RECORD OF SOCIETY OF ACTUARIES 1982 VOL. 8 NO. 4

MEETING OF THE HEALTH INSURANCE SECTION

Moderator: PAUL BARNHART

- 1. Reports to the membership
 - a. Elections
 - b. Results of membership survey
 - c. Committee activity
 - d. Other items of current interest
- 2. Presentation and discussion of papers
 - a. "Cumulative Anti-selection Theory" by William F. Bluhm
 - "Regulatory Monitoring of Individual Health Insurance Policy Experience" by John B. Cummings
 - c. "Medical Care and Services in Canada" by Frank G. Reynolds

MR. PAUL BARNHART: Welcome to the meeting of the Society of Actuaries Health Section. The first item of news to report concerns the naming of this section. Until now, we've been known as the Health Insurance Section. That is a narrower title than some of us wanted. We didn't want to confine the Health special interest area to insurance. The Council considered this and recommended to our supervising Vice-President that we be permitted to call ourselves the Health Section. This has been approved.

Alan Ferguson, the current Vice-Chairman, will moderate the first portion of the meeting. This portion will include a series of reports relating to the committee activities of the Health Section.

MR. ALAN N. FERGUSON: The first report is from the Chairman of the Committee on Elections, Ed Wojcik.

MR. EDWARD J. WOJCIK: My report concerns the results of elections for new council members. There were 331 ballots returned from about 600 eligible voters for a return rate of about 55%. The election produced three new members, each having a three year term in office which will expire in 1985. These members are Spencer Koppel, Raymond McCaskey, and Frank O'Grady. George Berry will fill the unexpired term of Mr. John Haynes Miller, who has resigned. His term will be for two years and will expire in 1984.

The officers of the Council are elected within the Council itself. The Chairman for 1983 will again be Mr. Paul Barnhart. Stephen Carter will be Vice-Chairman, Alan Ferguson will be Secretary, and Pete Thexton will be Treasurer.

MR. FERGUSON: The next report will be from Charles Habeck, the Chairman of the Communications Committee.

MR. CHARLES HABECK: I have two reports. The first one concerns a survey which was made of all Section members.* I'll summarize the responses to the survey.

The last page of the survey contains a map. The map indicates the location of the 815 members of the Health Section as of June of this year. The map can help us regionalize services to the Section, such as organizing programs or organizing input to our newsletter. The prior page of the survey contains a listing of the states and other geographical areas. There is a summary of a possible regional division.

We processed 345 completed surveys, for a response rate of over 42%. There is a terrific response for availability for committees.

The breakdown by type of employment is interesting. The split of Group to Individual was not tabulated but I would say that there are twice as many Group oriented actuaries as Individual actuaries.

The time spent on Health work is important because more than a third of the people are spending at least 90% of their time on Health work. Yet, among those opting for committee work, some indicated less than 10% of their time was spent on Health.

For availability for committees (Section 4.), 158 people indicated a first choice. Some listed as many as five committees, in order of preference. About 46% of the respondents wished to participate by being on a committee.

Meeting format preferences (Section 5.) were covered in a prior session. I won't expand on that. The contiguous format, meaning that the meeting of the Health Section would occur in conjunction with a regular Society meeting, seemed to have the most support.

Section 6. indicates the number of people (136) who were considered as choices for the Health Section Council.

There were many responses for Choice Of Topics (Section 7.). Fifty topics were suggested for Study Notes. Three hundred topics were suggested for program sessions. Two hundred and fifty items were listed for papers. Committee work would involve about 40 special tasks. A summary list of these topics will be developed and distributed to Health Section members and to other functioning units in the Society.

The responses to the Canadian section of the survey (Section 8.), indicate the topics which are considered to be appropriate for joint or separate treatment with U.S. topics.

Section 9. is the Miscellaneous section of the survey. I want to clarify the function of the Regulatory Committee. Regulatory monitoring involves keeping track of regulations. Six people suggested the formation of a committee that would respond to the needs of Health actuaries working for regulatory agencies.

* Editor's Note: The responses to the survey and the geographical distribution of members are included as an appendix to this record.

HEALTH INSURANCE SECTION

As to my second report, sixty-three people indicated interest in working on the Communications Committee. I have sent an information memo to each person. Our main goal is to produce a newsletter. We'll organize the committee in relation to this goal. We'll establish editor or assistant editor positions for each specialty that can be identified. There will be editors by type of material--Group, Individual, Blue Cross, Blue Shield, HMO's and Regulatory. There will be associate editors by organization -HIAA, ACLI, and other trade associations. There will be links on a regional basis with the 41 actuarial clubs. We will establish links with regulatory bodies.

Communications Committee work will involve three functions. Editing functions require editors to review submissions of topics of interest to Health Section members. We must establish editorial requirements for the newsletter--what will be included, the maximum length of the articles, etc. We will not rewrite anything submitted. The second type of activity will involve newswriting. The third function will be production of the newsletter. I believe it should be printed in and distributed from the Chicago area in the same manner as THE ACTUARY, so we can make use of the Society's staff.

MR. FERGUSON: Bob Dobson, Chairman of the Committee on Education, will speak next.

MR. ROBERT H. DOBSON: We have two Vice-Chairmen. Each coordinates a sub-committee. Basic Education will be chaired by Noel Abkemeier and Continuing Education will be chaired by Phyllis Doran.

The Basic Education Sub-Committee will be a liaison with the existing E&E Committee. No exam work will be involved.

Continuing Education will replace the Committee on Group and Health Insurance. That includes coordinating with the Program Committee and assisting with seminar preparation.

MR. FERGUSON: Tony Houghton will present the report of the Committee on Research and Data.

MR. ANTHONY J. HOUGHTON: Ray McCaskey is the Chairman of the Committee. Ernie Frankovich is the Vice-Chairman.

Eight of the fifteen members who volunteered for this Committee attended a meeting in Chicago on October 15. At that meeting, we divided into two groups. One group, coordinated by Ray McCaskey, will study the standards of Health Insurance data collection and reporting. Based on these standards, they will critique the inter-company reports prepared by the Society and they will recommend additions and revisions to this material.

The second committee, coordinated by Ernie Frankovich will prepare a bibliography of important health insurance statistical data, which will help Health Section members locate information on various benefits.

MR. FERGUSON: Bob Shapland will present the report of the Committee on Ratemaking and Valuation.

MR. ROBERT SHAPLAND: Jack Cummings will be the Vice-Chairman of this committee. Anyone who wishes to be a member of this committee should contact one of us. I'll list some areas we'll work with.

- A). Claim Reserve Questions:
 - Definition of past vs. future for accounting purposes, to determine allocation of funds between claim reserves and policy reserves.
 - Examination of rating principles and their impact on claim reserves.
 - 3). Dealing with claims paid during the grace period.
 - Effects of provisions calling for termination of benefits on lapse.
 - 5). Standards of conservatism in establishing claim reserves.
 - 6). Minimum standards of auditing data, maintaining records, and testing reserves that are established.
- B). Policy Reserves:
 - 1). What expenses should be deferred?
 - Problems of regulators in establishing minimum reserve tables and the impact of lapse, underwriting, and inflation on the minimum reserves.
 - Measurement of the impact of rating principles on reserves (such as NAIC Model Regulations and Regulation 62 in New York).
 - 4). Standards for conservatism and experience analysis to test adequacy of reserves.
 - 5). Rating principles,
 - i. impact of rate increases on closed blocks of business and dealing with deterioration of risks in closed blocks of business after issue.
 - ii. propriety of timing and amount of rate increases,
 - iii. inflation--dealing with inflation in claims and expenses.
- C). Regulation of Premium Rates:
 - 1). Definition of reasonable expenses.
 - 2). Coping with inflation and expenses.
 - 3). Reasonableness of risk and profit.

Loss ratios as tests of reasonable losses and experience monitoring.

MR. FERGUSON: Harry Sutton, Chairman of the Committee on Health Economics, is not here. Paul Barnhart will present the report instead.

MR. BARNHART: Harry Sutton is the Chairman and Morton Miller is the Vice-Chairman. This committee is still incomplete and needs additional members.

The purpose is to explore health care economics as it relates to actuaries, i.e. cost containment programs, alternative forms of finance, alternative delivery systems, evaluating pro-competition bills, effect of government programs like Medicare and Medicaid on health care costs and effects of statutory requirements.

The following is an outline of projects. Several task forces will be needed.

- 1. Effectiveness of cost containment programs.
- 2. Review of anti-selection on multi-benefit options, including HMO's.
- 3. Estimates of employer liabilities for medical benefit costs for retired lives, including the effect of Medicare changes.
- 4. Effects of changes in Medicare and Medicaid on employer health care programs--cost shifting.
- 5. Analysis of health care patterns under alternative delivery systems.
- 6. A look at how the Federal Government makes cost estimates in the Federal reimbursement system.
- 7. National Health Care proposals and regulatory changes in the way health care is provided.

MR. FERGUSON: That concludes the committee reports. Paul Barnhart will now discuss several matters of current interest.

MR. BARNHART: The NAIC Actuarial Advisory Group met last Sunday. The most urgent Health Insurance matter was the proposed revision in the existing NAIC Rate Filing Guidelines. The Guidelines have existed for three years and several areas need update or revision.

There is great concern among regulators about certain areas of ratemaking and valuation including stabilization and risk reserves as distinct from statutory reserves. Although the Actuarial Advisory Group decided to recommend to the NAIC "B" Committee the continued use of the guidelines with several minor changes, the Advisory Group concluded we must attend to problem areas in the guidelines as soon as possible. One of the biggest areas involves rate increases. State Department actuaries report a large volume of complaints about large rate increases.

Next, I want to comment on the Section's election process. We decided to have completely democratic elections to elect Council members. This is not

the philosophy of some of the other Sections. Please send any comments you may have to Ed Wojcik about this. As to election of officers, this is done by secret ballot within the Council.

Also, although we're delighted at having four new Council members, we regret that there are no Canadians. There is a smaller proportion of Canadians in this Section than in the Society (10% as opposed to about 23%) and a smaller number of Health Section Council members than members of the Board of Governors of the Society (9 rather than 29). I want to assure Canadians that we are interested in Canadian participation and interests.

Are there any comments or questions about the matters that have been discussed?

MR. STANLEY OLD: Will the Health Section take responsibility for reporting legislative changes?

MR. EARNHART: We may deal with that through the newsletter. Direct interface with legislative activities is more a function of the American Academy or the Canadian Institute than of the Society.

MR. JOE BUFF: Could you outline the qualifications for working on the committees.

MR. BARNHART: The main qualifications are interest and willingness to commit time. We want grass-roots participation. None of the committees are complete.

MR. DONALD PETERSON: The misfortunes of Multi-Employer Trusts (METS) are now in the public eye. Their downfall is largely due to a lack of actuarial advice. One of the committees should address this.

MR. BARNHART: That topic is being considered by the Committee on Health Insurance by the American Academy. Therefore, the subject is not being ignored although this Section is not considering it at the present time.

MR. SPENCER KOPPEL: Are plans being made for a Health Insurance Section meeting in addition to a single session, for example, a meeting that would last one or two days?

MR. BARNHART: There are no definite plans at the moment but this is being considered. One approach is the contiguous meeting for which Charles Habeck's survey demonstrated support. Another approach is expansion of the spring meeting to three days, with the third day used for section meetings.

The next topic is presentation of papers. We're privileged to present three papers dealing with health matters. I'll ask each author to give a brief abstract of his paper.

I invite Bill Bluhm to present Cumulative Anti-selection Theory, first.

MR. WILLIAM F. BLUHM: My paper attempts to explain why, over the course of time, there is a steady deterioration in experience on Individual Health Insurance policies. It does this by presenting a model of the effects of anti-selection to be analyzed and quantified. The model splits the population into two groups--people who recognize that they are healthy and people who recognize that they are not. By presenting various assumptions, it gives the opportunity to fit the model to the data.

MR. MONTGOMERY: I want to point out that the same problem exists for Renewable Term Life Insurance. Therefore the paper could be useful for Life Insurance as well as Health Insurance.

MR. BLUHM: In Howard Bolnick's discussion of my paper, he noted that the model could also be used in the Small Group area, too.

MR. HOUGHTON: I thought it was an excellent subject, well presented. I have one comment regarding notation. In one table, you defined a "Cash Loss Ratio" using Incurred Claims divided by Premiums Written and Renewed. You also have another ratio in which you bring active life reserves into the calculation. You should use a term other than "Cash Loss Ratio" to avoid misinterpretation.

MR. BLUHM: The reference to Cash Loss Ratio meant Incurred Claims before addition of Active Life Reserves. I could not find good terminology for this.

MR. JOHN B. CUMMINGS: First, I think you've done all of us a service by building a theoretical framework for quantifying anti-selection effects. That makes this an important paper which will improve our understanding of loss ratios and it builds on Joe Pharr's work.

Additional work is still needed. This would include sensitivity analysis or multiple regressions used to study correlations of CAST effects which you identified with some of the variables which are under management's control. These variables include plan design, absolute price level and the price level at which market resistance is encountered, frequency of rate increases, level of rate increases, claim administration practices, billing methods, efforts to resell the policy at the time of renewal, and correlations with agent, agency and direct response characteristics. We now make intuitive judgements about the sensitivity of the effects of all these variables. This often causes us to turn to heavy reliance on rate increases when experience of a book turns adverse. I think we've found that large rate increases don't always make a sour book of business profitable.

MR. HABECK: Is there a method of strengthening in the rate revision process which is acceptable to most states?

MR. BLUHM: The profession would have to accept any method before the regulators will. I think that everyone will have to agree that the effects of anti-selection exists and they must agree about the size of these effects before regulators allow rate increases to reflect anti-selection.

MR. HABECK: This raises questions about the basis for strengthening. If you have an attained age rated major medical plan which has no policy reserves, you have the question of what to base the strengthening on and how to classify it in the annual statement. The state of Washington suggests the use of a premium stabilization fund. They don't specify whether this fund is a mandatory liability. You have some interesting income tax effects if this

is not a required reserve. The real problem in strengthening is that no one can define what is truly required.

MR. BLUHM: I view the effects of anti-selection as being equivalent to changes in claim costs by duration. Even if you had attained age claim costs, you would still have to have policy reserves which account for the changes by duration.

MR. HABECK: Then, would these policy reserves resemble reserves developed using realistic assumptions on a GAAP accounting basis?

MR. BLUHM: Yes. In New York, we encourage the use of realistic reserves in calculating rate increases.

MR. BARNHART: The next paper is by John Cummings. It is entitled <u>Regulatory</u> Monitoring of Individual Health Insurance Policy Experience.

MR. CUMMINGS: The stimulation for my paper results from discussions with the New York Insurance Department in August, 1979. We discussed how new loss ratio standards in Regulation 62 could be monitored and enforced. The paper takes a position on eleven issues identified during the discussion. The aim is to foster a discussion among actuaries which will clarify areas of disagreement around these issues. The paper offers a proposal in the hope that we can design a reasoned and consistent approach to price regulation which would apply to the ratemaking process, simplifying the task for insurance company management and for regulators.

Management needs a predictable environment to meet customer needs while protecting the interests of investors who provide capital. For mutual companies, investors and customers may be the same. The current system appears to be capricious to many. This impedes our ability to meet the social need for our products. I hope that the discussion about monitoring on which we are now embarked will lead to a regulatory environment in which our business can thrive to the benefit of our customer and to the public.

MR. PETER THEXTON: You suggest dividends should be included as benefits in loss ratios, rather than as deductions from premiums. An additional argument, which was persuasive with the New York Department, is that dividends are a substitute for claims. They are paid because you did not pay claims. They are not built in excess premiums as for Life Insurance.

MR. KOPPEL: Do you discuss whether loss ratios are the only proper measure of reasonableness of benefits in relation to premiums? Perhaps expense ratios ought to be monitored as well.

MR. CUMMINGS: The paper alludes to this in several areas. One area discusses coverages where the loss ratio is low, such as Air Travel Insurance. It also mentions that unlike other regulated businesses, Health Insurance is subject to marketplace competition. Therefore, it should not be subject to direct profit regulation. If you have both claim and expense ratio regulation, then you are very close to having true profit regulation.

MR. MORTON HESS: Defining an appropriate standard of reasonableness would be very appropriate for this Section to undertake.

MR. BLUHM: First, to clarify what Pete Thexton said, New York State does not accept conceptually the use of dividends in the numerator of loss ratio calculations. This would allow companies to reduce risk and raise loss ratios at the same time. We have allowed it to be coincident with the rise in minimum loss ratios.

Second, I'll write a discussion and defend the use of loss ratios as an excellent means of measuring results.

Third, I take exception to the use of premium size to measure credibility. I think the use of numbers of claims, perhaps in combination with variance of claim size, is more in keeping with classical statistical theory.

MR. HESS: Do you think that standardization of some policy forms for certain basic coverages is an appropriate substitute for the type of regulation that is now going one?

MR. CUMMINGS: I would personally feel uncomfortable because that limits the availability of coverages and innovation.

MR. BARNHART: We'll now hear from Frank Reynolds. Frank's paper is entitled Medical Care and Services in Canada.

MR. FRANK G. REYNOLDS: Canadians have enjoyed the benefits of government controlled hospital coverage since 1961 and medical coverage since 1970. In view of plans to introduce similar plans into the U.S., it would be well to review Canadian experience.

There are several areas where government controlled coverage has affected medical care in Canada. First, there is the matter of compensation for employees. For unionized workers, these plans have been a bonanza. Their wages have risen quickly in relation to others in the economy. For physicians, on the other hand, wage rates have dropped 40% relative to others, in a decade. Working conditions have deteriorated. For both groups, wage increases are a highly visible political football. Increasingly, physicians are faced with billing outside the plan or moving abroad.

As to services provided, it is not unusual for emergency cases to face long waits or to be turned away. It is almost a monthly occurrence in Ontario for someone who is turned away from a hospital admitting room to die before arriving at another hospital. There are two causes for this. First for certain procedures, compensation to physicians is extremely unrealistic in light of time required. Secondly, as cost control procedures, some provincial governments have actively moved to limit the number of hospital beds available and to refuse to fund the purchase of replacement equipment.

As to the use of facilities, the length of hospital stay is longer for any given treatment than in the U.S.. There is considerable evidence of other abuses of the system.

Finally, what has been the cost? Initially, economists presented their estimates and together with their proponents, literally ridiculed the much higher actuarial cost estimate. I saw estimates that were higher by a factor of three. Within two years, in fact, it was proved that the actuaries had mis-estimated. They were too low. Today, health care is the biggest single item in provincial budgets and is likely to increase in importance, due to an aging population, union pressures, and poor or misguided cost control methods.

MR. THEXTON: It's obvious that we have avoided some serious problems by not taking this road in the U.S..

MR. REYNOLDS: I think you would be well advised not to.

MR. BARNHART: We thank the authors for their presentations. This meeting of the Health Section is now adjourned.

APPENDIX

RESULTS OF 1982 SOA HEALTH SECTION MEMBER SURVEY

- 1. <u>Response rate</u>: 42.3% (345 respondents out of 815 members 595 FSA's and 220 ASA's)
- 2. Type of Employment:

Lype of Employmence		
••••••••••••••••••••••••••••••••••••••	Number	%
Insurance	199	62.6
Blue Cross/Blue Shield	18	5.7
Consultants	78	24.5
Plan Sponsors	0	0.0
Government Unit	10	3.1
Trade Association	2	0.6
University	1	0.3
Other	10	3.1
Total responding	318	99.9%
Left blank	27	

- 3. Distribution by Time Spent on Health Work:

Proportion of Time:	Number	%
100%	74	21.4%
90% - 99%	43	12.5
80% - 89%	22	6.4
70% - 79%	30	8.7
60% - 69%	18	5.2
50% - 59%	29	8.4
40% - 49%	15	4.3
30% - 39%	22	6.4
20% - 29%	31	9.0
Less than 20%	$\frac{61}{345}$	17.7
	345	100.0%

4. Availability for Committees

Availability for Committe		Ch	oice-			
Name of Committee	_1	_2	3	_4	_5_	Total
Education	10	15	14	6	6	51
Research and Data	28	33	12	6	1	80
Health Care Economics	43	26	13	5	6	93
Ratemaking and Valuation	57	37	7	4	2	107
Communications	20	12	15	7	9	63
	158	123	61	28	24	394

Response rate: 45.8% (158 first choices out of 345 persons)

5. Meeting Format Preferences

	Yes	Doubtful	No
INDEPENDENT (incl. seminars)	142	106	80
CONTIGUOUS	256	58	17
INTEGRATED	198	88	42

6. Suggested Candidates for Health Section Council

Preferences were distributed as follows:

Six votes for	4 persons	
Five	2	
Four	10	Total number whose
Three	6	names were listed:
Two	20	
One	94	136

7. Choice of Topics

Results were voluminous, but sort out to the following:

for	STUDY NOTES:	about	50 subjects were suggested
for	PROGRAMS:	about	300 topics (including duplicates)
for	PAPERS:	about	250 items were listed
for	COMMITTEES:	about	40 special tasks were named.

Summary lists will be made and sent to Section members; appropriate SOA committees may be able to follow up on some of these topics.

8. Canadian Preferences

а.	Taking the lead on	<u>AID</u>	SOA
	Canada health topics	21	7
	U.S. health topics	0	27

b. Topics for joint format

Most topics except medical/surgical Cost containment Disability, LTD, dental Experience data, research Pricing theory Valuation techniques Funding methods

c. Topics for separate format

Healthcare (hospital, medical, surgical, etc.) Legislation, government regulation, tax laws, etc. Specific benefits Valuation

d. Benefits for Canadian members of SOA Health Section

Valuable exchange of information Larger data base Research, education pricing techniques Need to know U.S. scene if part of market is there

9. Other Remarks

a. Committees needed

Regulatory monitoring Canadian matters Direct response marketing Marketing in general Program committee Links to Academy Links to other health-oriented groups Stop-loss, reinsurance problems Social awareness, impacts of our work

b. Miscellaneous comments

Proper emphasis to both group & individual Need reading lists, bibliographies (syllabus lacking) Why not have ASA's on Council also? Need study notes to cover practical aspects more, and earlier in syllabus. Clarify committee structure and goals; two committees appear to be too large (referring to Education committee and Ratemaking and Valuation committee).

Distribution of SOA Health Section Members by geographical area.

1	Alabama	AL	12	26	Missouri	MO	21
2	Alaska	AK	0	27	Montana	MT	0
3	Arizona	AZ	3	28	Nebraska	NE	19
4	Arkansas	AR	1	29	Nevada	NV	0
5	California	CA	41	30	New Hampshire	NH	2
6	Colorado	со	8	31	New Jersey	NJ	25
7	Connecticut	CT	47	32	New Mexico	NM	0
8	Delaware	DE	4	33	New York	NY	87
9	Dist Columbia	DC	5	34	North Carolina	NC	11
10	Florida	FL	15	35	North Dakota	ND	1
11	Georgia	GA	10	36	Ohio	он	21
12	Hawaii	HI	1	37	Oklahoma	OK	5
13	Idaho	ID	1	38	Oregon	OR	4
14	Illinois	IL	82	39	Pennsylvania	PA	49
15	Indiana	IN	20	40	Rhode Island	RI	0
16	Iowa	IA	10	41	South Carolina	SC	6
17	Kansas	KS	5	42	South Dakota	SD	0
18	Kentucky	KY	8	43	Tennessee	TN	11
19	Louisiana	LA	5	44	Texas	ΤX	33
20	Maine	ME	6	45	Utah	UT	3

Distribution of SOA Health Section Members by geographical area (cont'd).

21	Maryland	MD	9	46	Vermont	VT	2
22	Massachusetts	MA	38	47	Virginia	VA	8
23	Michigan	MI	15	48	Washington	WA	16
24	Minnesota	MN	28	49	West Virginia	WV	1
25	Mississippi	MS	3	50	Wisconsin	WI	19
				51	Wyoming	WY	0
Tota	l United States:	721		Poss	ible regional div	isions:	
					- • •••• •• -•		
	British Columbia	1			rthwest [WA OR ID		K.
	Saskatchewan	1			uthwest [CA NV UI	-	
	Manitoba	-			st Central [CO ND	SD NE K	S
	Ontario	60			MN IA MO]	NT TH (
	Quebec New Brunswick	4		East Central [WI IL MI IN OH] South Central [NM TX OK AK LA]			
		1			-		-
	Nova Scotia	د			utheast [KY WV MD NC SC TN MS AL GA		A
Tota	1 Canada: 79			No	rtheast [PA NY JY VT NH ME]	-	IA
	Karachi	1			nada [all]		
	Hong Kong	1			• •		
	Manila	1					
	New South Wales	4					
	New Zealand	2					
	Trinidad	1					
	England	1					
	Switzerland	1					
	South Africa	3					
Tota	<u>1 Other Parts</u> : 15						
Gran	<u>d Total</u> : 815						

