-39	100	67	52	45	100	118	107	123		
40-44	100	52	50	44	100	113	120	140		
45-49	100	53	44	37	100	116	127	126		
50-54	100	57	42	40	100	132	140	125		
55-59	100	51	48	36	100	126	119	133		
60-64	100	72	62	60	100	130	125	128		
65-69	100	86	106	103	100	130	116	122		
70-74	100	80	84	69	100	148	117	105		
75–79	100	93	77	51	100	116	119	114		
All ages	100%	60%	47%	42%	100%	118%	110%	118%		
				Fen	nale					
20–24	100%	103%	93%	94%	100%	143%	144%	158%		
25–29	100	111	88	73	100	133	129	141		
30-34	100	86	83	72	100	112	108	116		
35-39	100	100	89	97	100	111	118	119		
40-44	100	115	103	96	100	106	117	145		
45-49	100	111	85	85	100	110	111	129		
50-54	100	100	90	80	100	124	117	136		
55-59	100	101	87	76	100	119	121	119		
60-64	100	88	82	63	100	112	113	85		
65-69	100	114	110	87	100	67	60	100		
70-74	100	75	84	91	100	132	119	123		
75–79	100	90	80	66	100	129	84	108		
All ages	100%	97%	84%	80%	100%	103%	97%	107%		
		All Adults								
All ages	100%	79%	65%	60%	100%	112%	106%	116%		
				Ch	iild	· · · · · · · · · · · · · · · · · · ·				
All ages	100%	82%	69%	45%	100%	127%	137%	156%		

<sup>\*</sup> Average claim reflects eligible expenses before application of the deductible; frequency involves only claims where the total eligible medical expenses exceed the policy deductible.

TABLE 19

1977–78 Experience under Individually Underwriften Policies
Claim Frequency of Hospital and Surgical Expense Policies
with a Deductible

A	\$25 DED	OUCTIBLE	\$50 Den	OUCTIBLE	\$100 Det	CUCTIBLE				
ATTAINED Age	Number of Claims	Claim Frequency	Number of Claims	Claim Frequency	Number of Claims	Claim Frequency				
1.11.11.11.11.11.11.11.11.11.11.11.11.1			М	ale						
15–19	27	.290	30	.093	4	.103				
20–24	338	.113	1,156	.097	69	.059				
5–29	608	.114	1,696	.086	140	.066				
0-34	575	.113	1,369	.087	126	.060				
5-39	500	.125	1,045	.100	134	.074				
0-44	345	. 110	815	.107	107	.089				
5-49	369	124	764	.111	114	.096				
0–54	508	.155	962	.128	108	.094				
5–59	583	.170	1,078	.145	118	.114				
0–64	677	.193	1,229	.175	120	.153				
5–69	369	.205	440	.248	35	.212				
0-74	367	.278	338	.338	15	.208				
5–79	352	.335	353	.306	8	.160				
All ages	5,618		11,275		1.098					
Ī	Female									
5–19	23	.165	63	.133	7	.106				
0–24	408	.133	1,350	.115	117	.099				
5–29	888	.170	2,125	.126	167	.091				
0-34	818	.165	2,090	.146	215	.111				
5-39	689	.177	1,538	.156	233	.141				
0-44	617	.191	1,383	.171	177	.132				
5-49	740	.208	1.507	.168	212	.153				
0–54	938	.207	1,725	.169	228	.143				
5–59	1,083	.197	1,808	.156	226	.140				
0–64	1,095	.184	1,953	.150	156	.119				
5–69	678	,213	585	.190	40	.142				
0-74	668	.246	190	.209	28	.201				
/5–79	690	.291	720	.261	20	.192				
All ages	9,335		17,037		1,826					
			CI	hild						
All ages	3,944	.107	7,821	.089	679	.054				
					L					

volving 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

Four companies contributed data on 6.285 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 that commenced after 30 days from date of issue or maternities that occurred after 10 months from date of issue. Maternity benefits provided by the policies varied considerably.

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. Frequencies of 1977–78 are slightly lower for most ages than those reported for the 1975–76 experience. Variations from the previous study may be due to fluctuations because of the small amount of data submitted.

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

Seven companies contributed data on 20,754 claims incurred in 1977 and 1978 to this section of the study. The volume of claims is about the same as that in the 1975–76 experience.

Data for this section of the study were submitted in five-year attainedage 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 cancelable)
- 3. Type (family or individual)
- 4. Coinsurance percentage
- 5. Deductible amount
- 6. Deductible type (fixed or variable)
- 7. Maximum benefit
- 8. Surgical schedule maximum
- 9. Hospital room and board limit
- 10. Intensive-care room and board limit
- 11. Period to satisfy deductible
- 12. Benefit period

TABLE 20

1977–78 Experience under Individually Underwritten Policies
Maternity Claim Frequency
Experience by Calendar-Year Duration

	DURAT	ton 1	Durai	ion 2	DURAT	ion 3	DURAT	10N 4	DURAT AND L		ALT DUR	ATIONS	1956 Intercom-
Attained Agf	Number of Claims	Fre- quency	Number of Claims	Fre- quency	Number of Claims	Fre- quency	Number of Claims	Fie quency	Number of Claims	Fre- quency	Number of Claims	Fre- quency	PANY HOSPITAL TABLE FREQUENCY
15–19	62	.150									62	.150	.328
20–24	659	.204	557	.232	151	.199	209	.234	181	.212	1,757	.216	.285
25–29	557	.171	528	209	416	.217	316	.194	990	.168	2,807	.184	.196
30–34	189	.087	159	.089	123	.099	100	.090	696	.086	1,267	.088	.117
35–39	39	.032	40	.039	25	.036	24	.038	208	.031	336	.033	.060
40-44	. 7	.008	3	.004	9	.017	8	.018	27	.005	54	.007	.016
45–49	1	.002	0	.000	0	.000	0	.000	1	.000	2	.000	
All ages	1,514		1,287		724		657		2,103		6,285		

The data submitted were number of lives exposed, number of claims incurred, and amount paid on claims incurred. The amount paid was reported in two categories: eligible expenses that are subject to coinsurance and eligible expenses that are not subject to coinsurance.

Amounts paid on policies with coinsurance percentages other than 75 percent were adjusted to the amount that would have been paid if the coinsurance percentage had been 75 percent, by multiplying amounts paid subject to coinsurance on the "other percentage" policies by the ratio of 75 to the specified other percentage and adding this adjusted amount to the amount paid not subject to coinsurance. Data for these policies were then combined with data for the 75 percent coinsurance policies.

In all tables in this section of the report, average claims and claim costs reflect eligible expenses after application of the deductible, coinsurance factor, and maximum benefit. Claim frequencies involve only claims where the total eligible expenses exceed the deductible.

In most of the following analyses only the ultimate experience of durations 3 and later was studied. Where sufficient data existed, comparisons were also made of this ultimate experience with the select experience of durations 1 and 2.

The two years of experience provided a sufficient amount of data so that meaningful experience tables could be constructed for four categories. The total number of claims that were studied in each category are listed in parentheses.

- \$500 fixed deductible amount, no room and board limit, and no surgical schedule maximum. (1,311)
- 2. \$500 fixed deductible amount and \$25 room and board limit. (4,198)
- 3. \$500 fixed deductible amount and \$30 room and board limit. (5,991)
- 4. \$750 fixed deductible amount and \$35 room and board limit. (1.783)

In the current study, there was ample exposure on policies with a \$1,000 fixed deductible and a \$50 room and board limit, but there was an insufficient number of claims to provide any meaningful analyses. Therefore, no analyses were done on this category in this study.

An analysis showed that experience on cancelable policies was sufficiently similar to experience on guaranteed renewable policies to allow the combination of both sets of data to be used in constructing all the tables. Cancelable experience was at the most I percent of the total experience.

Some variable deductible data were submitted, but not enough for a separate study. Therefore, these data were eliminated from all studies.

\$500 Fixed Deductible, No Hospital Room and Board Limit

Table 21 shows the combined experience of durations 3 and later for plans with a \$500 fixed deductible, no hospital room and board limit, no surgical schedule maximum, and 75 percent coinsurance (including adjusted data for plans with other coinsurance percentages).

This table was constructed on the same basis as the corresponding table in the 1975–76 experience study. All data submitted on policies with a \$500 fixed deductible and no room and board limit were also on policies with no surgical schedule maximum. "No surgical schedule maximum" is indicated on the table for information only and does not imply that any data have been excluded from this category.

All of the claims in this experience are on guaranteed renewable policies. Approximately 96 percent of the claims in the data are on policies with a \$7,500 maximum benefit, and the other 4 percent are on policies with a \$5,000 maximum benefit.

The 1977-78 experience is compared with the 1975-76 experience (1979 Reports, pp. 265, 266) and with the 1973-74 experience (1977 Reports, pp. 130, 131). In aggregate, claim costs have increased from the 1975-76 experience about 38 percent for males, 20 percent for females, and 27 percent for children. There were 16 percent and 20 percent increases in average claim for males and females, respectively, and a 12 percent increase in average claim for children. Claim frequency increased 19 percent for males and 13 percent for children. There was no change in frequency for adult females.

A graduation of the crude claim costs shown in Table 21 is presented in Table 22. This graduation is completed for ages 35-69. Graduated claim costs for females are greater than graduated claim costs for males in the age range below age 50. The opposite is true at higher age ranges. Graduated claim costs were also calculated for each of the other three categories and appear in Tables 25, 28, and 32. Because the companies that contributed the experience behind these tables may not be the same for each category, comparison of these graduated claim costs may be affected by the differences in the experience of these companies.

There were few data available for durations 1 and 2 to compare with those for durations 3 and later. Because of the fact that this business is almost a closed block, average ages have risen, which in turn has contributed to the increase in claim costs, since claim costs increase with increasing age.

Variations in experience for each company that contributed data for Table 21 are indicated in Table 23.

### 143

## TABLE 21—1977-78 Experience under Individually Underwritten Policies Major Medical Expense Benefit—\$500 Fixed Deductible No Hospital Room and Board Limit, 75 Percent Coinsurance (Adjusted)\* No Surgical Schedule Maximum

**DURATIONS 3 AND LATER** 

ATTAINED Age	NUMBER OF LIVES EXPOSED NUMBER OF CLAIMS	NUMBER	AMOUNT	CLAIM FRE- QUENCY	Average Claim	CLAIM COST	Ratio to 1975-76			Ratio то 1973-74		
		f I					Claim Frequency	Average Claim	Claim Cost	Claim Frequency	Average Claim	Claim Cost
	Male											
30–34	44 208	2 5	\$ 5,926 5,478	.04545 .02404	\$2,963.00 1,095.60	\$134.68 26.34	7.27	8.37 .36	60.94 .25	1.24	1.09	1.35
40–44	534 913	27 64	48,901 140,801	.05056 .07010	1,811.15 2,200.02	91.57 154.22	1.16 1.29	.86 1.11	1.01 1.44	.97 1.30	.72 1.52	1.12
50–54	1,498 1,486 1,309	121 154 178	312,488 416,045 503,517	.08077 .10363 .13598	2,582.55 2,701.59 2,828.75	208.60 279.98 384.66	1.07 1.11 1.10	1.17 1.15 1.23	1.25	1.08	1.39 1.56	1.50 1.83
65–69	167	20	62,235	.11976	3,111.75	372.66	1.21	1.30	1.36 1.58	.34	1.39 2.63	1.55
All ages	6,159 571 \$1,495,391 .09269 \$2,618.90 \$242.76 1.19 1.16 1.38 1.15 1.46 1.74											
30–34	60 350 729	2 20 43	\$ 3,553 40,435 79,918	.03333 .05714 .05898	\$1,776.50 2,021.75	\$ 59.22 115.53	1.38	1.08	1.49 1.67	.75 1.39	1.74 2.16	1.28 3.01
45–49	1,191 1,532	96 118	220,457 255,988	.08060 .07702	1,858.56 2,296.43 2,169.39	109.63 185.10 167.09	.84 .95 .91	1.26 1.14 1.18	1.05 1.08 1.07	.94 1.24 .97	1.23 1.84 1.37	1.14 2.28 1.34
55–59	1,577 1,305 173	145 149 21	386,428 365,477 44,185	.09195 .11418 .12139	2,665.02 2,452.87 2,104.05	245.04 280.06 255.40	1.05 1.07 .73	1.28 1.06 .90	1.35 1.13 .63	1.07 1.02 1.23	1.31 1.58 2.04	1.40 1.60 2.41
All ages	6,917	594	\$1,396,441	.08574	\$2,350.91	\$201.80	1.00	1.20	1.20	1.10	1.55	1.75
		Child										
All ages	4,247	146	\$ 223,978	.03438	\$1,534.10	\$ 52.74	1.13	1.12	1.27	1.32	1.51	2.02

Note 1.—Average claim and claim cost reflect eligible expense after application of the deductible, coinsurance factor, and the maximum benefit provision; claim frequency involves only claims where the total eligible expenses exceed the deductible.

Note 2.—Ratios for all ages are weighted averages of ratios for each age range; weight is number of lives exposed.

<sup>\*</sup> Includes policies with other coinsurance factors for which the following adjustment has been made. Amount paid (adjusted) = (Amount paid not subject to coinsurance) + (Amount paid subject to coinsurance  $\times$  0.75  $\div$  Other factor).

### TABLE 22

1977–78 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$500 FIXED DEDUCTIBLE
75 PERCENT COINSURANCE (ADJUSTED)\*
NO HOSPITAL ROOM AND BOARD LIMIT
NO SURGICAL SCHEDULE MAXIMUM
GRADUATED CLAIM COSTS FOR
DURATIONS 3 AND LATER

Attained	Claim
Age	Cost
Male	
30–34	\$106.20
35–39	77. <i>5</i> 8
40-44	97.16
45–49	148.05
50–54	207.60
55–59	286.37
60–64	378.97
65–69	388.28
Female	
30–34	\$ 76.62
35–39	103.34
40-44	131.91
45–49	168.54
50–54	182.45
55–59	240.90
60-64	279.05
65–69	263.06
* Conformator to Toble 21	

TABLE 23

# 1977–78 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES MAJOR MEDICAL EXPENSE BENEFIT \$500 FIXED DEDUCTIBLE NO HOSPITAL ROOM AND BOARD LIMIT NO SURGICAL SCHEDULE MAXIMUM 75 PERCENT COINSURANCE (ADJUSTED)\* DURATIONS 3 AND LATER

### RATIOS OF EXPERIENCE BY CONTRIBUTING COMPANY TO EXPERIENCE OF TOTAL STUDY

		Number		RATIO OF EACH COMPANY TO TOTAL				
	Company	OF Claims	AVERAGE AGE	Claim Frequency	Average Claim	Claim Cost		
Male	A B C	359 128 84	56.0 55.5 55.0	1.10 .88 .85	1.02 .95 .98	1.12 .84 .83		
Female		400 127 67	54.5 54.4 51.6	1.14 .86 .71	1.06 .86 .91	1.20 .74 .65		
All adults		759 255 151	55.2 55.0 53.1	1.12 .87 .79	1.04 .91 .95	1.16 .79 .75		
Children	$ \begin{cases} A \\ B \\ C \end{cases} $	89 37 20		1.15 .89 .75	1.01 1.11 .75	1.16 .98 .56		

Note.—Company codes in this table do not correspond to those used in other tables.

<sup>\*</sup> See footnotes to Table 21.

### \$500 Fixed Deductible, \$25 Hospital Room and Board Benefit

Table 24 shows the combined experience of durations 3 and later for plans with a \$500 fixed deductible and a \$25 room and board limit. All policies included in this study have a 75 percent coinsurance percentage, or amounts paid have been adjusted to a 75 percent coinsurance basis. About 28 percent of the claims in this table are on policies with a \$7.500 maximum benefit, 39 percent on policies with a \$10,000 maximum benefit, 29 percent on policies with a \$12,500 maximum benefit, and 4 percent on policies with a \$15,000 maximum benefit. The 1977-78 experience is compared with that of 1975–76 and 1973–74. Claim costs have increased 46, 33, and 54 percent for males, females, and children, respectively, over the 1975-76 study, and have increased 83, 56, and 134 percent, respectively, over the 1973–74 study. In comparison with the 1975–76 study. claim frequency has increased by 18, 10, and 31 percent for males, females. and children, respectively. In comparison with the 1973-74 study, claim frequency has increased 16, 8, and 72 percent, respectively, for males. females, and children. Increases in average claims were 23, 21, and 18 percent, respectively, over 1975-76 and 59, 44, and 36 percent, respectively, over 1973-74.

A graduation of crude claim costs for ages 20–74 appears in Table 25. Graduated claim costs for females exceed those of males for all age groups up to age 44 in this table.

There were insufficient data for durations 1 and 2 to compare with those for durations 3 and later.

Variations in experience for each company that contributed data for Table 24 are shown in Table 26.

### \$500 Fixed Deductible, \$30 Hospital Room and Board Limit

Table 27 shows the combined experience of durations 3 and later for plans with a \$500 fixed deductible and a \$30 room and board limit. All policies included in this table have a 75 percent coinsurance percentage, or amounts paid have been adjusted to a 75 percent coinsurance basis. About 58 percent of the claims in this table are on policies with a \$10,000 maximum benefit, 11 percent on policies with a \$12,500 maximum benefit, 3 percent on policies with a \$15,000 maximum benefit, and 28 percent on policies with a \$20,000 maximum benefit. Guaranteed renewable policies account for 100 percent of the claims.

The 1977–78 experience is compared with that of 1975–76 and 1973–74. Claim costs have increased substantially (32, 22, and 23 percent for males, females, and children, respectively) over the 1975–76 study. In comparison

## TABLE 24—1977-78 Experience under Individually Underwritten Policies Major Medical Expense Benefit—\$500 Fixed Deductible \$25 Hospital Room and Board Limit, 75 Percent Coinsurance (Adjusted)\* Durations 3 and Later

	NUMBER	NUMBER					Ratio то 1975-76			Ratio to 1973–74		
ATTAINED AGE	of Livis	OF	AMOUNT PAID	CLAIM FREQUENCY	Average Claim	CLAIM Cost	Claim	Average	Claim	Claim	Average	Claim
	EXPOSED	CLAIMS		1	2171111		Frequency	Claim	Cost	Frequency	Claim	Cost
	Male										1	
20–24	17	0	\$ 0	0	\$ 0	\$ 0						
25–29	330	12	15,540	.03636	1,295.00	47.09	1.50	.83	1.25	1.25	2.42	3.05
30–34	791	22	18,608	.02781	845.82	23.52	.86	.82	.71	1.16	.89	1.04
35–39	1,377	50	73,727	.03631	1,474.54	53.54	1.23	1.07	1.32	1.28	1.78	2.27
40-44	2,093	104	117,953	.04969	1,134.16	56.36	1.29	.90	1.17	1.02	1.11	1.13
45-49	2,907	188	349,774	.06467	1,860.50	120.32	1.17	1.33	1.55	1.18	1.52	1.80
50-54	3,825	296	664,662	.07739	2,245,48	173.77	1.13	1.38	1.56	1.07	1.77	1.89
55–59	4,025	385	799,936	.09565	2,077.76	198.74	1.13	1.11	1.26	1.06	1.41	1.50
60-64	3,806	478	1,061,845	.12559	2,221.43	278.99	1.12	1.25	1.40	1.08	1.45	1.55
65–69	771	61	124,823	.07912	2,046.28	161.90	.78	1.37	1.07	1.20	1.40	1.68
70–74	204	19	36,042	.09314	1,896.95	176.68	1.16	1.13	1.31	1.53	1.71	2.59
75 and over	79	6	19,115	.07595	3,185.83	241.96						
All ages	20,225	1,621	\$3,282,025	.08015	\$2,024.69	\$162.28	1.18	1.23	1.46	1.16	1.59	1.83
	Female											
20–24	23	0	\$ 0	0	\$ 0	\$ 0					·	
25–29	314	18	21,603	.05732	1,200.17	68.80	.91	.99	.89	1.01	1.49	1.49
30–34	883	53	52,774	.06002	995.74	59.77	1.20	.94	1.12	1.01	1.29	1.29
35-39	1,662	115	131,593	.06919	1,144.29	79.18	1.09	1.07	1.17	1.10	1.51	1.66
40-44	2,406	159	202,545	.06608	1.273.87	84.18	.93	1.16	1.09	.97	1.32	1.29
45-49	3,490	302	446,372	.08653	1,478.05	127.90	1.10	1.32	1.46	1.05	1.29	1.37
50-54	4,344	375	613,878	.08633	1,637.01	141.32	1.04	1.15	1.19	.98	1.35	1.30
55-59	4,719	434	763,537	.09197	1,759.30	161.80	1.07	1.17	1.25	1.06	1.36	1.44
60–64	4,598	522	1,031,093	.11353	1,975.27	224.25	1.11	1.30	1.44	1.15	1.44	1.66
65–69	987	62	92,948	.06282	1,499.16	94.17	1.05	.72	.76	1.20	1.35	1.62
70–74	345	17	21,995	.04928	1,293.82	63.75	1.66	.63	1.04	.90	1.08	.97
75 and over	116	13	13,334	.11207	1,025.69	114.95	5.71	.27	.64			
All ages	23,887	2,070	\$3,391,672	.08665	\$1,638.49	\$141.97	1.10	1.21	1.33	1.08	1.44	1.56
				-		Child	1			•	•	
All ages	16,856	507	\$ 557,153	.03008	\$1,098.92	\$ 33.05	1.31	1.18	1.54	1.72	1.36	2.34

<sup>\*</sup> See footnotes to Table 21.

TABLE 25

1977–78 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$500 FIXED DEDUCTIBLE
75 PERCENT COINSURANCE (ADJUSTED)\*
\$25 HOSPITAL ROOM AND BOARD LIMIT
GRADUATED CLAIM COSTS FOR
DURATIONS 3 AND LATER

Attained	Claim
Age	Cost
Male	
25–29	. \$ 45.32
30–34	. 35.91
35–39	. 42.99
40-44	66.80
45–49	. 119.29
50–54	. 169.75
55–59	. 207.65
60–64	. 270.65
65–69	. 205.27
70–74	. 140.81
Female	
25–29	. \$ 63.19
30–34	
35–39	
40–44	. 92.94
45–49	. 116.98
50–54	. 143.36
55–59	. 179.01
60–64	. 207.31
65–69	. 166.06
70–74	. 56.77

<sup>\*</sup> See footnotes to Table 21.

TABLE 26

# 1977-78 Experience under Individually UNDERWRITTEN POLICIES MAJOR MEDICAL EXPENSE BENEFIT

# \$500 FIXED DEDUCTIBLE

75 Percent Coinsurance (Adjusted)\* \$25 Hospital Room and Board Limit

# **DURATIONS 3 AND LATER**

### RATIOS OF EXPERIENCE BY CONTRIBUTING COMPANY TO EXPERIENCE OF TOTAL STUDY

		Number	Average	RATIO OF	EACH COMPANY	to Total
	COMPANY	OF CLAIMS	AGE	Claim Frequency	Average Claim	Claim Cost
Male	A	765	55.2	1.24	1.05	1.29
	B	295	51.9	.75	.78	.59
	C	40	53.5	.72	.41	.30
	D	228	54.7	.75	.93	.70
	E	242	57.7	1.17	1.23	1.43
	F	51	56.9	1.16	1.26	1.46
Female	A	1,024	54.0	1.25	1.02	1.28
	B	411	51.1	.86	.86	.73
	C	78	50.6	.91	.54	.49
	D	273	53.5	.71	1.01	.71
	E	235	54.7	.93	1.33	1.29
	F	49	52.4	1.04	.83	.86
All adults	A	1,789	54.7	1.25	1.04	1.29
	B	706	51.6	.81	.83	.67
	C	118	51.6	.84	.49	.42
	D	501	54.0	.73	.97	.71
	E	477	56.2	1.05	1.28	1.33
	F	100	54.6	1.10	1.05	1.16
Children	A B C D E F	197 138 19 93 44 16		.96 1.62 .71 .76 .83 1.10	1.26 1.03 .36 .,71 .73	1.21 1.66 .26 .54 .61

Note.—Company codes in this table do not correspond to those used in other tables.

<sup>\*</sup> See footnotes to Table 21.

	NUMBER	NUMBER					RAI	ю то 1975-	-76	RAT	10 то 1973-	-74
ATTAINED AGE	OF Lives Exposed	OF CLAIMS	Amoune Paid	CLAIM FREQUENCY	Average Claim	COST	Claim Frequency	Average Claim	Claim Cost	Claim Frequency	Average Claim	Claim Cost
		·				Made						
20–24	310	16	\$ 13,335	.05161	\$ 833.44	\$ 43.02	1.79	.77	1.38	2.56	.82	2.13
25–29	1,585	95	94,434	.05991	944.04	59.58	1.86	1.10	2.16	2.06	.77	2.68
30–34	1,909	79	100,784	.04138	1,275.75	52.79	1.19	1.31	1.56	1.29	1.77	2.28
35–39	2,126	98	102,345	.04610	1,044.34	48.14	1.20	1.01	1.22	1.32	1.13	1.51
40–44	2,280	109	162,408	.04781	1,489.98	71.23	1.03	1.29	1.34	1.19	1.91	2.30
45-49	2,492	141	214,392	.05658	1,520.51	86.03	.91	1.22	1.12	.98	1.60	1.58
50-54	2,476	187	387,372	.07553	2,071.51	156.45	1.26	1.64	2.07	1.06	1.57	1.68
55-59	2,100	181	259,983	.08619	1.436.37	123.80	1.03	.80	.83	1.21	1.18	1.43
60–64	1,770	175	384,041	.09887	2,194.52	216.97	.95	1.25	1.18	1.03	1.39	1.42
65–69	824	90	126,396	.10922	1,404.40	153,39	.98	1.03	1.01	.83	1.23	1.02
70–74	510	78	132,063	.15294	1,693.12	258.95	.92	1.50	1.38	1.29	1.67	2.15
75 and over	225	29	38,973	.12889	1,343.90	173.21	.80	1.32	1.05	.74	1.31	.96
All ages	12,607	1.278	\$2,016,526	.06868	\$1,577.88	\$108.37	1.12	1.18	1.32	1.21	1.42	1.72
						Female						
20–24	296	16	\$ 8,344	.05405	\$ 521.50	\$ 28.19	.85	.72	.61	1.39	.68	.93
25–29	1,334	113	116,649	.08471	1,032.29	87.44	1.24	1.31	1.62	1.69	1.17	1.96
30-34	1,946	156	147,304	.08016	944.26	75.70	1.35	1.24	1.67	1.89	1.49	2.81
35–39	2,260	173	183,772	.07655	1,062.27	81.32	1.24	1.18	1.46	1.30	1.23	1.59
40-44	2,509	201	290,096	.08011	1,443.26	115.62	1.24	1.26	1.56	1.26	1.51	1.90
45-49	2,745	204	265,047	.07432	1,299.25	96.56	.83	1.08	.95	1.14	1.53	1.74
50-54	2,860	231	292,744	.08077	1,267.29	102.36	1.04	1.13	1.18	1.01	1.03	1.03
55–59	2,834	226	337,950	.07975	1,495.35	119.25	.96	.88	.84	.94	1.10	1.03
60–64	2,927	294	503,041	.10044	1,711.02	171.86	.98	1.03	1.01	1.18	1.47	1.75
65–69	1.493	167	267,707	.11186	1,603.04	179.31	1.15	1.32	1.51	1.22	1.40	1.69
70–74	1,219	157	220,568	.12879	1,404.89	180.94	1.16	1.23	1.43	1.24	1.80	2.23
75 and over	634	85	97,556	.13404	1,147.72	153.87	.93	1.04	.97	1.01	1.08	1.10
All ages	23,057	2,023	\$2,730,778	.08774	\$1,349.87	\$118.44	1.10	1.11	1.22	1.27	1.31	1.66
						Child	<u>+</u> .					
All ages	17,781	559	\$ 474,948	.03144	\$ 849.64	5 26.71	1.39	.88	1.23	1.93	1.10	2.14

<sup>\*</sup> See footnotes to Table 21.

with the 1971–72 study, claim costs have increased 72, 66, and 114 percent, respectively. Claim frequency has increased 12, 10, and 39 percent, respectively, over the 1975–76 study and has increased 21, 27, and 93 percent, respectively, over the 1973–74 study. Similarly, increases in average claims were 18 and 11 percent for male and female adults over 1975–76 and 42, 31, and 10 percent for males, females, and children, respectively, over 1973–74. There was a decrease of 12 percent in frequency for children over the most recent study.

A graduation of crude claim costs for ages 20 and above is presented in Table 28. Graduated claim costs for females exceed those for males for all ages up to age 44 in this table. The reverse is true for all ages above age 44.

Table 29 compares the experience of durations 1 and 2 with that of durations 3 and later. Claim costs are higher in the first two durations for female adults and children, while the opposite is true for male adults. This is due primarily to the fact that there were only moderate increases in claim frequency for adult males, while the other two categories have experienced substantially higher claim frequency in the first two durations. With the exception of children in the first duration, all categories have experienced a lower average size claim in early policy durations.

Variations in experience for durations 3 and later for each company that contributed data for Table 27 are shown in Table 30.

# \$750 Fixed Deductible, \$35 Hospital Room and Board Limit

Table 31 shows the combined experience of durations 3 and later for plans with a \$750 fixed deductible and a \$35 room and board limit. As in the previous tables, all policies in this table have a 75 percent coinsurance percentage or are adjusted to a 75 percent coinsurance basis. About 96 percent of the claims in this table are on policies with a \$15,000 maximum benefit, and the other 4 percent are on policies with a \$20,000 maximum benefit. All policies are guaranteed renewable.

The 1977–78 experience is compared with that of 1975–76 and 1973–74. Claim costs have increased 25, 21, and 17 percent for males, females, and children, respectively, over the 1975–76 study and 80, 45, and 76 percent, respectively, over the 1973–74 study. Increases in average claims are 10, 10, and 1 percent, respectively, over the 1975–76 study and 34, 36, and 7 percent, respectively, over the 1973–74 study. Claim frequencies have increased 13, 10, and 16 percent, respectively, over the 1975–76 study and 34, 16, and 64 percent, respectively, over the 1973–74 study.

A graduation of crude claim costs for ages 25 and above appears in Table 32. Graduated claim costs for females exceed those for males for

### TABLE 28

1977-78 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$500 FIXED DEDUCTIBLE
75 PERCENT COINSURANCE (ADJUSTED)\*
\$30 HOSPITAL ROOM AND BOARD LIMIT
GRADUATED CLAIM COSTS FOR
DURATIONS 3 AND LATER

Attained	Claim
Age	Cost
Male	
20–24	\$ 52.56
25–29	46.44
30–34	48.79
35–39	59.67
40-44	78.66
45–49	104.22
50–54	133.46
55–59	162.58
60–64	189.08
65–69	209.86
70–74	223.94
75 and over	230.29
Female	
20–24	\$ 68.14
25–29	77.40
30–34	84.72
35–39	91.44
40-44	96.88
45-49	100.29
50-54	110.28
55–59	132.46
60–64	161.05
65–69	179.78
70–74	180.66
75 and over	160.92

<sup>\*</sup> See footnotes to Table 21.

TABLE 29

# 1977–78 Experience under Individually Underwritten Policies Major Medical Expense Benefit \$500 Fixed Deductible 75 Percent Coinsurance (Adjusted)\* \$30 Hospital Room and Board Limit Ratios of Experience for Durations 1 and 2 to Experience for Durations 3 and Later

		Number	NUMBER RATIO OF SELECT TO ULT			
	DURATION	of Claims	Claim Frequency	Average Claim	Claim Cost	
Male	{1 <sub>2</sub>	386 202	1.13 1.07	.76 .85	.86 .91	
Female	$\begin{cases} 1\\2 \end{cases}$	724 372	1.68 1.50	.75 .73	1.25 1.10	
All adults	$\begin{cases} 1\\2 \end{cases}$	1,110 574	1.48 1.34	.75 .77	1.11 1.03	
Children	$\{\frac{1}{2}$	298 149	1.87 1.58	1.02 .69	1.90 1.10	

<sup>\*</sup> See footnotes to Table 21.

TABLE 30

## 1977–78 Experience under Individually Underwritten Policies Major Medical Expense Benefit \$500 Fixed Deductible 75 Percent Coinsurance (Adjusted)\*

\$30 Hospital Room and Board Limit Durations 3 and Later

## RATIOS OF EXPERIENCE BY CONTRIBUTING COMPANY

TO EXPERIENCE OF TOTAL STUDY

		NUMBER	Average	RATIO OF	FACH COMPANY	fo Total
	COMPANY	OF CLAIMS	AGE.	Claim Frequency	Average Claim	Claini Cost
Male	A B C D	741 243 21 273	49.8 50.1 54.9 54.3	1.05 .82 .64 .94	.88 1.05 1.57 1.24	.92 .87 1.01 1.17
Female	ABCD	1,242 339 32 410	52.2 48.8 47.9 52.8	1.11 .82 .72 .92	.89 .89 1.06 1.42	.99 .73 .76 1.30
All adults	A B C D	1.983 582 53 683	51.3 49.3 50.7 53.3	1.09 .82 .69 .93	.89 .95 1.27 1.34	.97 .78 .88 1.25
Children	$\begin{cases} A \\ B \\ C \\ D \end{cases}$	299 131 4 125		.89 1.71 .26 .92	1.04 .92 1.07 .98	.93 1.57 .28 .93

Note.—Company codes in this table do not correspond to those used in other tables.

<sup>\*</sup> See footnotes to Table 21.

# TABLE 31—1977-78 Experience under Individually Underwritten Policies Major Medical Expense Benefit—\$750 Fixed Deductible \$35 Hospital Room and Board Limit, 75 Percent Coinsurance (Adjusted)\* Durations 3 and Later

	NUMBER	NUMBER					RAT	то то !975-	-76	RAT	ю то 1973-	-74
ATTAINED AGE	LIVES Exposed	OF CLAIMS	Amount Paid	CLAIM FREQUENCY	AVERAGE CLAIM	CLAIM	Claim Frequency	Average Claim	Claim Cost	Claim Frequency	Average Claim	Claim Cost
						Male					-	
20–24	15	2	\$ 665	.13333	\$ 332.50	\$ 44.33	7.33	3.54	25.92	16.64	5.44	7.99
25-29	188	3	13,358	.01596	4,452.67	71.05	.75	8.86	6.66	.92	1.77	1.67
30–34		18	17,297	.03629	960.94	34.87	1.68	1.02	1.72	1 61	.99	1.01
35-39		16	11,218	,02703	701.13	18.95	.87	.44	.38	1.17	.52	.60
40-44	781	22	32,147	.02817	1.461.23	41.16	.92	1.02	.94	1.16	1.02	1.18
45-49	1,186	54	146,908	.04553	2,720.52	123.87	1.02	1.35	1.37	1.31	1.80	2.32
50-54	1,353	71	137,963	.05248	1,943.14	101.97	.97	.96	.93	1.28	1.36	1.74
55-59	1,534	120	304,868	.07823	2,540.57	198.74	1.26	1.14	1.43	1.20	1.40	1.67
60-64	1,456	149	383,684	.10234	2,575.06	263.52	1.16	1.06	1.24	1.31	1.49	1.98
65-69	1,060	126	207,305	.11887	1,645.28	195.57	1.09	.99	1.08	1.10	.82	.90
70-74	902	127	257,402	.14080	2,026.79	285.37	.91	1.29	1.18	1.26	2.26	2.87
75 and over	553	76	146,305	.13743	1,925.07	264.57	.76	.93	.71	1.12	.86	.96
All ages	10,116	784	\$1,659,120	.07750	\$2,116.22	\$164.01	1.13	1.10	1.25	1.34	1.34	1.80
						Female						
20–24	18	1	\$ 107	.05556	\$ 107.00	\$ 5.94	2.61	.14	.36	2.84	.56	1.56
25-29	185	8	7,526	.04324	940.75	40.68	.97	1.31	1.28	1.42	1.07	1.55
30-34	633	21	19,194	.03318	914.00	30.32	.87	.80	.70	.90	.65	.59
35-39	742	29	35,088	.03908	1,209.93	47.29	.84	1.05	.88	.86	1.01	.87
40-44	1,004	49	61.642	.04880	1,258.00	61.40	.89	1.14	1.01	1.34	1.58	2.11
45-49	1,354	67	113,877	.04948	1,699.66	84.10	1.00	1.22	1.22	.89	1.56	1.40
50-54	1,594	93	185,844	.05834	1,998,32	116.59	1.10	1.06	1.16	1.19	1.23	1.46
55-59	1,834	115	166,333	.06270	1,446.27	90.69	.98	.81	.79	.93	.83	.77
60-64	1,918	146	297,852	.07612	2,040.00	155.29	.95	.89	.84	.94	1.27	1.19
65-69	1,391	129	236,899	.09274	1,836.43	170.31	1.25	1.32	1.66	1.14	1.24	1.41
70-74	1,192	118	252,519	.09899	2,139.99	211.84	.94	1.30	1.39	.93	1.21	1.28
75 and over	698	99	219,426	.14183	2,216.42	314.36	1.30	1.28	1.67	1.55	1.04	1.60
All ages	12,563	875	\$1,596,307	.06965	\$1,824.35	\$127.06	1.10	1.10	1.21	1.16	1.36	1.45
						Child						
All ages	8,334	124	\$ 150,311	.01488	\$1,212.19	\$ 18.04	1.16	1.01	1.17	1.64	1.07	1.76

<sup>\*</sup> See footnotes to Table 21.

TABLE 32

1977-78 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$750 FIXED DEDUCTIBLE
75 PERCENT COINSURANCE (ADJUSTED)\*
\$35 HOSPITAL ROOM AND BOARD LIMIT
GRADUATED CLAIM COSTS FOR
DURATIONS 3 AND LATER

Attained	Claim
Age	Cost
Male	
25–29	\$ 30.12
30–34	31.28
35–39	44.66
40–44	70.82
45–49	107.46
50–54	150.44
55–59	194.56
60–64	231.22
65–69	254.95
70–74	268.32
75 and over	270.21
Female	
25–29	\$ 30.50
30–34	43.16
35–39	56.13
40–44	69.32
45–49	82.77
50–54	97.07
55–59	115.38
60–64	143.22
65–69	176.66
70–74	228.49
75 and over	300.70
* C C T. 11 31	

<sup>\*</sup> See footnotes to Table 21.

all ages up to 44. Graduated claim costs for males exceed those for females for ages 45–74.

There were insufficient data for durations 1 and 2 to compare with those for durations 3 and later.

Variations of experience of each company contributing to this table are shown in Table 33.

### OTHER ANALYSES

In addition to the experience tables, analyses in the form of actual-to-expected ratios were made for each of the following variables: hospital room and board limit (Table 34), maximum benefit (Tables 35 and 36), and calendar year of experience (Tables 37–40).

It should be noted that, unless otherwise specified in the table heading,

TABLE 33

1977–78 Experience under Individually
Underwritten Policies
Major Medical Expense Benefit
\$750 Fixed Deductible
75 Percent Coinsurance (Adjusted)\*
\$35 Hospital Room and Board Limit
Durations 3 and Later
Ratios of Experience by Contributing Company

RATIOS OF EXPERIENCE BY CONTRIBUTING COMPANY
TO EXPERIENCE OF TOTAL STUDY

		Number	AVERAGE	RATIO OF EACH COMPANY TO TOTAL			
	COMPANY	OF CLAIMS	AGE	Claim Frequency	Average Claim	Claim Cost	
Male	A	576	62.5	1.12	.88	.99	
	B	15	41.7	.60	.76	.46	
	C	7	54.1	.53	1.37	.73	
	D	186	58.8	.81	1.35	1.09	
Female	A	623	62.0	1.07	.96	1.03	
	B	28	44.5	1.13	.93	1.05	
	C	10	56.0	.65	.56	.36	
	D	214	55.9	.84	1.16	.97	
All adults	A	1.199	62.2	1.09	.92	1.01	
	B	43	43.5	.94	.87	.82	
	C	17	55.3	.58	.89	.52	
	D	400	57.2	.83	1.27	1.05	
Children	A B C D	69 10 3 42		.90 3.00 .89 .97	1.09 .29 .39 .94	1.00 .87 .35 .91	

NOTE.—Company codes in this table do not correspond to those used in other tables.

<sup>\*</sup> See footnotes to Table 21.

the analysis of each variable ignored the effects of the other variables. Variations in experience among companies probably also have affected the relationships shown in Tables 34–40. Categories are chosen for these tables that would organize the data into meaningful homogeneous cells but would not so divide the data as to introduce a large amount of statistical fluctuation. However, in interpreting these tables, the effects of statistical fluctuation must be considered.

The basis of comparison of the impact of these variables is shown with each table. Results were calculated using separate factors for each combination of duration, five-year attained-age group, and sex. This method will adjust for variations in distribution of experience by duration, age, and sex between the actual and the expected basis.

Table 34 compares the experience on policies with a \$500 fixed deductible but different hospital room and board limits. Increasing the limit from \$25 to \$30 has a downward effect on claim frequencies in this study for males and children but not for females. Average claim size decreases with an increase in room and board limit by 22, 19, and 24 percent for males, females, and children, respectively. Claim frequencies on policies

TABLE 34

1977–78 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
75 PERCENT COINSURANCE (ADJUSTED)\*
\$500 FIXED DEDUCTIBLE
RATIOS OF EXPERIENCE ON POLICIES
WITH HOSPITAL ROOM AND BOARD LIMITS
OF \$25 AND \$30 TO EXPERIENCE WITH NO
ROOM AND BOARD LIMITS
DURATIONS 3 AND LATER

	HOSPITAL.	Number	RATIO OF LIMITED BENEFIT TO UNLIMITED BENEFI				
	ROOM AND BOARD LIMIT	OF Claims	Claim Frequency	Average Claim	Claim Cost		
Male	{\$25 30	1,621 1,278	.86 .74	.77 .60	.67 .45		
Female	$\left\{\begin{array}{c} 25\\30 \end{array}\right\}$	2,070 2,023	1.01	.70 .57	.70 .59		
All adults	$\left\{\begin{array}{c} 25\\30 \end{array}\right\}$	3,691 3,301	.95 .91	.73 .58	.69 .53		
Children	$\left\{\begin{array}{c} 25\\30 \end{array}\right\}$	507 559	.87 .91	.72 .55	.63 .51		

<sup>\*</sup> See footnotes to Table 21.

containing hospital room and board limits are lower than those on policies with no such limits for adult males and children. Substantial decreases for all three categories were shown in prior studies, except for the 1973–74 study, which showed only slight decreases. Average claim sizes on policies with an inside limit for hospital room and board are significantly lower than on policies with no limit, similar to the results of previous studies. These effects are generally expected, since (1) it is more difficult to reach the deductible with the limit present and (2) the limit tends to reduce the average claim size because not all of the hospital charges would be eligible expenses.

Tables 35 and 36 compare the experience on policies with different maximum benefits for policies with a \$500 fixed deductible and a \$25 and

TABLE 35

1977–78 Experience under Individually
Underwritten Policies
Major Medical Expense Benefit
\$500 Fixed Deductible
\$25 Hospital Room and Board Limit
75 Percent Coinsurance (Adjusted)\*
Ratios of Experience on Policies with
Maximum Benefits of \$7,500, \$10,000, \$12,500,
and \$15,000 to Experience of All Benefits Combined
Durations 3 and Later

	Maximum	Number		PECIFIC BENEFIT E TOTAL EXPERIENC	
	Benefit	OF CLAIMS	Claim Frequency	Average Claim	Claim Cost
Male	\$ 7,500 10,000 12,500 15,000	445 687 443 39	1.22 .92 .99 .66	.94 1.02 1.08 .54	1.14 .94 1.07 .36
Female	$ \begin{cases} 7,500 \\ 10,000 \\ 12,500 \\ 15,000 \end{cases} $	629 752 610 77	1.12 .82 1.11 .97	.97 1.09 .96 .73	1.18 .89 1.07 .71
All adults	$ \begin{cases} 7,500 \\ 10,000 \\ 12,500 \\ 15,000 \end{cases} $	1,074 1,439 1,053 116	1.16 .86 1.07 .89	.96 1.05 1.00 .67	1.16 .91 1.07 .60
Children	$ \begin{cases} 7,500 \\ 10,000 \\ 12,500 \\ 15,000 \end{cases} $	91 212 182 22	.87 .94 1.13 1.37	1.02 .80 1.25 .86	.89 .74 1.41 1.18

<sup>\*</sup> See footnotes to Table 21.

\$30 hospital room and board limit, respectively. Relative results tend to fluctuate without a clear pattern for the 1977–78 period. Prior studies have shown conflicting results: a decreasing trend in average claims and frequencies as maximum benefits increase was shown in the 1975–76 period, while the opposite was true in previous studies. These results most likely result from variations among the various companies that offer different maximum benefits.

Table 37 compares experience during calendar year 1978 on policies with a \$500 fixed deductible, no hospital room and board limit, and no surgical schedule maximum with experience on the same policies during 1977. Adult claim costs were down in 1978 an average of 4 percent from 1977 levels, while claim frequencies decreased 8 percent and average claim

### TABLE 36

1977-78 EXPERIENCE UNDER INDIVIDUALLY
UNDERWRITTEN POLICIES
MAJOR MEDICAL EXPENSE BENEFIT
\$5(0) FIXED DEDUCTIBLE
\$30 HOSPITAL ROOM AND BOARD LIMIT
75 PERCENT COINSURANCE (ADJUSTED)\*
RATIOS OF EXPERIENCE ON POLICIES WITH MAXIMUM
BENEFITS OF \$10,000, \$12,500, \$15,000, and
\$20,000 TO EXPERIENCE OF ALL BENEFITS COMBINED
DURATIONS 3 AND LATER

	Махімим	Number	ì	PECIFIC BENFFIT É Total Experienc	
	BENEFIT	OF CLAIMS	Claim Frequency	Average Claim	Claim Cost
Male	\$10,000 12,500 15,000 20,000	854 155 32 237	1.00 .83 .66 1.31	1.02 1.14 .91 .94	1.02 .95 .60 1.23
Female	$ \begin{cases} 10,000 \\ 12,500 \\ 15,000 \\ 20,000 \end{cases} $	1,349 228 59 387	.97 .86 .86 1.20	1.06 .94 .78 .97	1.03 .81 .67 1.16
All adults	$\begin{cases} 10,000 \\ 12,500 \\ 15,000 \\ 20.000 \end{cases}$	2,203 383 91 624	.98 .85 .80 1.24	1.05 1.02 .83 .96	1.03 .87 .66 1.19
Children	$ \begin{cases} 10,000 \\ 12,500 \\ 15,000 \\ 20,000 \end{cases} $	313 74 34 585	.81 1.49 2.35 1.62	1.01 .84 .87 .95	.82 1.25 2.47 1.54

<sup>\*</sup> See footnotes to Table 21.

size increased 4 percent. For children, claim frequencies increased dramatically by 39 percent, while average claim size decreased by 2 percent.

Table 38 compares experience during calendar year 1978 on policies with a \$500 fixed deductible and a \$25 hospital room and board limit with experience on the same policies during 1977. Adult claim costs, claim frequencies, and average claim size are up 4, 10, and 14 percent, respectively. Claim frequencies for children increased by 22 percent, while average claims decreased by 2 percent, resulting in a net increase of 19 percent for claim costs.

Table 39 compares experience during calendar year 1978 on policies with a \$500 fixed deductible and a \$30 hospital room and board limit with experience on the same policies during 1977. Adult claim costs are up in 1978 an average of 3 percent over 1977 levels, with claim frequencies increasing by 5 percent and average claim size decreasing 2 percent. For children, average claims in 1978 have decreased by 10 percent from 1977 levels, while claim frequency and claim costs have increased 17 and 5 percent, respectively.

Table 40 compares experience during calendar year 1978 on policies with a \$750 fixed deductible and a \$35 hospital room and board limit with experience on the same policies during 1977. Experience on adults and

### TABLE 37

1977–78 Experience under Individually
Underwritten Policies
Major Medical Expense Benefit
\$500 Fixed Deductible
75 Percent Coinsurance (Adjusted)\*
No Hospital Room and Board Limit
No Surgical Schedule Maximum
Ratios of Experience for 1978
TO Experience for 1977
Durations 3 and Later

	YEAR OF EXPERIENCE	NUMBER	R.4	RATIO OF 1978 TO 1977			
		of Claims	Claim Frequency	Average Claim	Claim Cost		
Male	1978	249	.93	1.01	.94		
Female	1978	259	.92	1.06	.97		
All adults	1978	508	.92	1.04	.96		
Children	1978	74	1.39	.98	1.35		

<sup>\*</sup> See footnotes to Table 21.

experience on children have moved in opposite directions. For adults, average claim size has increased by 4 percent, while claim frequency and costs have decreased by 8 and 4 percent, respectively. For children, on the other hand, average claim size has decreased by 2 percent, while claim frequency and costs have increased by 39 and 36 percent, respectively.

### TABLE 38

1977–78 Experience under Individually
Underwritten Policies
Major Medical Expense Benefit
\$500 Fixed Deductible
75 Percent Coinsurance (Adjusted)\*
\$25 Hospital Room and Board Limit
Ratios of Experience for 1978
TO Experience for 1977
Durations 3 and Later

	YEAR OF EXPERIENCE	NUMBER OF CLAIMS	RATIO OF 1978 TO 1977		
			Claim Frequency	Average Claim	Claim Cost
Male	1978 1978 1978 1978	734 960 1,694 242	1.01 1.06 1.04 1.22	1.11 1.09 1.10 .98	1.12 1.15 1.14 1.19

<sup>\*</sup> See footnotes to Table 21.

### TABLE 39

1977–78 Experience under Individually
Underwritten Policies
Major Medical Expense Benefit
\$500 Fixed Deductible
75 Percent Coinsurance (Adjusted)\*
\$30 Hospital Room and Board Limit
Ratios of Experience for 1978
TO Experience for 1977
Durations 3 and Later

	YEAR OF Experience	Number of Claims	Ratio of 1978 to 1977			
			Claim Frequency	Average Claim	Claim Cost	
Male	1978	623	1.00	.94	.94	
Female	1978	1,020	1.07	1.05	1.12	
All adults	1978	1,643	1.05	.98	1.03	
Children	1978	287	1.17	.90	1.05	

<sup>\*</sup> See footnotes to Table 21.

### TABLE 40

# 1977–78 EXPERIENCE UNDER INDIVIDUALLY UNDERWRITTEN POLICIES MAJOR MEDICAL EXPENSE BENEFIT \$500 FIXED DEDUCTIBLE 75 PERCENT COINSURANCE (ADJUSTED)\* \$35 HOSPITAL ROOM AND BOARD LIMIT RATIOS OF EXPERIENCE FOR 1978 TO EXPERIENCE FOR 1977

**DURATIONS 3 AND LATER** 

	YEAR OF EXPERIENCE	NUMBER OF CLAIMS	RATIO OF 1978 TO 1977		
			Claim Frequency	Average Claim	Claim Cost
Male	1978 1978	249 259	.93 .92	1.01 1.06	.94
All adults Children	1978 1978	508 74	.92 1.39	1.04 .98	.96 1.36

<sup>\*</sup> See footnotes to Table 21.

