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HEALTH CARE COVERAGE IN AN INFLATIONARY CLIMATE

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1. Health Care Costs

   a. How are they changing?

   b. Factors involved.

   c. Outlook for the future.

2. Control of Health Care Costs

   a. What is or should be the role of government, health care providers, third party payors and consumers?

   b. Experience in various countries.

3. Availability of Coverage

   a. What gaps exist?

   b. What coverage can and should be provided?

MR. ALAN N. FERGUSON: An inflationary climate creates many problems for the underwriters of health care coverages. At Prudential we are very aware of this phenomenon as we've not had the best year with our health care products in 1981. I am responsible for Prudential's Individual Life and Health Underwriting and for our Aviation Reinsurance. The first member of our panel is Bob Shapland, who is with the Mutual of Omaha. Bob is responsible for Individual Health products. He's very active in the industry and with the Society on innumerable committees. Next is Denis George. Denis is from Canada. He's a member of the Institute of Actuaries of the United Kingdom and also a member of the Canadian Institute and an associate of the Society. Denis has been very much involved in government programs. He's a Director of William Murcer Consulting Actuaries and has an incredible list of involvements in various provincial plans, state plans and the United States Unemployment Compensation. Our third participant, Gordon Trapnell, is from Virginia. Gordon is the President of Actuarial Research Corporation but during his career he's spent eight years in government, principally involved in Medicare. So you can see we have a panel who've been very much involved in health plans both here and in Canada and have knowledge of plans elsewhere.

The references that I've heard so far at this meeting to inflation have not addressed the problem of health care. A series of articles have appeared this week in the New York Times. They categorize much of the present reimbursement system for health care, the private system, as providing a blank check and not really contributing in any material way to cost

control. At the risk of repeating perhaps some of what the speakers may say, I quote a few examples to put this whole problem of health care cost and inflationary climate in context. The average hospital stay is now about $2100 and in ten years that's increased three times. The percentage of the Gross National Product (GNP) in the United States which is spent on health care is now close to 10%, which is twice what it was 25 years ago. The New York Times stated that last year the cost of employee and dependent coverage was $2100 per employee for General Motors, which is up $1000 in the last six years. I already mentioned the losses of the Prudential but didn't mention the figures. As indicated in the New York Times, the Prudential lost two hundred and ninety million dollars in group health insurance last year. So, what we are going to talk about first is the health care costs, how they're changing, the factors involved, etc. I'm going to call first on Gordon Trapnell to make his comments.

MR. GORDON R. TRAPNELL: In order to understand why health care costs are rising rapidly, and why the pace of inflation appears to have increased substantially in 1981-82, it is useful to analyze the underlying component factors in terms of their contribution to the overall increase in costs. I will do this for the two services that account for approximately three quarters of the premium rate for a typical health insurance plan: hospital and physician services.

In each case the cost increases must be measured relative to the level of general inflation in the economy. General inflation of the magnitude that we have experienced since 1965 has required that all analysis of financial aggregates be translated into constant value or "real" dollars to provide an unbiased standard for comparison. Further, fluctuations in the level of inflation have compounded the difficulties of determining its actual impact, and of devising unbiased measures.

The first major problem that must be solved in order to analyze the components of inflation in health care costs is to obtain an accurate measure of inflation. A number of indices are available for this purpose but each has some major limitation as a base for analyzing real increases in the cost of health services. Several such indices are as follows:

MEASURES OF INFLATION

	Annual Increases - Last		
	10 YEARS	5 YEARS	YEAR
GNP Deflator	7.3	7.9	9.1
CPI	8.4	9.8	10.4
CPI - Rents/Own	-	6.9	7.2
Average Wages	7.7	8.3	8.6
Hospital Inputs	9.2	10.1	12.1
SPECIALIZED MEASURES FOR HEALTH SERVICES			
CPI - Room & Board	11.4	12.4	14.9
- Physician Fees	8.7	9.7	11.0
- Dentists Fees	7.6	8.9	9.6
- Prescription Drugs	5.5	8.4	11.4

For our purposes, the primary criterion for a measure of inflation is that when it is used to reduce expenditures for health services to constant value dollars, the latter track well with changes in the other components of health care costs. Determining the best index is largely a matter of trial and error, although the composition of the index may supply a better or poorer logical foundation for its use. It may also be necessary to approximate the lags with which the level of general inflation affects the prices of the factor inputs used by hospitals and physicians.

The broadest measure available for an estimate of general inflation in the economy is the GNP deflator. It encompasses all goods and services produced and consumed in the economy, including those provided by government. It would thus appear to provide the best measure of general inflationary pressures. Unfortunately, the index is not based on data that directly measures general inflation but is calculated indirectly from other estimates. Nevertheless, it appears to provide a suitable basis for analysis of inflation in the components of health care costs.

The most frequently encountered index is the Consumer Price Index (CPI) for all goods and services measured. In theory, this index compares the actual average purchase price of a fixed set of goods and services needed by individual consumers.

It has several major flaws, however, as a measure of general inflation for our purposes. The market basket reflects average consumer purchases, not factor inputs needed by hospitals and physicians. It includes the price of buying a house, weighted by the average proportion of consumer income used to buy houses. This is in turn separated into components representing the down payment and interest components of the cost of purchasing a house. These components seriously bias the index. A rise in housing prices makes those who own existing homes richer, but does not represent a cost to them to maintain their standard of living. Further, a rise in interest rates is usually accompanied by a drop in house prices - i.e., deflation rather than inflation.

The problems of housing costs can be alleviated by substituting an index of rents for the house purchase component. As can be seen from the figures above, this produces a much lower index that tracks well with the GNP deflator.

Average wages per hour provide another measure of inflation, since wages are the primary factor cost involved in the production of nearly all goods and services in the economy. This is especially true for health services, which have a very high labor content.

The Hospital Input Price Index provides a direct measure of the cost of factor inputs actually purchased by hospitals, including labor costs. It thus provides a measure that combines the affect of inflation on both the goods and services purchased by hospitals and the wages and salaries of employees.

The specialized indices for health services measure charge or fee increases and reflect the reaction of providers to the price increase they face. They directly measure a major part of the increase in the cost of insuring the services but they explain only part of the increase.

Price inflation is only one factor affecting medical care costs. Utilization may also be an important component. In the case of premiums for hospital benefits, it is well to remember that a major component in the increase in the average cost per day is not included in the hospital index. This is the increase attributable to an increased number of services performed per day and changes in the mix of services toward the more expensive.

The factors underlying increases in the cost to insure hospital services can be analyzed as follows:

	Annual Increases - Last		
	10 YEARS	5 YEARS	YEAR
Hospital Costs per Capita	14.3	14.3	17.4
Inflation:			
- General	7.3	7.9	9.1
- Affecting hospitals	8.8	9.8	11.1
Labor (general)	7.7	8.3	8.6
Non-Labor	9.2	10.1	13.5
Components:			
- General Inflation	7.3	7.9	9.1
- Relative Cost of Hospital Inputs	1.4	1.8	1.8
- Beds/Capita	0.7	nil	0.6
- Added Employees/Bed	2.8	3.3	3.4
- Added Non-Labor/Bed	1.0	2.9	2.0
- Hosp Wages/all wages	2.5	1.9	4.4

The inflationary forces affecting hospitals have had an average impact that is 1 1/2% to 2% higher than general inflation (as measured by the GNP deflator). This has primarily been the result of a more rapid rate of increase in the price of services and supplies used by hospitals. A primary component of this increase is energy costs, for both fuel and electricity. The weighted average of these two components averaged 8.8% over the decade 1971 - 1981, compared to 7.3% for the GNP deflator. Inflationary pressures measured in this way are below those actually experienced by hospitals, which averaged 9.2% over this decade (as measured by the Hospital Input Price Index). The hospital input index is based on wage increases actually given by hospitals, which were somewhat higher than those in the economy generally.

The primary components of increases in expenditures for hospital services as they affect premium rates can be analyzed as indicated above. These are:

- General inflation, as measured by the GNP deflator,

- The more rapid rate of inflation in the cost of factor inputs purchased by hospitals,

- The increase in hospital plant per capita (as measured by the number of beds per capita),

- The number of employees per bed, which reflects the increase in intensity of services - i.e., increases resulting from changes in the mix or number of services performed per day of care,

- Additional inputs other than employees, and

- The more rapid increase in hospital wages per employee than in the average wage rate in the economy.

(Increases for employees and wages must be weighted by the proportion of hospital expenditures that are for labor costs, those for other inputs by the complement of the proportion.)

The components of the cost of insuring physician services can be analyzed as follows:

	Annual Increases - Last		
	10 YEARS	5 YEARS	YEAR
Total Services/capita	12.3	13.5	15.6
General inflation	7.3	7.9	9.1
Real Services/capita	4.7	5.1	5.9
Fee's relative to inflation	1.3	1.7	1.7
Other causes	5.9	6.2	7.3

These components represent:

- General inflation, as measured by the GNP deflator,

- The real rate of physician services per capita,

- The more rapid rate of increase in physician's fees, as measured by the CPI index, than general inflation, and

- A residual for all other causes.

The residual reflects primarily a shift in the mix of providers and the mix of services. Younger physicians entering practice tend to change the price mix of services and include a higher proportion of specialists. A major part of the increase is also explained by an increase in the number of office employees per physician, which averaged 4.5% per year over the last decade.

MR. FERGUSON: Gordon, what's the source of most of that data that you have here?

MR. TRAPNELL: Most of it came from a quarterly publication by the Health Care Financing Administration, HEALTH CARE FINANCING TRENDS. It can be obtained by writing ORDS PUBLICATIONS, 109 Oak Meadows Building, 6340 Security Boulevard, Baltimore, Maryland 21207.

MR. FERGUSON: I'd like now to ask Denis George if he'd talk about the way health care costs are changing with specific reference to Canada.

MR. DENIS R. J. GEORGE: I've been sitting here with a high degree of fascination listening to speculations as to what has been happening in respect to changes in hospital care and costs of medical care. In Canada, we have had a state medical program now, at least on the hospital side, since the late 1950's, and on the medical care side since the 1970's. We have had an opportunity of observing what the affect of having a control of cost and other matters through the state has had on the patterns of care and on the costs of care. Therefore, what I would like to do is to start with the physician's care, which I find to be the most fascinating of them all, and then if we have time I will go on to make some comments as to what is happening on the hospital side. The hospital side is, of course, the more important because about 50% of the overall cost of health care is through the hospitals.

Changes in health care costs are due to two factors:

(i) number of services, and
(ii) cost of services

A change in the number of services is a mixture of a change in demand for such services, and a change in supply.

A change in the cost of a service, apart from inflation, will depend on whether it is being priced in a free enterprise environment - when the demand versus supply situation will influence the change - or whether there is an outside control such as government intervention.

I will address this question using the Canadian health care system as my point of reference.

In making any comparisons between Canada and the United States on the question of health care costs, one must bear in mind that in Canada there is greater government intervention than in the United States, both as regards to the supply of services and the cost.

Perhaps it is well to clarify, however, a point about which there may be some misunderstanding. Canada's health care system is administered by provincial government agencies. The government does not own the hospitals; the doctors and other health practitioners are not government employees. The provincial government does, however, have a high degree of control over the purse strings and, as such, can influence the pattern of health care.

Overall, the cost of health care in Canada between 1970 and 1979 did not increase as a percentage of GNP. It remained between 7.1% and 7.2% of GNP throughout the period. A preliminary estimate of the figure in 1980 is that it will have increased to 7.5% of GNP. For the United States, the figure for 1980 is estimated to be 9.4%, and, from 1970 to 1980 the annual rate of increase in the United States for health care as a percentage of GNP was 2.3%. This is a slowing down in the rate of increase from the decade 1965 - 1975 when it was increasing at the annual rate of 3.7%. I do not have such recent figures for other countries, but during the decade 1966 - 1976 the average rates of increase in health costs as a % of GNP for some European countries were:

United Kingdom	3.0%
West Germany	6.3%
Sweden	3.8%
France	3.0%

Of these countries, West Germany had the highest overall costs at about 10% of GNP, and the United Kingdom was well below all other countries at 5.8%.

MR. FERGUSON: If the New York Times figures are to be believed, I think the figure for the United Kingdom last year was still about 5%. The highest figure, however, was for Israel where I assume you have a controlled environment. There it was 12% of GNP.

MR. GEORGE: In all of these it's an interesting question of what is included with the cost of health care. I don't know that there are completely comparable figures even between Canada and the United States. But that figure for Israel is very interesting. I'm not sure why it is that high or how it has increased recently.

Some of the other countries we are discussing also have state health plans, but all have a rate of growth higher than Canada.

Why is this?

The answer to this question is not simple, and it will vary according to whom you ask.

The hospital administrators, doctors and other health providers will tell you that it is due to the curtailment of the funds made available by the government and that, consequently, there has been a slowing down of the implementation of new procedures and techniques, and that other quality procedures in the health care system have not been introduced.

The government will say the reasons for the stable cost are efficient management of the hospitals and other facilities, and that the productivity of the doctors and other health service personnel has greatly improved.

There is some truth in both replies.

The approach of our panel is to deal first with health care costs generally and then to discuss the control of such costs. In Canada, it is almost impossible to deal with the two matters separately. They are very much intertwined, and this is perhaps best illustrated by taking a look at what has happened to the cost of physicians' services in Quebec. It will also give some insight into factors involved and how they are changing.

The statistics which I am going to quote refer to all medical services irrespective of where rendered - i.e., home, office or hospital. Every resident of Quebec has complete access to all these services without any deterrent or coinsurance costs. He may go to the doctor of his choice. The doctors are reimbursed by the government on a fee for service basis according to a fee schedule negotiated with the physicians' unions. I use this word deliberately, because in Quebec there are three medical federations representing specialists, general practitioners and hospital

residents and interns. These federations were created to negotiate with the government - they are quite distinct from the doctors' professional associations and the licensing body, the College of Physicians and Surgeons. Table A shows the trend in the cost of these medical services on a per capita basis for the period from 1971 to 1978.

To put these per capita costs into perspective they represent about 1/6 of the total costs of health care services.

In 1971 dollars there has been a modest increase over the seven years.

Table B, however, shows that average annual fees in 1971 dollars per physician have decreased over the period by 18.4%. One of the major causes of this has been the increase in the number of practicing doctors. Contrary to the speculation before the plan was introduced that many doctors would leave the province and the country to avoid participating in a government medical care insurance plan, the number of doctors has increased by 42.5% with the number of general practitioners increasing by 59.1% as shown in Table C.

During this same period the population of Quebec increased by only 3.8%, so that the doctor population ratio reduced from 1 doctor for each 873 of the population to 1 for each 636 of the population. The corresponding figure in the United States for 1978 was 1 doctor for each 535 of the population. This figure must, however, be interpreted carefully, as in Canada about 50% of our doctors are general practitioners, whereas in the United States this ratio is about 20%.

As I mentioned earlier, doctors' incomes in terms of 1971 dollars decreased by 18.4% between 1971 and 1978. Their actual dollar incomes increased by 43% whereas the CPI during this period increased by 75%. The significant factor is, however, that during the same period the fee schedules were only increased by approximately 22%, even though the dollar average incomes of the medical profession increased by 43%.

How did this come about?

Quite simply the pattern of practice changed as shown in Table D. The number of services rendered to patients increased and more of the higher cost procedures were performed.

There were no fee increases granted to the profession in Quebec between the introduction of the Plan in 1970 and November 1, 1976, for General Practitioners and January 1, 1977, for Specialists.

Table E shows the change in mix of consultations during this period 1971 - 1976, that is, during the period when there were no fee increases.

At the end of 1976, when fee increases were made, two of the changes made were that the fee for an ordinary examination in the doctors' office was increased by 40% from $5 to $7, and the fee for an urgent examination in the patient's home was doubled from $10 to $20. There was no change in the fee for a complex major consultation. The effect on the number of consultations was, as shown in Table F, quite dramatic.

TABLE A - COST PER CAPITA OF MEDICAL SERVICES

YEAR	COST PER CAPITA	PERCENTAGE INCREASE IN COST PER CAPITA FROM PREVIOUS YEAR	PERCENTAGE INCREASE IN COST PER CAPITA FROM PREVIOUS YEAR IN 1971 DOLLARS
1971	$44.64	---	---
1972	49.04	9.9%	4.8%
1973	54.97	12.1%	4.3%
1974	59.54	8.3%	-2.4%
1975	66.43	11.6%	0.7%
1976	71.18	7.2%	-0.4%
1977	81.32	14.2%	5.8%
1978	87.55	7.7%	-1.2%
1971-1978		96.1%	11.9%

TABLE B - AVERAGE FEES PER PHYSICIAN
1971 DOLLARS

	ALL PHYSICIANS		GENERAL PRACTITIONERS		SPECIALISTS	
YEAR	Average Fees	% Increase	Average Fees	% Increase	Average Fees	% Increase
1971	$38,945	---	$33,106	---	$43,235	---
1972	36,700	-5.8%	30,549	-7.7%	41,519	-4.0%
1973	36,158	-1.5%	30,142	-1.3%	41,041	-1.2%
1974	34,046	-5.8%	29,103	-3.4%	38,078	-7.2%
1975	32,890	-3.4%	27,481	-5.6%	37,327	-2.0%
1976	31,496	-4.2%	27,220	-1.0%	35,110	-5.9%
1977	32,676	3.7%	26,998	0.8%	37,812	7.7%
1978	31,761	-2.8%	26,751	-0.9%	36,460	-3.6%
1971-1978		-18.4%		-19.6%		-15.7%

TABLE C - NUMBER OF PHYSICIANS

	ALL PHYSICIANS		GENERAL PRACTITIONERS		SPECIALISTS	
YEAR	Number	% Increase	Number	% Increase	Number	% Increase
1971	6,911	---	2,927	---	3,984	---
1972	7,723	11.7%	3,392	15.9%	4,331	8.7%
1973	8,216	6.4%	3,681	8.5%	4,535	4.7%
1974	8,567	4.3%	3,848	4.5%	4,719	4.1%
1975	8.979	4.8%	4,046	5.1%	4,933	4.5%
1976	9,397	4.7%	4,304	6.4%	5,093	3.2%
1977	9.635	2.5%	4,465	3.7%	5,170	1.5%
1978	9,850	2.2%	4,656	4.3%	5,194	0.5%
1971-1978		42.5%		59.1%		30.4%

TABLE D - NUMBER OF SERVICES BY CATEGORIES OF SERVICES
(in 000's)

YEAR	CONSULTATIONS	EXAMINATIONS	THERAPEUTIC AND DIAGNOSTIC SERVICES	SURGERY	OTHER SERVICES	ALL
1971	898	20,546	7,472	1,321	1,469	31,706
1972	969	21,373	9,558	1,434	1,041	34,376
1973	1,119	22,915	11,595	1,554	1,004	38,188
1974	1,288	23,862	13,074	1,597	1,019	40,840
1975	1,485	24,997	15,943	1,731	1,174	45,331
1976	1,445	25,955	16,279	1,977	1,610	47,265
1977	1,574	26,429	10,890	1,820	1,066	41,779
1978	1,643	27,458	12,059	1,750	960	43,870
Increase 1971 - 78	83.0%	33.6%	61.4%	32.5%	(35.6%)	38.4%

TABLE E - NUMBER OF CONSULTATIONS
BY TYPE OF CONSULTATIONS
(in 000's)

YEAR	ALL CONSULTATIONS	MINOR CONSULTATIONS	ORDINARY CONSULTATIONS	MAJOR CONSULTATIONS
1971	898	158	581	159
1972	969	188	591	191
1973	1,119	215	664	241
1974	1,288	211	786	291
1975	1,485	204	915	366
1976	1,445	170	899	376
Increase				
1971 - 76	60.9%	7.6%	54.7%	136.5%

TABLE F - NUMBER OF EXAMINATIONS BY TYPE OF EXAMINATIONS
(in 000's)

OFFICE

YEAR	HOME	ORDINARY	COMPLETE	COMPLETE MAJOR	ALL	INSTITUTIONS	ALL EXAMINATIONS
1971	1,145	8,440	2,531	222	11,193	8,208	20,546
1972	888	8,461	3,157	335	11,952	8,533	21,373
1973	808	8,612	3,855	423	12,890	9,217	22,915
1974	743	8,609	4,686	517	13,812	9,307	23,862
1975	709	8,379	5,707	650	14,736	9,552	24,997
1976	646	8,452	6,964	769	16,184	9,125	25,955
1977	719	8,622	6,546	619	15,787	9,923	26,429
1978	795	8,839	7,046	635	16,521	10,142	27,458
% Increase 1971-1976	-43.6%	0.1%	175.1%	246.4%	44.6%	11.2%	26.3%
1976-1978	23.1%	4.6%	1.2%	-17.4%	2.1%	11.1%	5.8%

I have given just one illustration of some of the changing factors in health care costs. There are many more, and it is a fascinating study. I do not have time today to explore what part of the change in the pattern of practice is due to a change in patients' demands, and what part is induced by the physicians.

The first visit to a doctor is completely under the control of the patient. Subsequent visits are influenced by the doctor. Bearing this is mind, increases in service can be due to better care from which increased fees result, but some critics will contend that the financial consideration is the dominant factor in the increased services.

There is one thing that is quite certain in Canada. The doctors are more productive than they were. They can see many more patients per day without sacrificing quality of care. This is due to their access to good diagnostic services and other ancillary care which are available to the patient without direct cost.

The interaction of financial control by government over fee schedules, and the doctors' ability to choose the services they will render, will give rise to ever changing patterns of health services. In Canada, the future outlook is more tied in with control of costs, which I will deal with later.

Will Canada be able to keep its health care costs at the level of about 7.1% of GNP? I don't think so.

As we all know health care costs increase with age. Our Canadian population is growing older. Not only will our population of over 65's have increased to 12.02% by the turn of the century, but our baby-boom births are about to become 40-year olds. Hospital care costs are relatively minimal for those under 40. They escalate rapidly over that age and, although many persons now live for many years where they would previously have died, this often means more hospitalization and certainly increased medical care. From this source alone, I would expect Canada's health care costs to have increased to over 8.0% of GNP before the end of the decade.

I spent rather a lot of time during my previous remarks about doctors, so I propose to have a little more to say this time about hospitals which account for nearly 50% of the health care costs in Canada. Before I do that, I must, however, say one last thing about the medical profession in the light of cost control.

In quite a number of provinces there is considerable conflict between the government and the profession regarding fees. Presently this has given rise in three provinces, Quebec, Ontario and Alberta, to sporadic and temporary withdrawals of services by physicians for other than emergency care. In Quebec, this is nearly the only weapon the profession has to negotiate an increase in the fee schedules which were last increased in November, 1979, for general practitioners and September, 1980, for specialists. Doctors in Quebec have either to practice entirely within the medicare system or entirely without. If they are outside the system, they receive no reimbursement from the government for any services rendered to their patients even though they are taxpayers and have contributed to the government plan.

In Alberta and Ontario, those doctors who are outside their respective plans cannot claim fees directly from the government, but their patients can. These doctors are not bound to accept the Government fee and can bill the patient for additional fees. The more the government tries to control costs by minimizing fee increases, the more doctors opt out of the medicare plan and bill their patients additional amounts. Extra billing is not permitted in Quebec.

In Ontario, there is a difference of over 30% between what the Ontario Medical Association considers as a proper level of fees and what the government is prepared to pay.

If extra billing continues and increases, there is speculation that there may be increasing demands for private insurance to cover the extra fees. This is presently prohibited by law.

Other observers forecast that we may see a development similar to what has happened in the United Kingdom. In that country general practitioners are renumerated on a per capita basis - that is, so many pounds for each patient on their list. This payment is made irrespective of whether or not the patient requires care. Specialists are paid on a fee for service basis.

The quality of medical care, especially in the hospitals, has deteriorated to the extent that a competing private health care system has grown up alongside the public one. Contributors to organizations such as BUPA have access to private hospitals owned by the Association and staffed by their own specialists. The higher fees paid to such doctors have encouraged the better ones to leave the public service, thus adding to the problems of the National Health Service. This is an instance where control of costs led to a reduction in quality of care.

Control of costs, as I mentioned awhile ago, can be achieved by control of supply, more efficient management and keeping fee increases and wages for professionals at minimum level. In Canada the three methods are practiced.

Hospitals are effectively controlled by the provincial governments by strict budgetary control. As any resident of Canada can be admitted to a hospital on the recommendation of his doctor for any form of care without payment of any direct costs (except in a few instances in the Western provinces where small per diem payments have to be made), almost all hospitals receive the great majority of their income from the government for the services they have rendered.

Each hospital has to submit a budget each year to the provincial government, which is very rarely approved without amendment. Sometimes drastic amendments are required. You must remember that there are only a handful of proprietary acute general hospitals - almost all are community owned except for some federal hospitals for veterans and service personnel.

Over the years prospective budgeting has been introduced, and standardized accounting procedures have been adopted. There are annual returns for all hospitals, and these are audited in accordance with a standardized format.

All admission, care and discharge data are fully maintained. These data are compared on a regional basis to ascertain whether a hospital is deviating from the norm. Admission rates, length of stay, occupancy rates, etc. are all compared.

If there is a deviation from the norm, the reasons why are quickly determined by a comparison with the regional norms. This has led to the rationalization of the facilities in the region. For example, in Montreal at this time, the maternity wards in a number of hospitals are being closed. The Montreal General Hospital, which is English speaking, is closing its maternity ward but keeping its abortion unit open, as there are few such units in the French speaking hospitals.

Beds are closed in those hospitals where the occupancy rates are not up to the norm. It must be remembered that Canadian hospitals are not so competitive with one another as in the United States - they combine to fight the common enemy, the government.

Consequently, there is a higher efficiency and utilization rate than in some United States hospitals. However, I understand that Blue Cross is taking some steps in some areas by saying that it will not continue to make its service contract available to certain hospitals unless they rationalize their facilities within the area.

The strict budgetary control has, however, led to a shortage of facilities in some areas. This, in turn, has led to long waits by patients for admission to hospitals unless it is an emergency. Waits of six months or more can occur for non-urgent elective surgery.

In an attempt to help hospitals generate more income, the Ontario Government has introduced a new approach which starts next April. Up till now the additional costs for semi-private and private rooms were fixed by the government, and the hospitals kept only one half for themselves. Each hospital will now set its own price for these rooms and can keep the whole amount. Government hospital insurance covers standard ward care, unless the illness is sufficiently severe in the opinion of the doctor to warrant semi-private or private care. Furthermore, there is a limited number of standard ward beds available. Some fears are being expressed that the price hike will be so large as to be out of the reach of most patients unless they are covered under an employer insurance plan. This type of insurance is still permitted, so we can look forward to an increase in premium rates. Unfortunately, the November, 1981, Canadian Budget now considers all employer contributions to health care insurance as taxable income in the hands of the employee.

A further attempt to control hospital costs is the reason for the province of Manitoba introducing extensive home care services, and Ontario is working on the introduction of a similar approach.

All major hospitals in Canada are university affiliated and all have good quality control. More systems are being introduced whereby patients are moved from one level of care to another as they progress.

In the last five years guidelines have been developed to measure efficiency and educational systems have been developed to get those hospitals which are not in line with the norm back on track. A hospital cannot expand its facilities without a certificate from the regional authority and there is less and less redundancy in facilities.

When one considers that 80% of provincial hospital costs are incurred by about 200 hospitals, one can see how relatively easy it is to have good budgetary control.

Strictly comparable statistics between the United States and Canada are not available because of differing methods for including and excluding federal and long term psychiatric and tuberculosis hospitals. However, generally speaking, admissions to hospitals in the United States have increased between 1975 and 1980 from about 157 per thousand population to about 160 per thousand. During the same period hospital admissions in Canada have reduced from about 166 per thousand to about 154 per thousand. The occupancy ratio in United States hospitals during 1975 to 1980 remained nearly constant at about 75%, whereas in Canada the ratio increased from 78% to nearly 82%.

I think it is generally agreed that the quality of care in Canadian hospitals is excellent - once you have been admitted!

Turning again to medical care, we are beginning to see control being exercised on the number of doctors practicing. Fewer students are being admitted to medical schools and it is more difficult for foreign doctors to immigrate. Physicians are no longer given privileged status to enter Canada and foreign medical degrees are no longer acceptable without further examinations. Some provinces are considering insisting that newly graduated doctors should be obliged to practice for a few years in the outlying areas - especially in the North. If these students have received government grants a degree of control can be exercised over them; however, it is also proposed that they be given higher incomes.

Finally, can a public programme become insolvent? Obviously, if it is the will of the electorate that the programme should continue, the elected governments will be able to find the money. Quality of care may be affected from time to time, and some luxury services may be excluded - but the programme will not go broke.

We will certainly see a tighter control exercised over the available supply of services, as well as the price that is paid to health care providers for their services. A major problem area, as in the United States, is the provision of care for the chronically ill and the aged. The breakdown of the family unit and the increased institutionalizing of old people is going to present many difficulties over the coming years, and further government intervention in this area in Canada would seem inevitable.

Despite the many criticisms made of the Canadian system - especially now that cutbacks are being attempted - the majority of Canadians think highly of it, and would certainly not countenance its disbanding.

The only gaps in coverage in the public plans are drugs outside the hospital, dental care other than as a result of an accident, and such other types of services as special duty nurses when not ordered by a doctor, prosthetic appliances and all those other items normally covered by extended coverage contracts.

Medical care is provided whether or not confined to the hospital, and care outside Canada - at Canadian price levels - is also covered in the case of emergency, or if appropriate care is not available in Canada.

Although I said dental care was not covered, it is in fact covered for children in the majority of provinces, as well as for the elderly in British Columbia and Alberta. The Quebec government is presently considering its removal because of lack of funds.

Other than the extra bills rendered by some doctors in some provinces all costs are paid by the government agency. In some provinces, the fees of chiropractors, podiatrists, naturopaths and other similar practitioners are paid for by the government plan.

MR. FERGUSON: Denis has said that health care as a percentage of GNP in Canada did not change very much from the beginning of the 70's until now. They have been at the level that we were at in the United States about ten years ago and we have gone up by about 2 1/2 points since then. Whether that is due to the population or the type of medical care or whatever, I leave you to judge. We are now going to address the question of controlling health care cost and I'm going to ask Bob Shapland to discuss with you the ways in which health care costs are or may be controlled.

MR. ROBERT SHAPLAND: Since Gordon has given you some statistics on changing health care costs in the United States, I thought I might provide you with a little information about how health care itself is changing. Such changes obviously have an impact on health care costs. These changes involve types of treatment, treatment settings and the volume of treatment.

For example, changes are taking place in the relative number of operations taking place in hospitals for certain conditions. Between 1972 and 1979, tonsillectomies dropped 50% and hemorrhoidectomies dropped 40% while Caesarean sections increased over 100%. Of course, dramatic increases are taking place in the relatively new procedures such as open heart surgery, transplants and joint replacements.

In the aggregate, the number of hospital days per person has increased in the last ten years. While the average stay has decreased, this has been more than offset by an increase in frequency.

The percentage of citizens who see a physician in a given year has also increased in recent years. This is especially true for those with low incomes so that there is now little difference in this regard by income level. In fact, the poor now experience more physician visits per year than the non-poor.

Membership in Health Maintenance Organizations has also been increasing but it still involves a minor segment of the population. For example, less than 10% of Federal Employees are enrolled and less than 3% of those over age 65 are enrolled.

Finally, the relative supply of physicians has been increasing. The number of active physicians per 10,000 population has increased from 15.5 in 1970 to 19.7 in 1980. This increase has taken place by a growth in the number of specialists since there has been a decrease in the number of general practitioners.

The outlook for the future regarding health care costs is complicated to the degree that if inflation in general continues, health care costs will be affected. This is because ultimately almost every aspect of health care costs is related to wages and these are impacted by inflation. Not only are the wages of the providers involved but the wages of those producing the facilities, supplies, medicines, etc., that they use. In addition, great strides are being made in developing new techniques for diagnosing and treating health problems and many of these are quite expensive. The development of life support systems, CAT scanners, complicated surgical procedures and similar items will continue to add to health care costs. Hopefully, some of these will produce more effective care and possibly lower costs. I also look for an increasing demand by the public for top quality expensive medical care. On the other hand, I look for the many pressures that are being placed on health care costs to have a positive effect on keeping increases in health care costs down. The interest and resulting energy expended in this direction by governmental agencies, health care providers, insurers and consumers is growing rapidly. I also foresee a favorable effect from an increasing emphasis on wellness and eventually a favorable effect from the eradication of many diseases. On balance, I predict that there will be some continuation in the increase in GNP allocated to health care but that this increase will taper off as capacity meets or exceeds demand, the nation's health improves and research goals are realized.

Governments, providers, insurers, employers, consumers and researchers all have an important role in the control of health care costs. Health care costs must be attacked from all fronts if we are to realize the maximum result. Because of the extent and immediate outlook of this problem, it seems that an increasing amount of energy is being expended to develop health care cost controls. In my discussion today, my main purpose is to bring together a list of cost controls being utilized or suggested. This list should provide a good starting base for any of those in the audience interested in this subject.

A. Control of the Costs Incurred by Providers by:

1. Improved efficiency by application of modern management techniques.

2. Governmental restrictions on prices and/or salaries.

3. Restrictions on expansion of unneeded facilities and equipment by health planning agencies.

4. Modernization of outdated equipment and utilization of improved technology.

5. Minimizing the expenses for supplies by using the most inexpensive tests and generic drugs.

6. Group purchasing of equipment and supplies.

7. Reduction in regulatory costs.

8. Expansion of the use of paramedics and the expansion of the allowable duties of medical assistants.

9. Limitations on malpractice liability and therefore on malpractice insurance premiums.

B. Control of Prices Charged by Providers by:

1. Minimizing provider costs.

2. Reduction in provider charges via:

   a. Increased price competition through advertising or changing the supply/demand relationship.

   b. Governmental price controls.

   c. Negotiated lower prices by insurers and other payors. It is interesting to note the legal attempts to prohibit this arrangement regarding prescription drug charges.

C. Minimizing Utilization and/or Providing Care in the Lowest Cost Setting via:

1. PSRO organizations.

2. The design of insurance programs with utilization disincentives and coverage of lower-cost types of care.

3. Expansion of less expensive provider settings including ambulatory surgical centers, hospital outpatient facilities, freestanding emergency clinics, birthing centers and home health care. Special diligence must be exercised in the area of hospital outpatient care in order to avoid replacing doctor office care with more expensive care.

4. Legal limitations on malpractice liability which would reduce defensive medicine.

5. Utilization of additional medical opinions before undergoing expensive treatment.

6. Preauthorization of health care by insurers.

7. Education of providers and the public regarding unnecessary utilization.

8. Financial incentives to providers to minimize utilization such as via the utilization of capitation payments, payment based on diagnosis group and the development of HMOs.

9. The mandating of or financial incentives to utilize ambulatory surgical treatment.

D. Wellness.

Keeping people well is an obvious way to reduce health care costs. Some of the methods of accomplishing wellness are as follows:

1. Public education regarding diet, exercise, habits, etc.

2. Public health programs such as:

   a. Environmental controls.

   b. Immunization programs.

   c. Diet programs such as food stamps and school lunches.

   d. Food and drug standards.

   e. Accident prevention programs, including more severe drunk driving penalties.

   f. Blood pressure and other screening programs.

   g. Drug and alcohol treatment programs.

3. Price incentives or disincentives such as premium incentives for non-smoking, moderate drinking, maintaining normal weight, etc., and taxes on cigarettes and liquor.

It might be noted that there is a question as to whether or not some wellness programs will decrease the cost of health care. Obviously, there is an immediate decrease in health care cost if the health of our citizens improves but there is a question as to whether or not some programs will keep people alive longer and therefore more will survive to the high-cost ages. Old age may be especially costly if there is an expansion in the effort to extend the life of the severely ill.

A more remote area that may be related to wellness, both physically and mentally, would be the general expansion of the concept that each citizen is responsible for his own acts instead of their being the fault of heredity and environment.

E. Limitations on Prolonging Life.

Technology has allowed physicians to keep people alive via transplants and machinery that take over bodily functions. If this trend continues, it is conceivable that keeping people alive could ultimately utilize a major part of our gross national product. Therefore, sometime down the road, society may have to cope with this problem and put limits on the expenses that can be incurred to keep people alive, especially if the cost is borne by others. These limits should take into account the relationship of the expenses to the length and quality of

the prolongation, as well as other national priorities. It might be noted that insurance programs, private and public, are currently spreading this cost to a broad spectrum of citizens. This hides the cost and thus defers the decision-making process in this area.

F. Cost Control Coalitions.

There is a recent growth in the development of coalitions made up of employers, providers, insurers and the community in general. More than sixty community coalitions now exist. These coalitions are trying to develop a coordinated effort to control health care costs. In addition, a national coalition was recently formed by the HIAA, AMA, AHA, Blue Cross/Blue Shield, Business Roundtable and AFL-CIO.

G. Reduction of Insurance Administrative Costs.

Another way to reduce health care costs is to reduce the cost of administering insurance programs. Some of the efforts in this direction include:

1. Increased electronic communication with providers.

2. Computerization of benefit administration including utilizing computers to determine benefits, explain benefits, issue benefit checks, create statistical records and monitor utilization charges.

Another possibility is the reduction in the expense caused by conflicting state regulation of insurance.

H. Pro-Competition.

There has been work at the federal level on proposals under the "pro-competition" label, although I understand some of these are being abandoned. Backers feel that these proposals will help control health care costs. These proposals include the following:

1. A tax deductibility maximum on employer contributions toward health insurance programs. This would create incentives to avoid first-dollar or low-deductible coverages and thereby reduce the pressure on utilization brought about by such programs.

2. Multiple options under insurance programs. This is a related idea where employees are given a choice of programs with higher deductibles and coinsurance which again would create financial disincentives for overutilization.

3. Tax-free rebates. This is also a related idea. Here, employees could receive tax-free income if they accept alternative lower-cost insurance programs.

I. Elimination of Cost Shifting.

Cost shifting forces providers to increase their health care charges to many citizens in order to cover losses on other patients. Therefore,

its elimination would reduce the cost for many citizens and equalize the pressure for health care cost control. Some of the examples of cost shifting include:

1. Underpayments to providers under government programs such as Medicare and Medicaid.

2. Reducing the benefit levels provided under government insurance programs which shift the cost to the patient and/or their supplementary private insurance programs. This includes the proposed requirement that employers make group insurance primary to Medicare for employees aged 65 to 69. This would shift costs from the government program to employees/employers.

3. Discounts given to Blue Cross and other organizations.

J. Research.

This includes both basic research into ways to avoid or cure disease or other medical problems as well as research into ways to provide care more efficiently and effectively. This could include the expanded use of computers for maintaining and analyzing patient records. Obviously, research has the greatest potential impact on reducing medical care costs since research findings could theoretically eliminate all diseases and stop the aging process.

K. Maintaining Restraints on Costs under Insurance Programs.

To the degree that insurers pay citizens' medical care expenses, there is a reduced restraint on avoiding unnecessary medical costs as compared to direct patient payment. Therefore, insurance programs need to be designed to maintain some of the self-interest restraint of direct payment within the constraints of providing necessary insurance protection as well as include other cost restraint provisions. This is becoming more important as a greater portion of the population is becoming insured and the level of benefits provided is expanding. Some of the restraints that could be maintained in insurance programs include:

1. A meaningful level of deductible.

2. Effective coinsurance percentages.

3. Significant stop-loss levels.

4. Bonuses for utilizing less than average care. For example, if the average hospital stay for an appendectomy is four days, the patient might receive a $100 bonus for staying only three days.

5. Premium reductions or refunds based on favorable claim experience.

6. Premium structures that encourage good health. Examples would be discounts for mini-drinkers and non-smokers or surcharges for overweight.

7. Providing coverage for alternative less expensive health care. For example, coverage of hospital outpatient and home health care.

8. Benefit incentives for utilizing less expensive health care. For example, paying higher coinsurance when utilizing ambulatory surgery centers or lower coinsurance when utilizing hospitals unnecessarily for certain surgical procedures.

9. Creating a cash fund in place of basic protection. Initial expenses would be paid from the insured's cash fund with excess charges covered by catastrophic insurance. This is similar to paying employees for unused sick leave.

10. More fully avoiding duplication of insurance benefits.

Many insurers are offering low-deductible, high-maximum major medical plans, both on an individual and group basis. These plans have reasonable out-of-pocket limitations and few restrictions on the types of medical expense covered. I therefore see that the important gaps in availability stem from lack of affordability and uninsurability. The first gap, if any, could be filled by expanding the earnings limits under Medicaid or subsidy of insurance premiums for low-income families. The second gap could be filled by lowering the deferment period under Medicare for disability beneficiaries and expansion of state substandard risk pools.

In examining the question of what coverage can and should be provided, one must look first to the underlying criteria.

From the standpoint of the insurer, the insurance program must be self-supporting. This means that it must be designed to avoid abuse and cope with inflation. From the standpoint of supporting efficient medical care, a plan should contain incentives to avoid abuse and utilize the least expensive care. From the standpoint of the insured, the plan should cover unbudgetable expenses, should cover a broad spectrum of medical care expenses and be affordable.

It is interesting to note that these criteria or goals are compatible. In order to fulfill these goals, a major medical plan should contain the following features:

A. A deductible that the insured can afford which at the same time creates a practical barrier to the overutilization of frequent, less costly services and supplies. A secondary purpose of the deductible is to avoid the relatively high insurance administrative expense associated with small claims. It is therefore axiomatic that the deductible would vary with the income of the insured and therefore increase with inflation. In order to implement deductible increases, individual policies may need to retain the unilateral right for the insurer to change it.

B. A practical coinsurance level which provides an incentive to avoid unnecessary expense while not creating a burden on the patient he can't afford to bear. Possibly the coinsurance could start at a low level (e.g., 25% or 50%) and build up to 100% when the out-of-pocket expense

reaches the level where further expense is impractical within the insured's budget and income. Again, these amounts would adjust as an insured's income increases because of inflation.

C. Coverage would be provided for all types of necessary expense unless abuse was out-of-bounds or the expense was budgetable. Most certainly, coverage should be provided for alternative less expensive care such as outpatient, ambulatory surgery and home health care. One must be careful, however, to avoid simultaneously providing care in a more expensive setting. For example, cost problems arise when non-emergency care is provided in an outpatient facility since such care is more economical in a doctor's office.

D. Financial incentives to avoid unnecessary care should be included. This could include payment for second medical opinions, higher benefits for preauthorized care and premium and/or benefit incentives for favorable claim experience either on an aggregate basis or based on the specific illness involved.

E. Financial incentives to stay well. This includes lower premiums for good health habits as well as premium and/or benefit incentives for favorable aggregate claim experience.

Special problems may exist for insurers in maintaining a viable individual major medical program. This is because claim experience deteriorates after issue because of inflation, aging and the wearing off of the initial health underwriting. The resulting rate increase levels may compound this trend by creating anti-selection. Insurers can combat these problems by:

1. Periodically increasing the deductibles and stop-loss levels to help combat the effect of inflation on premiums. Since some insurers already retain the right of non-renewal by class, the right to adjust benefits should be acceptable.

2. Changing the health rating classification after issue. This would reduce the chance of developing a deteriorating pool of risks which requires non-competitive premium rates for risks in good health. This rating system has historically been used under auto insurance and is starting to be used under life insurance.

3. Maintaining anti-duplication provisions so that risks in poor health that obtain other insurance can't maintain dual programs to make a profit.

MR. FERGUSON: You mentioned insurers negotiating for lower fees. Are you aware of any examples of that?

MR. SHAPLAND: We are aware of a group in California where they are going out and signing up hospitals and doctors to accept a lower than normal fee schedule and doctors are signing up to do this.

MR. FERGUSON: I've heard of that. I think there is something like ten groups in California which have that. I don't know if it has extended anywhere other than California yet. You mentioned rebates for less care

and various variations on that theme such as no claims bonus and paying a cash fund balance. You run into an awful lot of administrative problems with these things. If you establish a cash fund for an employee, for example, what happens if the employee leaves? What do you do if he comes in the middle of the year? I wonder, have any of these ideas been tried?

Are they really feasible?

MR. SHAPLAND: I'm not aware of any under hospital insurance but that is similar to a refund of premium under disability insurance. Our Company is the largest writer of that insurance and there is a tremendous difference in the morbity costs under the policy with those provisions. There are other policies so there is a definite financial incentive. I don't know how much anti-selection there is from unhealthy people not taking such a policy and the healthy people taking their refund of premiums. The experience is very definitely different.

MR. GEROLD FREY: All discussions on health care costs start with the apparently unchallenged notion that it is very bad that health care costs devour an ever increasing share of the GNP and I think this basic assumption should be examined before it is accepted. We can start by looking back in history as to how much of the total GNP was devoured by health care costs in the year 1800, the year 1850, and so forth. Society as a whole may have benefited from an ever increasing share of GNP going towards maintaining our health and maybe in the year 2100 we will spend 50% of the GNP on health care and we and our decendents will be so much better off for it.

MR. SHAPLAND: You've got a very good point. How do you measure how much we should be spending of our GNP on medical care? If we ask each citizen when he is sick how much he wants to spend he'll say 1000% if it will make him well. Increasing education of the public on health care and what is available to them and the increasing demand by doctors will continue to exert an upward pressure on the ratio of health care costs to GNP.

MR. GEORGE: I'm in agreement with Mr. Frey's basic philosophy that one should not start with the concept that any increase in the ratio to GNP is bad. I don't think that is so in many areas. Each country must make its own decision as to what percentage of the GNP it wants to spend on health care. In the United States it has gone to 10%. But there is now beginning to be some resistance. The population is beginning to say enough is enough.

MR. FERGUSON: We, regrettably, have run out of time. In this kind of discussion you realize just how much there is to this subject, just how many facits it has. We have just scratched the surface.