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SURGICAL AND MEDICAL INSURANCE BY A BLUE SHIELD PLAN

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IT IS more than ten years since experience on hospital service insurance by a Blue Cross Plan was reported to the Society in a paper by Arthur Hunter and Allen B. Thompson.[1] In that decade there has been a phenomenal growth of the two types of health insurance generally known as Blue Cross and Blue Shield. The latter is a companion plan to the former, supplementing it by providing help to meet the cost of medical care. The principal fields now covered by it are surgery, including maternity, and medical care in hospitals. Nothing further has been reported of the experience under either Blue Cross or Blue Shield, although membership in Blue Cross nationally has risen in the meantime from approximately 10½ millions of subscribers to 46 millions in 1953. Enrollment in Blue Shield nationally has risen from 900,000 in 1944 to over 28 millions as of December 31, 1953.

This article will deal with the practices and experience of United Medical Service, Inc., hereinafter called UMS, with its home office in New York City. It is the largest of the Blue Shield Plans and is chartered in the seventeen southeastern counties of New York State, including all five boroughs of New York and neighboring counties of Nassau, Suffolk, and Westchester. There is, naturally, a considerable overflow to the adjacent states of New Jersey and Connecticut due to the enrollment of persons employed in New York City who reside in either of these states. Enrollment in UMS has risen rapidly from 79,000 to 3,000,000 in the nine years ending December 31, 1953. These enrollment figures include family dependents, comprising the spouse and unmarried children between the ages of three months and eighteen years.

TYPE OF CONTRACT

UMS issues three types of contracts, Surgical, Surgical-Medical and General Medical. Underwriting practices are identical for the first two plans, which together comprise over 96% of the business by number. The differences for the General Medical Plan will be summarized under a separate heading.

Surgical benefits are provided whether the surgery is performed in or

[1] See *TASA* XLIV, 5.

out of the hospital, and the family contract provides obstetrical benefits for the enrolled wife. Maternity is never included in individual contracts for female employees. The underwriting practice for Group Contracts and Group Remittance differs from the usual group insurance plan in that married applicants without children may select the husband and wife contract without maternity benefits or the full family contract with such coverage.

The Surgical-Medical contract adds in-hospital medical benefits. The General Medical contract provides for nonsurgical medical care both in and out of the hospital, in addition to the surgical coverage.

Appendix A shows the schedule of benefits for the more frequent surgical procedures, for obstetrics, and for medical care.

UMS has an agreement with each of 17,000 participating physicians by the terms of which he agrees to accept the UMS allowances in full payment for care covered by the contract, if the income of the subscriber is less than $2,500 per annum in the case of a single subscriber and if the family income is less than $4,000 per annum in the case of a married subscriber. Upon arranging for care with the participating physician, such subscriber must make known to the physician that he is entitled to the service. This "service benefits" feature applies to surgical and to in-hospital medical care but is not applicable to obstetrics and medical care in the patient's home or the physician's office.

Under the terms of the UMS contracts, payment is made directly to the physician, unless the subscriber has already paid the physician's bill. Because of dealing directly with the physician and because of the service feature, UMS has found it necessary to develop a very detailed schedule of surgical allowances.

CONTRACT LIMITATIONS AND EXCLUSIONS

Waiting Periods.—In the absence of waivers granted in accordance with underwriting rules, the contracts provide for the following waiting periods: tonsils and adenoids—6 months; any pre-existing condition—11 months; maternity—10 months.

Exclusions.—Contract exclusions now are: workmen's compensation cases; care furnished by federal or state law or by the subscriber's employer; cosmetic surgery; functional disorders of the mind or nervous system;[2] diagnosis or treatment of allergies;[2] rest cures;[2] nonsurgical treatment of pulmonary tuberculosis after diagnosis as such;[2] services of physicians if fees or charges therefor are claimed by hospitals, laboratories, or other institutions.

[2] Applies only to Medical Care.

UNDERWRITING RULES

UMS enrolls its subscribers both on a nongroup and on a group basis. Of the business in force, 85% was written by group methods, comprising Group Remittance and Group Contracts. Group Remittance is the application of group underwriting methods to the issuing of individual contracts where the employer or labor union acts as the remitting agent.

Both Group Contracts and Group Remittance provide for continuance of coverage by direct payment of charges due after termination with the group. These are hereafter designated as Group Conversion. The other direct payment contracts are non-Group, which are individually underwritten originally.

TABLE 1

NEW GROUP REQUIREMENTS FOR SURGICAL AND SURGICAL-MEDICAL

Number of Employees Eligible	Number of Applications Required	Minimum
4	100%	.....
5– 10	100% minus 1	.....
11– 12	10	.....
13– 14	11	.....
15– 16	12	.....
17– 18	13	.....
19– 20	14	.....
21– 25	15	.....
26–249	60%	16
250–500	50%	150
Over 500	40%	250

Enrollment is limited to those under age 65 at entry, except in the case of the larger groups where the employer contributes at least 50% of the single contract cost and where not less than 75% of all eligibles enroll according to marital status. UMS contracts are cancelable. However, up to the present time, the company has not encountered any underwriting situations which have required the outright cancellation of any contracts. There is no age limitation at which coverage expires or is decreased.

The natural field for enrollment in Blue Shield is among the present or prospective members of Blue Cross. Currently, UMS has enrolled more than one-half of Associated Hospital Service (Blue Cross) members.

The underwriting rules for Group Remittance have been developed by experience. Groups of four or more are accepted. The present minimum percentage requirements for new groups are shown in Table 1. These requirements may appear somewhat liberal in comparison with the usual 75% minimum of group insurance, but our latest experience shows little

variation in loss ratios by size of group after taking into consideration the fact that the larger groups are granted waiver of waiting periods.

Direct Payment (non-Group) is offered only to the self-employed or to those working where there are less than four employees. These contracts call for a health questionnaire. In few cases has it been found necessary to require the prospective member to take a medical examination. Another method is to attach a limiting rider whereby all benefits will be excluded for care due to an existing condition. It has been found necessary to reject outright only 6% of applicants.

Maternity benefits are available only in family contracts under Group Remittance or Group Contracts. On Group Conversion, maternity benefits are available only for a pregnancy existing at the time of the transfer.

UMS enrollment is subdivided by these four categories as shown in Table 2.

TABLE 2

	Number of Subscribers	Percentage
Group Remittance	2,413,000	78.9%
Group Contracts	215,000	7.0
Group Conversion	279,000	9.1
Non-Group	151,000	5.0
	3,058,000	100.0%

SUBSCRIPTION CHARGES

Table 3 shows the Group Remittance monthly rate of subscription for each of the plans of benefit. There is no variation in the charge by sex on single contracts.

TABLE 3

Group Remittance—Monthly	Single	Husband and Wife	Family
Surgical	$ .68	$1.60	$2.88
Surgical-Medical	.88	2.00	3.40
General Medical	2.40	7.60	7.60

The charges to a subscriber under the Direct Payment contracts are approximately 10% higher than the corresponding Group Remittance charge in the case of a single or a husband and wife contract. This margin has been provided for the extra expense and for the probable extra morbidity. In family contracts, the differential is only 1%, but this must be

taken in conjunction with the fact that maternity benefits are excluded from the Direct Payment contracts. The rate of subscription for those who have dropped out of a group but who continue on Group Conversion is the same as that for Direct Payment non-Group.

Most of the new enrollment occurs under the Surgical-Medical Plan and there has been a decided shift of existing subscribers to that plan from the Surgical. Enrollment in General Medical is naturally limited by the relatively high rate of subscription and the stricter underwriting rules.

Enrollment on December 31, 1953 by plan of benefit is given in Table 4.

TABLE 4

	Number of Subscribers	Percentage
Surgical	1,456,000	47.6%
Surgical-Medical	1,485,000	48.6
General Medical	116,000	3.8
	3,058,000	100.0%

GENERAL MEDICAL PLAN

As noted earlier, the General Medical Plan includes benefits for home and office medical care. These begin with the first visit and are limited to a maximum of one visit a day and an over-all maximum of thirty visits in a contract year for each subscriber. The plan is underwritten on a group basis only and is not available either on Group Conversion or on non-Group. Subscribers leaving a General Medical group are offered Surgical-Medical as their conversion privilege. The new group requirements for General Medical are shown in Table 5.

TABLE 5

Number of Employees Eligible	Number of Applications Required	Minimum
4*	100%	.....
5- 10*	100% minus 1	.....
11- 24*	80%	10
25- 99	75%	20
100-249	70%	75
250-500	60%	175
Over 500	50%	300

* General Medical will be offered to groups with less than 25 employees only if there is a contribution by the employer amounting to not less than the individual cost.

There is no husband and wife contract. Obstetrical benefits are available for all enrolled wives under family contracts.

The waiting period of 11 months for pre-existing conditions does not apply to home and office visits, it being considered uneconomical to incur such administrative expense on the many small claims.

Additional contract exclusions to those already enumerated include provisions whereby no benefits are available for: check-up medical examinations; examination of the eyes for glasses; drugs or medicines; immunization or other prophylaxis.

The complex nature of the contract provisions applicable to the General Medical Plan require considerably more space to describe them than the volume of business on this plan warrants. As reported above, the General Medical Plan comprises less than 4% of the total business. However, it has been included because we feel that there is considerable general interest in experience on home and office medical care.

CLAIMS EXPERIENCE

Since surgical schedules vary with each company and almost with each group underwritten by the various companies, we will attempt herein to show the surgical experience by number of claims rather than by their cost. When these are not readily available, other comparisons must necessarily be made by employing loss ratios or monthly costs per thousand contracts.

Table 6 shows the nonmaternity experience in 1952 and 1953 for those types of surgical operations which either occur most frequently or for which UMS pays the most in benefits. The data are shown separately for men, women, and children, the results for single and married adults being combined. Hence, it is not intended to make available comparisons of the respective costs of contracts on men and women, but rather to indicate in each instance the relative weight of the leading claim causes. The data account for about 55% of the total amount paid for surgery.

The six most costly causes among men are: appendectomy, herniotomy, gastrectomy, hemorrhoidectomy, prostatectomy, cholecystectomy. Combined they account for 31% of the total claim cost. The six principal causes among women are: hysterectomy, appendectomy, cholecystectomy, mastectomy and excision of cyst or benign tumor, hemorrhoidectomy, dilation and curettage of uterus. Combined they cover 40% of the total claim cost.

Experience by Calendar Year

Over the past four years, there has been a steady rise in the number of claims in each calendar year under each form of contract as may be seen from Table 7.

TABLE 6

MOST IMPORTANT COST PROCEDURES

SURGICAL ONLY—MATERNITY EXCLUDED

NUMBER OF SERVICES AND COST OF INCURRED CLAIMS PER YEAR

TOTAL BUSINESS EXCLUDING GROUP CONTRACTS

NOMENCLATURE	FEE SCHEDULE ALLOWANCE	MEN				WOMEN				CHILDREN			
		Services		Cost		Services		Cost		Services		Cost	
		Per 1,000 Members								Per 1,000 Family Contracts			
		1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953
Local excision of small benign neoplastic, cicatrical, inflammatory or congenital lesion, one	$15	4.0	4.1	$ 66	$ 62	3.8	3.9	$ 65	$ 59	1.5	1.8	$ 23	$ 27
more than one	S.C.	1.1	.9	29	23	1.0	1.1	26	29	.5	.4	11	10
Wide excision of lesion, without graft or plastic closure	50	.6	.4	31	22	.6	.4	28	19	.2	.2	7	9
Excision of pilonidal cyst or sinus	100	1.0	1.0	95	97	.4	.3	37	33	.3	.3	26	29
Primary, secondary or delayed suture of wounds	S.C.	1.6	1.8	32	33	1.1	1.3	22	22	8.1	11.6	116	152
Excision of cyst, fibroadenoma or other benign tumor, aberrant breast tissue, duct lesion or nipple (including any other partial mastectomy), unilateral	50	.1	.1	6	6	3.0	3.2	153	162	.1	.2	7	11
Radical mastectomy, including breast, pectoral muscles, and auxiliary lymph nodes, unilateral	150					.8	.8	115	117				
Radius, distal end, Colles' (including ulna styloid), closed reduction	65	.2	.3	15	16	.7	.7	42	44	1.6	1.7	97	106
Septectomy: submucous resection	75	1.0	.9	73	71	.9	.9	66	71	.4	.6	33	43
Tonsillectomy, with or without adenoidectomy, under age of 12	30									53.0	51.5	1,591	1,551
age 12 or over	50	1.4	1.2	68	58	2.0	1.7	98	85	2.1	1.7	104	85
Subtotal gastrectomy (partial)	200	1.0	1.2	196	249	.3	.3	60	64			1	2

TABLE 6—*Continued*

Nomenclature	Fee Schedule Allowance	Men				Women				Children			
		Services		Cost		Services		Cost		Services		Cost	
		Per 1,000 Members								Per 1,000 Family Contracts			
		1952	1953	1952	1953	1952	1953	1952	1953	1952	1953	1952	1953
Colectomy: resection of large intestine, all or part, one or two stages, including colostomy and closure, if necessary	250	.3	.4	$ 79	$ 93	.4	.4	$ 87	$ 93	.....	.....	$ 2	$ 5
Appendectomy (I.P.)	125	3.2	2.9	396	355	4.0	3.1	500	386	8.7	8.0	1,076	986
Sigmoidoscopy, diagnostic, initial	25	2.1	3.2	52	81	1.6	2.6	40	65	.2	.3	4	7
Hemorrhoidectomy, internal plus external (in hospital)	75	2.4	2.5	183	193	2.1	2.0	158	156	.....	.....	3	2
Cholecystectomy	150	1.0	1.0	143	156	2.5	2.8	374	416	.....	.....	2	2
Exploratory laparotomy: exploratory celiotomy	125	.4	.4	46	44	.6	.6	77	71	.1	.1	13	11
Hernioplasty: herniorrhaphy: herniotomy, inguinal, unilateral	100	2.5	2.5	248	255	.4	.4	37	33	3.2	3.7	308	371
Cystoscopy, diagnostic, initial	25	1.4	1.5	35	38	.9	.9	22	23	.2	.2	6	5
Cystoscopy, with ureteral catherization, initial	35	1.7	2.2	59	76	1.7	1.9	60	67	.3	.4	11	15
Prostatectomy, suprapubic, one or two stages	200	.8	1.1	167	215	.....	.....	.....	.....	.....	.....	.....	.....
Panhysterectomy, total hysterectomy (corpus and cervix)	175	.....	.....	.....	.....	4.6	4.8	803	841	.....	.....	.....	.....
Supracervical hysterectomy: subtotal hysterectomy	125	.....	.....	.....	.....	1.8	1.4	226	177	.....	.....	.....	.....
Vaginal hysterectomy, with or without pelvic floor repair	175	.....	.....	.....	.....	.7	.7	118	120	.....	.....	.....	.....
Dilation and curettage of uterus for all other causes including diagnosis (I.P.)	35	.....	.....	.....	.....	3.7	4.3	131	153	.....	.....	.....	.....
Thyroidectomy, subtotal or partial	125	.2	.1	17	15	.9	.9	95	115	.....	.....	1	2
Extraction of lens, intracapsular or extracapsular with iridectomy (combined cataract extraction), unilateral	175	.4	.5	74	95	.4	.4	61	74	.....	.....	3	3
All other Surgery	.....	41.7	48.8	2,211	2,439	51.8	55.7	2,848	2,933	38.3	50.6	1,815	2,281
Total All Surgical Procedures	.....	70.1	79.0	$4,321	$4,692	92.7	97.5	$6,349	$6,428	118.8	113.3	$5,260	$5,715

Note.—I.P. = Independent Procedure.

The foregoing is an aggregate experience, but there has been little change in the distribution of membership either by sex or marital status or by type of enrollment. Part of the marked increase in the number of General Medical claims is attributed to the increase in benefits commencing January 1, 1952. Office visits were increased from $2 to $3 per visit and home visits from $3 to $4. Prior thereto, surveys had shown that many claims were not filed because of the small sums involved.

The very growth of enrollment appears to have increased the number of claims because of the steady rise in cases which now receive the private care of a personal physician rather than treatment in a free ward, as these people now have both Blue Cross and Blue Shield protection. Many

TABLE 7

TOTAL ENROLLMENT
CLAIM EXPERIENCE PER 1,000 MEMBER MONTHS

YEAR	SURGICAL		SURGICAL-MEDICAL		GENERAL MEDICAL	
	Number of Claims	Cost	Number of Claims	Cost	Number of Claims	Cost
1950	7.0	$432	9.0	$509	79.8	$ 980
1951	7.3	512	9.3	599	84.3	1,049
1952	8.0	527	10.6	633	104.0	1,351
1953	8.6	545	11.0	641	117.7	1,579

hospitals have changed their rules so as to allow physicians to make a charge on ward service cases if covered by insurance.

The number of office surgery claims has increased as members become better acquainted with the full scope of their coverage. Further underlying reasons are the slow-up in the proportion of new to total enrollment and the relatively less importance of the waiting periods on new enrollment.

Surgery In-Hospital and Out-of-Hospital

Table 8 shows the Group Remittance claim experience incurred in 1953 on in-hospital and out-of-hospital surgery for each of the three plans.

There was a drastic increase in the number of out-of-hospital surgery claims from 1952 to 1953. The increase was approximately one-fourth on the General Medical Plan and one-third on the other two plans.

The cost of minor surgery increases rapidly as the scope of the contract is increased. Office surgery on the General Medical Plan occurs from four

to five times as frequently, while the cost per contract is nearly three times the rate for that of the other two plans.

Group Conversion and Non-Group

Table 9 gives a comparison by marital status over the three-year period 1950–1952 of the yearly nonmaternity claim cost per contract on Group Conversion and non-Group with that on Group Remittance. It shows the Group Remittance dollar value by type of contract for each of the three years. Relative values for Group Conversion and for non-Group are shown by indices, using 100 as the base in each year for Group Remittance.

TABLE 8

GROUP REMITTANCE—1953
SURGERY CLAIM EXPERIENCE PER 1,000 MEMBER MONTHS

	NUMBER OF CLAIMS			COST			AVERAGE AMT. PAID		
	Surg.	Surg.-Med.	Gen. Med.	Surg.	Surg.-Med.	Gen. Med.	Surg.	Surg.-Med.	Gen. Med.
Surgery—In-Hospital									
Single	4.1	4.3	4.3	$358	$363	$365	$88	$84	$85
2-Person	5.3	5.7	.....	512	527	.....	97	93	.....
Family	4.3	4.5	4.6	297	308	336	70	68	72
All	4.2	4.7	4.6	$345	$354	$341	$79	$76	$74
Surgery—Out-of-Hospital									
Single	1.8	2.2	8.3	$ 43	$ 44	$119	$22	$21	$14
2-Person	2.2	2.5	.....	50	54	.....	23	22	.....
Family	2.2	2.4	9.8	47	49	137	21	21	14
All	2.1	2.4	9.6	$ 45	$ 49	$134	$22	$21	$14

We do not have available for 1953 the breakdown by marital status. However, Table 10 compares the results by contract on Group Conversion and on non-Group with that on Group Remittance. In this table, the two-person contract is the sum of the morbidity on husband and wife, while the family contract is the sum of the morbidity on husband, wife and children.

The tables clearly show the need to provide a margin for extra expected morbidity both on Group Conversion and on non-Group contracts. On single contracts under the former, there is much greater antiselection by women than by men.

TABLE 9

COMPARISON OF YEARLY NONMATERNITY CLAIM COST PER CONTRACT
GROUP CONVERSION AND NON-GROUP TO GROUP REMITTANCE
Group Remittance Taken As 100

	Single Contract			Two-Person Contract			Family Contract		
	1950	1951	1952	1950	1951	1952	1950	1951	1952
	SURGICAL PLAN								
Men									
Group Remittance—Cost per Contract	$2.74	$3.71	$4.03	$3.65	$5.11	$5.65	$2.33	$3.26	$3.28
Group Conversion—Index	104	96	112	152	112	122	136	132	127
Non-Group—Index	122	115	171	106	76	127	157	99	154
Women									
Group Remittance—Cost per Contract	$3.58	$4.80	$4.84	$5.05	$6.73	$7.04	$4.38	$5.41	$6.18
Group Conversion—Index	368	221	173	149	104	114	132	143	117
Non-Group—Index	126	103	163	108	91	143	194	130	189
Children									
Group Remittance—Cost per Contract							$3.86	$4.51	$5.00
Group Conversion—Index							127	135	128
Non-Group—Index							150	125	183
	SURGICAL-MEDICAL								
Men									
Group Remittance—Cost per Contract	$4.22	$5.10	$5.10	$4.98	$7.02	$7.84	$3.02	$4.16	$4.18
Group Conversion—Index	130	112	146	141	108	115	146	164	148
Non-Group—Index	158	134	161	110	115	114	150	125	149
Women									
Group Remittance—Cost per Contract	$4.71	$6.45	$6.01	$6.26	$8.40	$8.82	$5.00	$6.23	$7.17
Group Conversion—Index	219	167	171	150	113	123	146	171	143
Non-Group—Index	149	138	163	121	106	124	166	139	140
Children									
Group Remittance—Cost per Contract							$4.35	$5.30	$6.05
Group Conversion—Index							124	165	138
Non-Group—Index							166	140	140

Variation by Age

Our experience is not readily available by age groups. A representative sample of exposure was taken and tested for adequacy. Table 11 shows the result according to age group on Group Remittance by comparing the 1952 incurred cost in that age group to a basis of 100 for all ages combined.

The data indicate that the cost of in-hospital medical care rises continuously with advance in age. This appears also to be true for the cost of surgery on men. On women, the surgery claim curve seems to flatten out. On the husband and wife contract, the cost for wives in this one year was even better than average at ages over 50.

TABLE 10

	Single Contract		Total Two-Person Contract				Total Family Contract			
	Men	Women								
	1953	1953	1950	1951	1952	1953	1950	1951	1952	1953
Surgical Plan										
Group Remittance Cost	$4.52	$5.15	$ 8.70	$11.84	$12.69	$14.05	$10.57	$13.18	$14.46	$15.50
Group Conversion Index	100	147	150	107	118	107	131	138	123	120
Non-Group Index	150	143	107	85	136	134	170	121	179	157
Surgical-Medical Plan										
Group Remittance Cost	$5.52	$6.45	$11.24	$15.42	$16.66	$18.21	$12.37	$15.69	$17.40	$17.83
Group Conversion Index	123	146	146	111	119	103	138	167	142	134
Non-Group Index	155	149	116	110	119	115	162	136	142	142

Maternity Benefits

Table 12 shows for Group Remittance the yearly number of obstetrical claims incurred per thousand family contracts. The exposed to risk in each quarter-year claim period was that in effect nine months previously.

The rate for General Medical is lower because the exposed to risk includes all familes, whereas under the other two plans the family contract is optional to the individual applicant in the event that there are no children. The higher rate under the Surgical-Medical Plan is probably due to the fact that most of our new enrollment arises under that plan and there are undoubtedly fewer established families in the exposed to risk. Normal delivery accounts for about 90% of all maternity claims. The balance consists of claims for miscarriage, Caesarean section and ectopic pregnancies.

TABLE 11

GROUP REMITTANCE—1952

	Under 30	30 to 39	40 to 49	50 to 59	60 to 64	65 and Over
	Relative Claim Costs by Age Group (Total all ages combined taken as 100)					
Surgical Claims						
Single Contract						
Male	91	73	75	119	185	208
Female	75	96	132	121	111	134
Two-Person Contract						
Male	66	70	85	92	125	123
Female	130	102	118	91	92	89
Family Contract						
Male	86	86	111	133	*	*
Female	77	96	132	132	*	*
Medical Claims In-Hospital						
Single Contract						
Male	41	59	87	184	277	354
Female	51	65	107	177	209	381
Two-Person Contract						
Male	17	50	70	95	139	124
Female	79	66	77	102	136	169
Family Contract						
Male	49	70	125	210	*	*
Female	74	87	123	274	*	*
Obstetrical Claims						
Family—Female	194	86	10	.....	.....	.....
	Percentage Distribution of "In Force" by Age Group					
Single Contract						
Male	41.5%	17.8%	16.3%	14.4%	4.9%	5.1%
Female	40.1	18.4	18.7	15.1	4.9	2.8
Two-Person Contract						
Male	.9	3.5	17.6	46.7	17.5	13.8
Female	1.0	6.2	29.5	46.0	11.0	6.3
Family Contract						
Male	20.5	39.8	29.3	9.3	.9	.2
Female	32.0	40.9	23.3	3.7	.1	.....

* Incomplete data.

Prior to October 1, 1950, it was the practice of UMS to permit a Group Conversion family contract to carry maternity benefits with it after transfer from Group Remittance. Also, upward changes of conversion contracts could be made without submitting satisfactory evidence of insurability. This resulted in such severe antiselection against UMS, particularly with respect to maternity benefits, that the contracts were changed so that maternity benefits on Group Conversion are available only for a pregnancy existing at the time of the transfer. Further, a change in contract after transfer to Group Conversion is individually underwritten.

TABLE 12

MATERNITY BENEFITS
YEARLY CLAIM RATE PER 1,000
FAMILY CONTRACTS

Year	Surgical	Surgical-Medical	General Medical
1950.....	141	151	102
1951.....	138	153	98
1952.....	133	160	87
1953.....	127	145	93

Surgical-Medical—Non-Group

Table 13 shows the yearly cost per contract for the three-year period 1951 to 1953. Over 80% of non-Group subscription income arises on the Surgical-Medical Plan.

TABLE 13

NON-GROUP SURGICAL-MEDICAL
COST PER CONTRACT YEAR

	1951	1952	1953
Single Contracts—Men.....	$ 6.81	$ 8.19	$ 8.58
Single Contracts—Women...	8.89	9.79	9.59
Husband and Wife.....	17.04	19.99	20.89
Family.....	21.37	24.70	25.25

An increase in cost per contract is particularly evident for single contracts—men, and for husband and wife contracts. The rise in cost is due to a general increase in claim rate for every cause, but we have noticed in particular an increase in cost due to herniotomy, hemorrhoidectomy, cystoscopy, and prostatectomy for men. On women, the most significant

increases have been due to dilation and curettage (nonpuerperal), resection of the colon, cystoscopy and mastectomy. We have also noted a substantial increase in the cost of in-hospital medical care on these contracts.

Medical Care

Table 14 shows the incurred claim experience on Group Remittance for the years 1952 and 1953.

The cost of the in-hospital medical benefits per single contract is slightly higher for men than for women on the Surgical-Medical Plan, which had a significant exposed to risk in 1953 of approximately 200,000 single contracts. The in-force on women is 65% of the total. On the husband and wife contract, the cost of the husband is greater than that of the

TABLE 14

MEDICAL CARE—GROUP REMITTANCE
INCURRED CLAIMS PER CONTRACT YEAR

	Surgical-Medical		General Medical	
	Number of Days			
	1952	1953	1952	1953
In-Hospital Only				
Single Contract				
Men	.30	.34	.25	.27
Women	.28	.32	.25	.29
Husband and Wife Contract				
Men	.52	.62	.....	.....
Women	.48	.54	.....	.....
Family Contract				
Men	.20	.23	.27	.35
Women	.20	.21	.23	.26
Children	.21	.19	.16	.15
			Number of Visits	
			1952	1953
Home or Office Visits				
Single Contract				
Men	.....	.....	1.77	2.02
Women	.....	.....	2.27	2.69
Family Contract				
Men	.....	.....	2.21	2.72
Women	.....	.....	2.93	3.58
Children	.....	.....	3.32	4.10

wife, the excess being 10% in 1952 and 15% in 1953. On the full family Surgical-Medical contracts, the cost is rather evenly distributed among the male, female, and children members of the family. Combining the husband and wife and family Surgical-Medical contracts would develop a pattern similar to that shown for General Medical, the result in 1953 for the Surgical-Medical Plan being .34 male, .30 female, and .13 for children.

The home and office visit experience for single contracts on the General Medical Plan shows women costing approximately one-third more than men. Using 100 as the male cost under a family contract, the results are

TABLE 15

GROUP REMITTANCE—1952
CLAIM RATIO BY SIZE OF GROUP

Size of Group	Surgical and Surgi-cal-Medical	General Medical
Less than 6	74%	78%
6–10	70	88
11–25	69	75
26–50	71	68
51–100	72	56
101–250	72	58
251–500	75	68
501–750	75	68
751–1,000	79	76
Over 1,000	73	72
Total	72%	71%

men 100, women 133, children 150. Data separating home and office visits were not readily available.

Experience by Size of Group

Table 15 shows the 1952 Group Remittance experience by size of group. The percentage is the ratio of incurred claims to subscriptions earned. Separate colums appear for combined Surgical and Surgical-Medical and for General Medical because of the different minimum percentage enrollment requirements.

There were no significant differences on the Surgical and Surgical-Medical in 1952 according to the size of the group, but in our early years we had decidedly worse experience in the smaller than in the larger groups, which was remedied by more conservative underwriting rules adopted for the former.

On the General Medical Plan, the results of 1952 showed selection against the company in groups of 25 or less, particularly in those under

10. This plan had the best results in the groups of 50 to 250 in size. Just as in the case of the other plans, the groups of 750 to 1,000 in size indicated a significantly higher claim ratio. These variations may be partly due to paucity of data.

PERSISTENCY OF GROUPS

In conjunction with the foregoing experience, we made a study of the rates of persistency of our groups. This should be of particular interest to those who may be considering the advisability of entering the small group field.

In 1952, a little less than 5% by number of all enrolled groups were canceled. Among the smaller groups, the cancellation rate was about 6½% by number. A further analysis showed that 85% of the canceled groups had less than 15 members and that the rate of cancellation on groups of 50 or more was a little over 2%.

Table 16 shows the reasons for group cancellations. The groups in the first two categories comprise almost two-thirds by number of the total

TABLE 16

	Percentage of Total
Group fell below minimum of 4	42.7%
Company or firm went out of business	19.5
Canceled on account of nonpayment	20.7
Coverage substituted by parent company or from decision to discontinue coverage	11.2
Result of competition	4.9
All other reasons	1.0
	100.0%

groups canceled. The members in these groups were given the opportunity of continuing their coverage on a direct payment basis and about three-fourths of them did so. On any other type of group cancellation, the same privilege is available but we do not have records indicating how many took advantage of the privilege.

CONCLUSIONS

It appears to the authors that the existence of hospital, surgical, and medical expense insurance has an automatic effect on medical economics in general. There are indications that the rapid growth in these forms of protection has resulted in a steady uptrend in incidence of claims as the subscribing public becomes educated to the full benefits available. There has been an increase in the number of private and semiprivate room patients because funds have been made available through insurance. For example, in a typical hospital which was brought to our attention, over one-half of the patients in the semiprivate rooms had Blue Cross or Blue Shield coverage. Many of them would formerly have gone to the wards,

where the physicians gave their services free, but now can afford to have their own personal physician.

Since the Blue Shield Plans have been in existence, there has been no economic depression. It behooves them, therefore, to lay aside adequate reserves to meet the increased claim ratios which will surely occur in a period of marked unemployment. An additional reason to accumulate contingency reserves is to meet the advancing cost due to (*a*) the rising claim rate being experienced among those actively at work, (*b*) the adverse experience on group conversions, and (*c*) the increasing proportion of retirees and others exposed to risk at the older ages.

We have found that severe antiselection can result from granting too liberal privileges on converting coverage from group to direct payment. We believe that the Blue Shield type of business, with careful underwriting, may be successfully administered on an individual as well as on a group basis and that the smaller groups can be handled with safety.

APPENDIX A

SCHEDULE OF BENEFITS FOR MORE FREQUENT PROCEDURES

Those Accounting for ½ of 1% of Services or Cost

Nomenclature	Schedule Allowance
SURGICAL CARE	
INTEGUMENTARY SYSTEM	
Skin and Subcutaneous Areolar Tissue	
Drainage of small subcutaneous abscess	$ 10
Drainage of large subcutaneous abscess (where not specified elsewhere)	15
Drainage of large subcutaneous abscess, complicated (deep, or with cellulitis or in-hospital treatment)	25
Local excision of small benign neoplastic cicatricial, inflammatory or congenital lesion, one	15
more than one	25
Wide excision of lesion, without graft or plastic closure	S.C.
Excision of nail, nail bed, or nail fold, partial	10
complete	25
Excision of pilonidal cyst or sinus	100
Contusions or abrasions	S.C.
Primary, secondary, or delayed suture of wounds. List number, location, length and depth	S.C.
First Aid	S.C.
Cauterization or fulguration of local lesion, single, large or multiple, initial	10
Breast	
Excision of cyst, fibroadenoma or other benign tumor, aberrant breast tissue, duct lesion or nipple (including partial mastectomy), unilateral	50
Radical mastectomy, including breast, pectoral muscles and axillary lymph nodes	150

NOTE.—S.C. = Special Consideration.

Nomenclature	Schedule Allowance
MUSCULOSKELETAL SYSTEM	
Bones	
Fractures	
Radius, distal end, Colles' (including ulna styloid), closed reduction	$ 65
Radius and ulna, simple, closed reduction, with displacement	100
Joints	
Sprain	S.C.
RESPIRATORY SYSTEM	
Nose	
Septectomy: submucous resection	75
CARDIOVASCULAR SYSTEM	
Arteries and Veins	
Ligation and division and complete stripping of long and short saphenous veins, unilateral	125
DIGESTIVE SYSTEM	
Pharynx, Adenoids, and Tonsils	
Tonsillectomy, with or without adenoidectomy, under age of 12	30
age of 12 or over	50
Stomach	
Subtotal gastrectomy (partial)	200
Intestines (except Rectum)	
Colectomy: resection of large intestine, all or part, one or two stages, including colostomy and closure, if necessary	250
Appendix	
Appendectomy (I.P.)	125
Rectum	
Sigmoidoscopy, diagnostic, initial	25
Anus	
Hemorrhoidectomy, internal plus external	75
Biliary Tract	
Cholecystectomy	150
Abdomen, Peritoneum and Omentum	
Hernioplasty; herniorrhaphy; herniotomy, inguinal, unilateral	100
Hernioplasty; herniorrhaphy; herniotomy, inguinal, bilateral	150
Hernioplasty; herniorrhaphy; herniotomy, ventral incisional, large, I.P.	150
URINARY SYSTEM	
Bladder	
Cystoscopy, diagnostic, initial	25
Cystoscopy, with ureteral catheterization (retrograde pyelography), initial	35
MALE GENITAL SYSTEM	
Prostate	
Prostatectomy, suprapubic, one or two stages	200

Nomenclature	Schedule Allowance
FEMALE GENITAL SYSTEM	
Oviduct	
Salpingo-oophorectomy, complete or partial, unilateral or bilateral (I.P.)	$125
Ovary	
Excision of ovarian cyst, unilateral or bilateral	125
Uterus and Cervix Uteri	
Panhysterectomy: total hysterectomy (corpus and cervix)	175
Supracervical hysterectomy: subtotal hysterectomy	125
Vaginal hysterectomy, with or without pelvic floor repair	175
Local excision of lesion of the cervix (cauterization or conization, electrocoagulation) (I.P.)	15
Dilation and curettage for all other causes including diagnosis (nonmaternity) (I.P.)	35
Hysteropexy (with or without dilation and curettage and surgery on tubes, ovaries, ligaments, etc.) with ventrosuspension: ventrofixation (I.P.)	125
Cauterization of cervix (I.P.)—Electro, initial (chemical—5; subsequent —5; maximum—15)	10
ENDOCRINE SYSTEM	
Thyroid Gland	
Thyroidectomy, subtotal or partial	125
EYE	
Crystalline Lens	
Extraction of lens, intracapsular or extracapsular with iridectomy (combined cataract extraction), unilateral	175
Eyelids	
Blepharectomy; excision of meibomian glands (chalazion) single	15
MATERNITY	
Fetus and Fetal Structures	
Classic Caesarean section	125
Low cervical (lower uterine segment) Caesarean section	125
Obstetric delivery	75
Miscarriage or abortion prior to 5 months gestation, including dilation and curettage	50

MEDICAL CARE

In Hospital

1st and 2d day of each hospital admission ..... $4 per visit (maximum 2 visits per day)

3d through 21st day of each hospital admission ..... $4 per day

4th week through 16th week of each hospital admission .. at rate of $14 per week

Home and Office

In Subscriber's Residence ..... $4 per visit

In Physician's Office ..... $3 per visit

NOTE.—Maximum of 30 visits in any one contract year.
Maximum of one visit per day.