

Sweden's Health and Cash Sickness Insurance Program

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HISTORICALLY, Sweden has had a dual medical care system—a private health insurance scheme made up of voluntary sickness societies and an extensive public program financed at the local level. The public program provided low-cost medical, dental, and nursing services as well as traditional services for infectious diseases, mental illness, crippling conditions, and similar long-term disabilities. Hospital care in ward accommodations has been available for everyone for more than 200 years. The small fees charged have been reimbursed by the private sickness funds.

The private or voluntary health insurance system, in existence since the end of the 19th century, did not provide coverage to about 30 percent of the population, including those who could not afford the premium and those who were disqualified from membership because of poor health. These two groups relied on the public system, much as in the United States. Before January 1955 almost 70 percent of the population of Sweden had been covered by the voluntary sickness societies. A similar proportion of the U.S. population today has voluntary hospitalization coverage. Unlike the United States, however, the voluntary forms of insurance in Sweden had been government sponsored and to a certain extent subsidized almost from their inception. They applied to physicians' services outside the hospital and the hospital charge.

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On May 27, 1953, the Swedish Riksdag voted to institute a national system of compulsory health insurance. Its provisions went into effect on January 1, 1955. As of January 1, 1963, a new National Insurance Act went into effect in Sweden. The new act welded together the national system of compulsory health insurance instituted in 1955 and the various sectors of Swedish social insurance (1). Sweden now has a coordinated social insurance scheme which provides benefits for maternity, illness, disability, old age, and death of the family breadwinner. The provisions for health and sickness benefits are basically the same as those contained in the legislation of 1955.

The health insurance provisions of the act now in force cover all Swedish citizens and aliens registered as residents. Children are covered as dependents and are not shown in table 1 except in the total population line. The system consists of local public sickness funds and separate regional public sickness funds set up with a high degree of self-administration on an area basis, either by province or by major municipal area. Every person aged 16 and over is compulsorily registered as a member of either a local or a regional fund to which he pays contributions, and everyone is entitled to certain benefits.

Four benefits of the National Insurance Act are: medical benefits, medical and cash sickness benefits for maternity, cash sickness (income loss) benefits, and other services of a health nature included in the program. Other services provided directly by the Government, outside the National Insurance Act, include the operation of hospitals, school health services,

and public dental services. These benefits and some of the financial and utilization aspects of the program are described here.

Medical Benefits

Physicians' fees. Patients pay the doctors directly and are later partially reimbursed by the local or regional public sickness fund to which they belong. The funds are liable for three-fourths of the amounts established in a fee schedule approved by the Government after negotiation with the Swedish Medical Association. If the physician's charge exceeds the amount stipulated in the fee schedule, the patient is also responsible for this excess. There are no limits on number of services or days of coverage for physician services.

Hospitalization. Hospital care includes general ward care as well as physician's care, nursing care, diagnostic services, drugs, and supplies while in the hospital.

Hospital care in public ward accommodations is compensated in full. A patient receiving treatment in a private room or in a private hospital is expected to pay the difference between the price charged in a public ward in his home district and the price for the private accommodation.

For old-age pensioners the period of entirely free hospital care is limited to 180 days, after

which patients are charged 5 kronor per day. (One U.S. dollar equals approximately 5.25 Swedish kronor. The purchasing power of the Swedish krona is considerably greater in Sweden.) For all other patients there are no limits on the days of care covered.

Transportation. The patient must bear any travel costs under 4 kronor each time he visits a doctor for an illness. In four of the largest cities of Sweden, the patient pays anything up to 5 kronor. If the patient's transportation exceeds these amounts, the public sickness fund refunds the balance. On subsequent visits the funds usually reimburse all travel costs over 2 kronor.

A patient receives full compensation for transportation costs to the hospital as well as full compensation for return travel costs exceeding 4 kronor.

Medicines. Compensation of outlays for medicines is provided for not by the National Insurance Act but by a Royal Decree of 1954.

Certain medicines for chronic and serious diseases—cancer, tuberculosis, diabetes, and epilepsy—are free. For other medicines prescribed by a physician, the patient receives a 50 percent discount on any charge above 3 kronor. For example, if the cost of a prescription is 10 kronor, the patient pays 6.50 kronor (3+3.50).

Table 1. Number of persons covered by the Swedish National Insurance Act, by income group and sex, 1955, 1960–62

(in thousands)

Insurance status and income groups	1955	1960	1961	1962		
				Total	Male	Female
Total population ¹	7, 235	7, 463	7, 498	7, 542	3, 763	3, 779
Total number of compulsorily insured persons ²	5, 405	5, 663	5, 733	5, 797	2, 867	2, 930
Annual income (kronor): ^{3 4}						
Less than 1,200.....	2, 184	2, 220	2, 232	2, 258	477	1, 781
1,200–1,800.....	643	527	503	479	378	101
1,800–3,000.....	215	142	132	125	37	88
3,000–5,000.....	375	282	264	238	84	154
5,000–8,400.....	800	541	497	452	187	265
8,400–14,000.....	975	1, 216	1, 168	1, 085	683	402
14,000 or more.....	213	735	937	1, 160	1, 021	139
Total voluntarily insured persons.....	268	340	343	342	213	129

¹ As of January 1.

² As of December 31; omits children under 16 years of age, covered as dependents.

³ Income to 1,200 kronor includes housewives.

⁴ Incomes of 1,200 kronor or more from employment only; income from other sources is irrelevant.

SOURCE: *Statistical Abstract of Sweden*, 1962, and preliminary information.

Dental services. Ordinary dental services are not included in the compulsory health insurance plan of Sweden. An exception is prenatal and postnatal dental care for mothers, which is provided by the sickness funds. However, there is a comprehensive public dental health service which provides the same services as private dentists although at lesser cost to the patient. This service is mainly devoted to the dental care of children. There are 1,812 dentists employed in the public dental health service: 87 in central clinics, 55 in orthodontic clinics, and 1,670 in district clinics. The service uses 36 percent of the 4,980 dentists actively practicing in Sweden (2).

Other services. The public sickness funds also provide three-fourths of the costs of speech therapy, physiotherapy, and related convalescent care. Physicians are required to certify to the necessity of these benefits. Transportation costs are not supplied for such treatment.

The health of children of school age is under the medical supervision of school physicians and nurses.

Maternity Benefits

Obstetrical and hospital care. All women are eligible for maternity benefits in Sweden, where both health insurance benefits and cash allowances or maternity grants are provided nationwide. When delivery takes place in the hospital, obstetrical care is provided by the hospital staff doctors assisted by hospital midwives. The insurance program provides full compensation for care during confinement in a public ward. The transportation benefit also applies. More than 95 percent of all infants are born in hospitals. If a woman has her baby at home, she is reimbursed in full by the fund for the cost of a midwife. If a doctor is called in, the fee schedule for a doctor's home visit in other cases usually applies, with the insurance meeting three-fourths of his charge. Mothers are insured both during pregnancy and 270 days after delivery for dental care. The public sickness funds pay three-fourths of the dentist's fee.

Maternity cash grants and child allowances. In the event of pregnancy, every woman is entitled to 6 months of leave from work. Under Swedish laws, a woman is forbidden to work

in factories or to do other heavy work for 6 weeks after childbirth.

Every woman after childbirth receives a basic tax-free grant of 900 kronor for a single birth or 1,350 kronor for multiple births. In addition, families receive a child allowance of 550 kronor a year for each child under 16 years of age beginning with the first child. These grants are the obverse of tax deductions for dependent children in the U.S. income tax system.

If a woman refrains from gainful work because of pregnancy, she becomes entitled to a supplementary cash sickness benefit corresponding to that part of her ordinary sickness allowance which exceeds the basic 5 kronor for a period of up to 180 days. A gainfully employed mother is thus insured for loss of income for 6 months.

In 1961 there were 107,000 maternity cases qualifying for maternity allowances.

Maternal and child health services. Even before passage of the social insurance laws of 1955 and 1963, Sweden had a well-developed program of free maternity clinics and child health services, and this program has been continued under the new law.

Since January 1, 1955, all maternal health services in these clinics have been free of charge. The services include free prenatal care, free consultation relating to mishaps resulting from pregnancy, postnatal examinations of mothers and infants, and free vitamins and drugs.

In 1959 in Sweden, 82 percent of all the expectant mothers and 97 percent of all the infants were examined at these clinics.

Cash Sickness Benefits

In addition to the provisions for insurance benefits for physician's services, hospital care, and transportation, and the special drug benefits, Sweden's public sickness funds also provide daily cash allowances for each day of sickness, with the certain specific exceptions noted below. The cash benefits consist of (a) a flat basic allowance of 5 kronor per day applicable to all adults and (b) a supplementary daily allowance that rises with income from zero to a maximum of 23 kronor (table 2). Housewives and unmarried mothers are entitled to the basic 5-kronor allowance each day they are ill.

Self-employed persons are automatically covered by the public sickness insurance. They are, however, entitled to choose a longer waiting period for benefits than the ordinary 3-day period. They also have the option of choosing not to participate in the supplementary benefit program.

For students and housewives, optional insurance for a daily allowance or a supplement to their basic daily allowance may be subscribed to, subject to the limitation that the total daily allowance must not exceed 12 kronor.

Benefits are increased according to the size of the family if the breadwinner is ill. In addition to the cash basic and supplementary benefits paid to an insured patient, the child allowance is added to his or her basic daily benefit. The scale of additional daily benefits is 1 krona for one or two children, 2 kronor for three or four children, and 3 kronor for five or more children.

Terms of benefits. Daily benefits generally do not begin until the fourth day of illness. However, if a person becomes ill within 20 days of a previous illness, daily benefits begin immediately.

Daily cash benefits are payable for 7 days a week and are free from taxation.

A partially incapacitated beneficiary whose

capacity to work has been reduced through sickness by at least 50 percent has his daily benefit cut in half.

The daily basic and supplementary cash benefit is reduced during a hospital stay by amounts up to 5 kronor but not more than half the total allowance. The reduction presumably reflects the fact that meals are supplied in the hospital. An exception occurs for women with one or more children under 10 years of age. If hospitalized they receive at least the minimum sickness allowance of 5 kronor per day and an additional 2 kronor in the child allowance.

Contributions to Program

The program for health insurance is financed from three sources (3). Employees contribute approximately one-half, employers more than one-fourth, and the State (National Government) a little less than a fourth (table 3). The rate of contribution payable by the insured person depends on his class of income and to some extent varies with the sickness fund of which he is a member.

Contributions by individuals. The average annual taxes of individuals in class 10 (table 2) are as follows:

1. Insurance providing compensation only for medical care—62 kronor.

Table 2. Cash sickness allowance benefits paid per day to insured persons according to annual income class intervals, in kronor, as of 1963¹

Class	Annual income from employment	Cash benefit per day			
		Basic	Supplemental	Total	While in hospital
1 ²	0-1,800	5	0	5	2½
2	1,800-2,600	5	0	5	2½
3	2,600-3,400	5	1	6	3
4	3,400-4,200	5	2	7	3½
5	4,200-5,000	5	3	8	4
6	5,000-5,800	5	4	9	4½
7	5,800-6,800	5	5	10	5
8	6,800-8,400	5	7	12	7
9	8,400-10,200	5	9	14	9
10	10,200-12,000	5	11	16	11
11	12,000-14,000	5	13	18	13
12	14,000-16,000	5	15	20	15
13	16,000-18,000	5	17	22	17
14	18,000-21,000	5	19	25	20
15	21,000 or more	5	23	28	23

¹ Beginning the 4th day of illness.

² Class for housewives who do not earn at least 1,800 kronor a year from employment.

SOURCE: National Insurance Act, Swedish Ministry of Social Affairs, May 25, 1962.

2. Insurance providing compensation for medical care and for the basic daily 5 kronor cash sickness benefit—119 kronor.

3. Insurance providing compensation for medical care, the basic daily 5 kronor benefit, and a supplemental daily allowance of 11 kronor—195 kronor.

If the supplemental daily allowance attains the maximum of 23 kronor, the average annual tax would be 281 kronor.

Contributions by employers. Before 1955 employers financed the workmen's compensation fund and contributed nothing toward sickness insurance. Under the new law, coverage for work-connected illness and injury is automatic under the program. Employer contributions are primarily for supplemental daily allowance and benefit only the employees. Employers' contributions have been set at 0.4 percent of the annual payroll for medical care benefits and 1.1 percent of the annual payroll for supplemental daily allowances.

Contributions by Government. The Government makes grants to the local and regional public sickness funds equal to half their ex-

penditures for (a) medical care other than hospital care, (b) the basic 5-kronor cash sickness benefit, (c) the child allowance for ill breadwinners and hospitalized mothers of small children, and (d) the maternity care benefits and maternity cash allowances. The Government also contributes to the sickness funds in its role of employer.

Table 3 shows that contributions to the sickness insurance funds from the three main sources have risen 63 percent in the past 8 years. Employer contributions have risen more than employee contributions, which presumably reflects rising wage scales since the employer contribution is a percentage of wages.

Of the 1,300 million kronor the program cost in 1962, members contributed about 50 percent, employers just under 30 percent, and the Government 20+ percent. At the inception of the program in 1955, it was expected that members would contribute 44 percent, employers 27 percent, and Government 29 percent. The apparent shift away from Government aid is more apparent than real. These data do not reflect that part (approximately 90 percent) of the

Table 3. Income and expenditures of sickness insurance funds, 1955-62
(in millions of kronor)

Item	1955	1956	1957	1958	1959	1960	1961	1962	Percent change 1955-62
Income-receipts (compulsory insurance)-----	807	889	952	986	1,066	1,136	1,189	1,316	+63.1
Contributions from members-----	426	444	455	483	509	520	555	652	+53.1
State subsidies-----	208	225	242	241	247	266	263	276	+32.7
Contributions from employers-----	167	213	247	254	302	341	359	375	+124.6
Interest-----	5	5	7	7	7	7	9	8	+60.0
Other receipts-----	1	2	1	1	1	2	3	5	+400.0
Expenditures (compulsory insurance)-----	703	827	923	952	1,027	1,113	1,173	1,262	+79.5
Daily allowances and children's supplement-----	394	471	522	526	548	600	610	644	+63.5
Medical benefit, cost of medicine-----	211	258	280	301	348	380	416	449	+112.8
Maternity benefits-----	43	51	56	59	61	62	66	72	+67.4
Administrative expenses-----	48	53	59	63	65	68	78	96	+100.0
Decreases in book value-----	6	3	4	2	4	3	3	1	-83.3
Other expenditures-----	1	1	2	1	1	0	0	0	-100.0
Surplus (compulsory insurance)-----	104	52	29	34	39	23	16	54	-48.1
Reserves-----	307	364	398	439	486	517	542	603	+96.4
Sickness benefit reserves, compulsory insurance-----	262	315	344	378	418	441	457	510	+94.7
Sickness benefit reserves, voluntary insurance-----	30	34	39	46	52	59	68	75	+150.0
Other reserves-----	15	15	15	15	16	17	17	18	+20.0
Employers' contributions to the general sickness insurance funds (not included in income above)-----	77	59	41	47	-----	-----	-----	-----	-----

SOURCE: *Statistical Abstract of Sweden*, 1962, and preliminary information.

cost of hospital care which is financed by the Government. Hospital costs have risen faster than other costs.

As table 4 shows, after the initial 2 years 1955 and 1956, the amount spent for all health services, government-operated programs, and the compulsory health insurance programs has remained quite stable in relation to gross national product. For all services the average in recent years is 4.4 percent of gross national product. The government-operated services use 2.6 to 2.7 percent, and the jointly financed medical and cash sickness programs, 1.7 to 1.8 percent of gross national product.

It is interesting to note that the expenditures for cash sickness benefits exceed those for physicians' services, maternity, medicines, transportation, miscellaneous services, and the small portion (10 percent) of hospital costs financed by the sickness insurance programs.

Table 5 indicates the importance of expenditures for health in the total expenditures for health and welfare purposes in Sweden. The two types of health expenditures, direct services and contributions for basic cash sickness benefits, together produced the largest percentage of the aggregate, 37.5 in 1961. The next largest percentage is 36.8 for old-age and disability pensions. Family and child welfare moneys constitute the only other sizable percentage of the 8,238 million kronor expended for health and welfare. These data do not include the expenditures made out-of-pocket by individuals

Table 5. Percent distribution of expenditures for social services, by type of service, 1955, 1960, 1961

Type of service	1955	1960	1961
Total expenditures (millions of kronor)	4, 911	7, 622	8, 238
Total (percent).....	100. 0	100. 0	100. 0
Health.....	37. 4	37. 1	37. 5
Industrial accident insurance and workers' protection.....	2. 2	1. 5	1. 4
Unemployment.....	2. 7	3. 7	3. 2
Old age and disabled persons.....	33. 1	35. 4	36. 8
Family and child welfare.....	19. 4	19. 1	18. 2
Other social assistance.....	3. 8	2. 0	1. 8
Compensation for injuries incurred in military service and war casualties.....	. 3	. 2	. 2
Central administrative expenses.....	1. 1	1. 0	. 9

SOURCE: *Statistical Abstract of Sweden*, 1962.

for their 25 percent of doctors' fees and their share of medicines and other medical items or dental care they purchased privately.

Manpower and Facilities

Medical personnel. Because it is a small country and because of the system of medical care in operation, Sweden is able to know the numbers and types of medical and related personnel serving the population. Table 6 shows the ratio of population to 15 classes of health workers. The data are presented for those interested in manpower requirements.

Table 4. Expenditures and percent of gross national product for all health services of government-operated programs, and for compulsory health insurance, 1955-62
(in millions of kronor)

Item	1955	1956	1957	1958	1959	1960	1961	1962
GNP at market prices ¹	45, 400	49, 216	52, 874	55, 202	58, 477	63, 884	69, 608	75, 272
Expenditures for all health services.....	1, 835	1, 986	2, 319	2, 489	2, 592	2, 829	3, 088	(²)
Percent of GNP.....	4. 0	4. 0	4. 4	4. 5	4. 4	4. 4	4. 4	(²)
Expenditures for government-operated health programs.....	1, 132	1, 149	1, 396	1, 547	1, 565	1, 711	1, 913	(²)
Percent of GNP.....	2. 5	2. 3	2. 7	2. 8	2. 6	2. 6	2. 7	(²)
Expenditures for compulsory health insurance.....	703	837	923	952	1, 027	1, 118	1, 175	1, 262
Percent of GNP.....	1. 5	1. 7	1. 7	1. 7	1. 8	1. 8	1. 7	1. 7

¹ From United Nations *Yearbook of National Accounts Statistics*, selected years.

² Not available.

SOURCE: *Statistical Abstract of Sweden*, 1962, and preliminary data.

From the data in table 6, it is evident that the numbers of medical personnel in almost all categories have increased during the past few years. This is true both in terms of absolutes and in rates per 100,000 population. The ratio of physicians to population is considerably smaller in Sweden than in the United States—98 physicians per 100,000 population in Sweden and approximately 147 per 100,000 population in mid-1963 in the United States. (This includes doctors of medicine and doctors of osteopathy.) In 1961 Sweden had 7,380 physicians or 1 doctor per 1,022 population.

Approximately 10 percent of the physicians are public medical officers who are responsible for practically all medical care in rural areas that does not require the services of specialists. In addition to receiving a salary from the Government, they treat private patients who pay them very low fees fixed by the Government. The private patient can choose any doctor that he wishes to consult. The patient who sees a doctor in private practice pays the difference between the public insurance benefit and the actual fee established for public medical officers.

Assisting the public medical officers are approximately 1,700 district nurses from a total of 21,900 nurses. The duties of the district nurse include home visits, child care, school hygiene, and other typical public health nurs-

ing duties. The average district nurse makes 1,150 home visits yearly.

Home and hospital confinements in rural areas are attended by 650 district midwives, who also provide much of the necessary prenatal and postnatal care.

Hospital facilities and services. Almost all Swedish hospitals are publicly operated. In the public hospitals are private wards in which heads of clinical departments are allowed to have private patients and receive fees. The medical staff serves all patients alike, and there are no visiting physicians. In Sweden physicians are either employed full time by hospitals or their work is entirely outside a hospital in private practice, on a salary if in a rural district, or both.

As can be seen in table 7, the total number of hospitals and the length of stay has been declining in Sweden, but the number of beds, admissions, and bed-days per 1,000 has been increasing. Because long-term beds are included, the occupancy rate is high—86 percent in 1961. The figures cited include mental hospitals.

Data on general hospital care, available only for 1959, show 6.08 beds per 1,000 population, 121.4 admissions, and 1,729.4 days per 1,000 persons. Average length of stay was 14.2 days. The occupancy level was 77.9 percent. The ad-

Table 6. Rates for active medical personnel in Sweden per 100,000 population, as of December 31, selected years 1953–61

Category of personnel	1953	1955	1960	1961
Total population ¹	7, 192, 316	7, 290, 112	7, 498, 770	7, 542, 459
Physicians.....	73	78	95	98
Nurses.....	206	225	286	290
Midwives.....	24	24	23	23
Physiotherapists, female.....	15	17	22	23
Occupational therapists at somatic hospitals.....	2	2	3	3
Social workers at somatic hospitals.....	2	2	3	3
Auxiliary nursing personnel at somatic hospitals.....	331	351	438	449
Nursing personnel at mental hospitals.....	116	122	147	154
Nursing personnel at homes for mentally deficient and epileptics.....	35	37	52	57
Dentists.....	55	60	68	70
Dental mechanics.....	21	22	25	25
Dental chairside assistants.....	59	60	68	70
Pharmacists.....	12	12	10	10
Bachelor of pharmacy.....	15	16	19	20
Pharmacy students and technical personnel.....	67	69	67	70

¹ January 1 of following year.

SOURCE: *Statistical Abstract of Sweden*, 1962.

Table 7. Utilization of general and special short-term and long-term hospitals in Sweden, 1955-61

Year	Number of hospitals	Number of beds	Average length of stay	Rates per 1,000 population ¹		
				Beds	Admissions	Bed-days
1955.....	963	105, 108	38. 1	14. 4	126	4, 800
1956.....	983	107, 487	37. 7	14. 6	128	4, 840
1957.....	946	109, 389	37. 4	14. 8	130	4, 868
1958.....	928	111, 904	36. 6	15. 0	132	4, 829
1959.....	926	113, 361	36. 4	15. 2	133	4, 843
1960.....	928	116, 681	-----	15. 6	(²)	4, 912
1961.....	955	119, 609	36. 5	15. 9	135	4, 930

¹ Population figures for January 1 of the next year were used in calculating the rates for beds; the averages of figures for January 1 of the year and the next year were used in calculating the rates for admissions and bed-days.

² Not available.

SOURCE: *Statistical Abstract of Sweden, 1962.*

mission rate is comparable with that of the United States, but the length of stay is twice as long, which explains the use of nearly double the number of beds per 1,000 in Sweden.

Summary

Sweden's dual public system of health service provisions and cash sickness has evolved from partly public and partly voluntary systems. The voluntary system, which provided physician services and cash benefits in the main, was effective until 1955 and was subsidized by the Government. The hospitals were largely publicly financed and available to all. The present public system has three-way financing by individuals, employers, and tax funds, with tax funds the main resource if the two systems are considered together.

The local and regional public sickness funds have been the instrument by which a fee system of paying physicians practicing outside hospitals has been maintained. The system has also provided the mechanism for some flexibility in the amount of daily cash sickness bene-

fits which can be obtained and for allowing differentials between urban and rural areas.

The Government operates those services where physicians and other health personnel have traditionally been on salary in Sweden—hospitals, welfare clinics, rural medical officers, and district or public health nurses.

The data on utilization and expenditures indicate that there has been a notable degree of stability in the finances of the two parts of the total health program—a rather remarkable achievement in the face of rising utilization and expanding numbers of health personnel involved in the provision of care.

REFERENCES

- (1) Swedish Ministry of Social Affairs: National insurance act, May 25, 1962. Translation, July 1963.
- (2) Olof, O.: The Swedish public dental health service: Its development and actual status. Stockholm, The Swedish Institute, 1962.
- (3) The National Social Welfare Board: The cost and financing of the social services in Sweden in 1961. Stockholm, 1963.