SWEDISH HEALTH CARE SYSTEM

Five Projects about the Swedish Health System : Acute Care, Care of the Elderly, Primary Health Care, Labour Relations in Sweden and Swedish Health Care Today.

By

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PRIMARY HEALTH CARE IN SWEDEN

PRIMARY HEALTH CARE

Introduction

This section of the report is designed to give a brief - and unashamedly impressionistic - view of primary health care in Sweden. This aspect of the system is undoubtedly the least well developed of all the Swedish health care tiers despite considerable publicity being given to it in recent years.

General medical practice in the British sense has never existed in Sweden and this in itself has had a very significant effect on the evolution of that country's health system.

For example, the Swedes as a whole are unused to such frequent contact with health professionals as are the British, they consult a doctor on average only three times per year as compared with the British figure of six consultations. The consequence of this is that admission to hospital is much more common through casualty departments or out-patient clinics (for example, 50% of those attending the medical out-patient clinics at the Sahlgrenska Hospital in Gothenburg which I visited were admitted to the wards).

Over the last ten years the Swedish National Board for Health and Welfare have attempted a "reconstruction" of primary health care with a long term goal of making it the basic level for health care delivery in Sweden. At the outset, the two most crucial of the professed intentions were the integration of the various health/social services within the counties and an expansion of the resources available. The observations I made during the study tour suggested that, at best, progress with both has been slow but that the sincerity and commitment of those concerned remains largely un-diminished.

A number of the problems being encountered are similar to those already known well in Britain, many of which remain un-conquered - and even un-challenged in some cases. The Swedish perspective on some of these problems serves to hearten, with the knowledge that others are involved in a similar struggle, and with others suggests refreshingly new solutions to be tried. The following is offered with these sentiments in mind.

BACKGROUND PROBLEMS - LOCAL AUTONOMY - SELF REFERRAL - DISTRICT MEDICAL OFFICERS STATUS

A feature of the Swedish health system which is essential to any understanding of that country's primary health care is the large degree of independence enjoyed by each county council. The bulk of health service finance is raised by way of locally levied taxes and this is the ingredient which serves to dilute the overall influence of the National Board of Health and Welfare. Hence, national policies may, and do, point to a serious deficit in the level of primary care but this fails to be translated into a major change in service provision. Local interests inevitably play a major part in determining how the available resources are divided and the most vociferous of these interest groups invariably originate from the larger acute units.

A second factor which vitally affects the nature of primary health care in Sweden is the relationship between the district medical officers (the "general practitioners") and the hospital based consultants. Unlike in Britain where referral to the latter may only be achieved through a patient's GP, in Sweden patients themselves may opt to attend the hospital specialty out-patient clinic without reference to anyone else. This serves both to burden many of the out-patient clinics with work much more appropriate to the primary health care team and to leave the district medical officers with no obvious position of power/influence in the system. In the context of the first of these, it is reliably estimated that in Sweden 50% of all contacts between the public and doctors take place in hospital based out-patient clinics. I certainly found this concept difficult to grasp and only fully understood its implications whilst visiting the Danderydd (large acute hospital in Stockholm).

There I learnt that in the local "health handbook" patients were advised on the various possible diagnostic destinations they might choose in their search for treatment for a particular condition. Where a patient is unsure about which clinic or specialist to consult, then they simply attend a casualty department for advice.

These arrangements appeared to me to be a very inefficient use of medical staff whereby an orthopaedic surgeon might be consulted by a patient anxious about a sprained joint or where mild but persistent heartburn were taking up the time of a cardiologist. However, in fairness to the Swedes, it did not seem to many of them to be a major problem requiring immediate change.

District Medical Officers in the rural areas tend to assume more of a role along the lines of a British GP. The twin reasons for this are the much lesser turnover of the medical staff as compared with the towns, and the distances involved in visiting the larger hospitals. The apparent pre-disposition of City dwellers to circumnavigate their DMO, is also compounded in some areas by a serious shortage of "GPs". For example, the south west districts of Stockholm - which is the relatively poorer part of the City - has succeeded in filling only half of its current DMO vacancies. Hence, the primary health service is stretched which means that patients are likely to take the most convenient route to receive medical attention. This usually means a visit to an acute hospital. This general feature can be seen in the following table as can the plan to bring the first point of patient contact down to the primary health care level.

Out-patient contacts between the public and doctors.
1970, 1977 and 1984 (in millions)

Year	Hospital	Outside Hospital i.e. PHC	Total
1970	8.8	5.6	14.4
1977	10.7	7.4	18.1
1984 (planned)	12.7	11.4	23.5

TRENDS IN PRIMARY HEALTH CARE - HEALTH CENTRES - TIBRO MEDICAL CENTRE

The entire system of health care in Sweden has a strong institutional emphasis. There has been a move away from the vast 1500-to-2000 bedded general hospitals towards units of more manageable proportions; but at the other end of the service spectrum there is a continuing movement towards centralisation. Small, neighbourhood hospitals are still being closed on cost grounds and whilst the very large long stay institutions are being run down somewhat, there is a general accretion of long stay and primary care facilities.

Single-handed practices are becoming increasingly unknown even in the rural areas as a result of a successful heath centre building programme across the county councils. There are two main types of health centre; the first comprises a team practice usually between two and five doctors. The second type takes the form of a much larger centre where the district medical officers represent one of a range of services.

I visited one such unit, the Tibro Medical Centre which has only recently been completed and is still something of a "show-piece".

Tibro is in the County of Skaraborg which is reckoned to be one of the most advanced in Sweden particularly in the field of primary health care to which it currently devotes 50% of its financial resources. The Centre serves a population of 11,200 and has a permanent staff of almost 300 of which 200 are employed in connection with the 96 long term elderly care beds which are found there. The Centre has facilities for six district medical officers but problems of recruitment have meant that only two are currently in post. A number of out-patient clinics are held at the Centre by consultants from the County's general hospital thirty miles away but their number is limited by the unpopularity of such sessions with the hospital-based medical staff.

Other services housed in the Centre include dentistry, a dispensing pharmacy, health insurance office and a social services benefits/ claims office. An additional and particularly interesting feature was a small health education and prevention department. This provided the conventional information service to local schools but also accepted individual referrals from the district medical officers. These referrals were subsequently dealt with in a variety of ways ranging from intensive personal counselling to admission to one of the large number of self help group

Attached to the Centre, though forming a distinct part of it, is a "sheltered housing" development providing accommodation for approximately 100 elderly people. The residents each have their own facilities but are encouraged to make use of the impressive social and recreational facilities of the long term care unit.

The unit itself comprises 96 individual bedrooms for the elderly patients who are encouraged to bring with them their own furniture and other accoutrement in order to make their room as homely as possible.

The unit displayed a magnificent array of equipment and the standard of design and decor was extremely high. My first impression was one of amazement at the sheer opulence of the facilities, followed by a feeling of shame at the likely appearance of a similar establishment in Britain. However, I later realised that unlike geriatric units I have known in the NHS only some 10% of the patients were actually in bed. The rest were sat around looking rather bored and not a little lost in their "habitat style" environment. One very sprightly lady, whom we spoke to through our guide, told us that while she found the facilities very comfortable she, along with a number of her fellow patients, wished they were still at home.

The Tibro Medical Centre was built at a capital cost of ten million pounds and has an annual revenue cost of roughly 4.5 million pounds. There are

currently 100 such centres throughout Sweden and it is hoped to have one in each of the 270 municipalities by the year 1990.

POLICY AND PRACTICE: STAFF LEVELS - RECRUITMENT - STATUS - STANDARDS OF CARE

A very large amount of work has being undertaken in Sweden over the last ten to fifteen years to ~~both~~ highlight deficiencies in primary health care and then to set about formulating policies to achieve a re-distribution of resources in its favour. It is interesting however to look at the reality of changes effected rather than to accept the much vaunted pro-primary care policies espoused at a national level.

The total number of full time positions in primary health care rose from 10,000 in 1973 to 16,000 in 1978. During the same period, the figures for hospital care rose from 140,000 to 170,000 with the bulk of the increase being devoted to increased staffing levels in the acute sector. *

At present, only 12% of medical staff are employed in primary health care but much publicity has been given to the declared policy of raising this to 33% before the end of this century. Yet one of the factors most inhibiting the development of the primary sector currently is an inability to recruit DHOs in both the more remote rural areas and in certain other less attractive urban areas. However, medical staff unemployment is claimed to be just-around-the-corner and the commentators on the Swedish health scene see this as an inevitable bonus for primary services. Yet this, in my view, fails to take account of the credibility gap which is currently an important and detrimental feature of this aspect of the Swedish health services. The status of district medical practice remains low and this shows no real sign of change; least of all could this be achieved if only hospital-rejected medical staff were seen to find employment in the primary sector.

* Reference WHO Study on management needs in primary care.

The nature of the relationship between doctors employed in primary health care and those working in acute hospitals - or rather the apparent lack of a formal relationship - contributes importantly to the continuing lack of status for GP-type work. Hospital doctors are resistant to any moves towards greater involvement of the DMOs and the unified position of the former shows no sign of breaking down under the disparate attempts of the latter.

However, it would be wrong to see the situation as simply a power struggle between two groups of medical functionaries. There seems little doubt that patient care does suffer as a result of it. Patients may be admitted to hospital without the knowledge of their DMO - even where a British style GP relationship had formerly existed - and the two medical parties will function without detailed reference to the other. Hence the notion of continuing care throughout the various health care tiers is at best reliant upon the goodwill and co-operation of those involved and at worst, may simply not exist at all.

HEALTH AND SOCIAL SERVICES CO-OPERATION - VOLUNTARY SERVICES - ATTITUDINAL DIFFERENCES AS COMPARED WITH BRITAIN

Since the 1960's there has been a continuously growing public debate in Sweden about the organisation of health care but more specifically about the most effective shape in which to form primary health care. The number of similarities with Britain in terms of the obstacles preventing this development is striking. In addition to the inevitable resource shortage problems, and the question of the status of GPs plus the ability of high technology medicine to attract funding, the issue of co-operation between and within agencies is persistently highlighted. As discussed earlier, the Swedish health system seems to be excessively constrained by organisational boundaries and this again is demonstrated by the reluctance of both health service and the social services to tackle those issues

which inconveniently lie in the grey area between the two.

In this context the almost complete absence of voluntary services must be noted and notice taken of the Swedes' apparent view that such activity is best left to the State. This attitude was underlined in a number of conversations I had with various health personnel who, whilst being undoubtedly "caring people", had a much more limited notion of helping the disadvantaged/handicapped, in their home locality than, I feel, would be the case with British equivalents. In saying this I certainly do not wish to be seen to be making a cheap nationalistic point but simply to be highlighting an important attitudinal difference between the two countries. In essence, my point is that the Swedish do not have the number of charitable/voluntary bodies involved in the health arena that the British do, and that this seems to reflect a more insular approach to that part of society outside the individual's immediate family or friends.

SUMMARY

In conclusion, I would suggest that the development of primary health care in Sweden will continue to take place at the dual levels of Policy and Practice, with the gap being accounted for by the conventions of accepted practice with its accompanying in-built resistance to change. It is likely that primary health care at a national level will follow the past example of Stockholm County where much emphasis was given to primary care throughout the 1970s with the stated goal of achieving one District Medical Officer for every 1000 inhabitants. Significant steps have been made in this direction but by 1982 this figure was well in excess of 1 DMO per 3,000 population but with persisting black-spots such as the north east district of the city where 13,000 people had to share one district doctor.

The future of primary health care at the planning/academic level is extremely optimistic with moves afoot to make it much broader based with increased involvement from the personal social services and from education. Additionally, greater resources are envisaged but - with the full effects of the world recession approaching and much of the "future" mortgaged by way of excess foreign payments and the relatively elderly population - the mechanics of re-apportioning the resources available for health care in Sweden, promise to make it a tempestuous period for those involved but a fascinating one for outside observers.

CARE OF THE ELDERLY

IN SWEDEN

CARE OF THE ELDERLY IN SWEDEN

Summary:

As previous articles have shown there are many similarities between the NHS and the Swedish health services. The underlying concept of both systems is that of a national, 'welfare' system; funded centrally in Briatin and in Sweden through local taxes and central contributions. In Sweden the health services are administered by local county councils. The current discussion here about community care and the transfer of patients from hospitals is also a topical issue in Sweden. The problems of caring for the elderly are even more acute with a higher proportion of over 65's and a higher level of institutional care. This article looks at the theoretical background to this, and provides detailed statistics. The second section draws on our observations following visits to health centres and hospitals in 1982.

The Demographic Pattern

In Britain 14% of the population is aged 65 or over; while in Sweden the figure is 17%. The projected population data are shown in Table I below.

Table I: To Show Population Projections in Sweden to 2006 in Percentages of Projected Total.

(1)

Age	1970	1982	1994	2006
	%	%	%	%
0-14	21	19	18	18
15-44	40	42	40	32
45-74	34	32	34	36
75+	5	7	8	14
	100%	100%	100%	100%
(65+)		17%	18%	18%

The fluctuations in the proportion of elderly people are expected to work out as follows; by about 1990 the percentage of over 65 year olds is expected to peak at 18%. This percentage will then fall for a decade but is not expected to fall below 16%. From 2000 onwards the percentage again will increase, reaching about 23% by 2020.

The table shows that there is to be a shift towards the very old. In Sweden it is expected that there will be three times as many people over the age of 95 in 2000 as compared with 1970, and twice as many people of over 85. (2) The diagram below shows the already heavy burden placed on the care services by the elderly.

Diagram I: To Show the Use of Health Care by the Elderly. (4)

Age Group	Percentage of Population	Percentage of all Care "Consumed"
Over 80	3%	35% of all hospital care
Over 70	10%	60% of all hospital care
Over 65	17%	47.5% of the acute care
		93.4% of the longterm care
		51% of the psychiatric care
		33% of drugs

Why Has This Trend Occurred?

There are two main reasons for this trend towards an increasing number of elderly with a particular shift towards the very old. The first is the rise in life expectancy. Sweden has among the highest life expectancies worldwide for females (79.0 in 1981) and the highest for males (72.4 in 1980). In 1974 life expectancy at 75 was 10 years; by 1982 this had risen to 11 years. It is not totally clear why this has happened but it is not related to death rate, and since the life expectancy at 95 remains unaltered it does not seem to be related to increased medical activity. (5)

The second factor in the increasing proportion of the very old lies in the falling fertility. Projections of this are very tentative at the moment since the working patterns of women and immigration both have a part to play, and have not yet been assessed. (6)

Clearly Sweden will face a severe problem in the future in providing services not only for more elderly people, but older people, with a smaller proportion of younger people to provide the care and funds.

Changes in Swedish Social Structure

To exacerbate the problem further the whole social structure has altered radically in Sweden over the last forty years. This is due both to the search for employment and to the expansion of higher education which led to increased urbanisation and tend to separate families. This means that elderly people are less likely to receive support from their families, and are more likely to depend on institutional care than would be the case in this country.(7)

(see diagrams 2 and 3)

Diagram 2: To Show the Trend Away from Family Support in Sweden.(8)

Date	Single Person Households	Deaths at Home
1950	20%	50%
1982	33%	>90%

Diagram 3: To Show the Levels of Institutional Care in Five Countries.

Countries	Percentage of Population over 65 in Institutional Care
Sweden	12.5%
Canada	9.6%
Switzerland	6.5%
Great Britain	6.0%
France	3.8%

Implications for the Health Services

The implications for health services are wide-ranging. The Swedish system is based on three levels of care: primary care, county hospital care and specialised Regional care.

However, there is no GP system at all and the primary care services in general are poorly developed. In some areas money has been poured in but the commitment and the will to benefit from community based care has been lacking. The theories being propounded nationally look attractive on paper but do not seem to meet the real needs. This is partly simply because services are so impersonal. A patient can see different doctors for different complaints with no overall co-ordination of his care.(10) In addition to this the population of Sweden (8.3 million) is not spread evenly. About $\frac{1}{3}$ is concentrated in the three largest cities; overall 83% of the population is urban. For the remainder, health centres might be many miles distant.

The same distinction between health and social services exists in Sweden as in the U.K., with roughly similar functions being assigned to each. The social services which are administered by the municipalities are responsible for domiciliary services, old-age residential homes and flats.

One particularly interesting feature of care for the elderly is that Swedish researchers have attempted to quantify aspects of care that have not been examined in this country.(11) For example, Svanborg has studied the levels of illumination available to the elderly (especially among those who claim to read alot). He has also investigated the relationship between longevity and occupation and the relationship between bereavement and life expectancy.

The views of old people on institutional versus home care have also been sought.

Health Care Policy and Goals

Despite the greater sophistication of Swedish measurements many of the

problems faced are similar to ours but heightened by a higher proportion of old people, a scattered population and a higher level of institutional care and less family support. The social policy is also similar; the aim is "to give individual security in different situations and to provide both for material needs and for needs of personal care and welfare".(12) While recognising that of course elderly people must have access to each of the three tiers of care, the development of primary care is crucial in planning care for the elderly. Bergman(13) lists the three guiding principles for planning which reflect the fundamental concensus throughout the health and social services fields. The "normalisation" principle means that the psychological, physical and social needs of each individual are seen in a single context and each should be given the opportunity to live in as normal an enviroment as possible. The principle of "self-determination" allows people to make their own decisions; the respect for personal integrity must be combined with care needs. The third principle is called "properly managed activation" which means that each individual must have stimulating surroundings. These principles have been formulated to demonstrate that the health needs of the elderly do not have to be met only through hospital services but can also be satisfied by community and home-based care. Swedes have extremely high expectations of both hospital care and of high levels of social responsibility.

Co-Operation with Municipal Authorities

The same need exists as in England, to co-operate fully with the municipal authorities. These provide local transport, leave activities and many other services in addition to the social service provision already mentioned. The Swedes are committed to the concept of primary care teams and care planning groups in which health and social services

personnel together co-ordinate a care plan for each individual.

Collaboration between county councils and municipal authorities should be wide-ranging, and should lead to improvements in all local, neighbourhood facilities. Housing grants are available to allow the elderly to live in modernised or new houses. Supplementary transport systems, local shops and day centres may be required. Services for the disabled of whatever age are completely free so all aids for the deaf, blind, and for those with speech impediments are provided. Legislation now provides that all new housing plans must include facilities for people of reduced mobility.

Health Care Personnel

On the health side the caring personnel are organised in a broadly similar way to the English system. Again, however, the problems are exaggerated. In the case of personnel this arises due to the lack of a GP-system and over-specialisation on the medical staffing side.

Insert:-

The nursing role is rather different from England; district nurses are involved in a wider range of duties in supervising and nurses cover duties that would be considered a doctor's duties here. For example, nurses undertake check-ups and advice on treatment.

(Insert section on Staffiing Levels, especially of Paramedics):-

Health Care in Practice

This explanation of Swedish health is based on lectures and reading material provided during the visit; we also made visits to health centres and hospitals. From these we were able to gain an insight - albeit limited - into how the reality of care of the elderly matches the high ideals of the theory.

The Vasa Hospital is a 950 bed long-stay hospital in Stockholm.

Rosenlund

Rosenhåll

Uddevalla Health Centre

The immediate impression in the new or recently modernised buildings was one of lavish spending on a scale we found hard to comprehend. In Rosenlund there were 4 wards of about 25 beds in a 100 year old block. In order to maintain the charming, old exterior, modernisation had been carried out internally. This was at a cost of over £5 million for 100 places.

In other areas, for example, corridor space was almost over-abundant. The walkways were very wide and had nothing stored in them since storage space was also ample. In OT areas some of the patients looked a little lost in the enormous halls although the lighting and airiness and furnishings were most attractive.

In one room a number of patients were weaving at looms. There were about 30 or 40 desks each with a loom on, and about 4 or 5 patients sitting at their work. I could not imagine that in England there would be enough space for 30 looms, especially when only 5 are in use at any one time. And this was only one of the OT departments rooms!

In Rosenlund each patient had a small bed-sitting room. Despite the friendly and home like atmosphere with no smells or other signs of institutional life every patient that we spoke to wished that they were at home. The staff morale was high - as indeed it was wherever we visited - which provided a contrast with some staff reactions on visits to English hospitals. I felt that in many ways Sweden has enough money devoted to health care to provide many of the facilities that would be seen as ideal here - land, space, buildings, equipment, staffing levels. However, most of the theories about geriatric care and ageing that form the basis of this provision are imported from North America and Britain (with some notable exceptions such as Professor Svanborg, Professor of Long-Term Care in Stockholm,()()).

We were most impressed with the care provided and were interested to see how the problems and solutions in Sweden and England were developing along such similar lines (despite differing Resource levels).

THE SWEDISH HEALTH CARE SYSTEM:

ACUTE CARE

THE SWEDISH HEALTH CARE SYSTEM: ACUTE CARE

The main purpose of studying the acute care sector was to discover how acute hospitals served the communities in which they were placed, whether every hospital was expected by medical or public pressure or for reasons of funding to cover all specialties, and the position of medical staff in the determination of the hospital's policy. The problems being experienced in the acute sector, whether of an economic or managerial nature formed another area of interest, particularly as a means of contrast with the development of the health service in Britain.

The Philosophy of Hospital-based Acute Care

All public health care in Sweden is organised and funded by the 26 county councils. Hospitals are only a part of the services provided, but traditionally have had the lion's share of attention and resources. Until recently Swedish health care was almost entirely hospital-orientated. Hospitals were built on a large scale and intended to cater for most of the illnesses that occurred in the local population. Research into medicine and health care was hospital-based and the acute services tended to attract more doctors, prestige, and resources than any other branch of the health care system.

With a growth rate of between 4% and 5% in the money allocated to health services each year, a trend which has slowed considerably due to recent economic difficulties, large amounts of resources were available for the maintenance and expansion of the health service. It is interesting to see how the Swedish authorities are now having to come to terms with a reduction in the resources available for the development of health care, and the recent ascendancy of primary care appears to be an attempt to make the health service more cost-effective. Sweden still has an extremely high level of health expenditure in an international context but there is increasing economic competition between different interests within the country and within the care sector itself between private and public consumption. The pattern of development is thus affected not only by the change in the long standing bias towards hospital-based services but by the slower rate of economic growth than in the previous 25 year period.

Present Structure

Hospitals, however, are still a major part of the health care system. Each county has a large county hospital and usually a number of smaller local hospitals. The county councils are required by law under the Medical Care Act to provide facilities for both in and out-patient care for all acute "illnesses" including injury due to accidents.

The County Councils plan on the basis of frequency of procedures rather than categories of specialties. Procedures which are frequently required are provided in district hospitals, the less frequently required in county hospitals, and the most specialised

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in regional hospitals. Local, or district hospitals, would therefore provide basic acute services such as internal medicine and surgery and patients requiring more specialised treatment would go to county hospitals where specialties such as cardiology, dermatology, nephrology, oncology, orthopaedics, paediatrics, neurology, rheumatology, and the treatment of infectious diseases would be based. The seven regional hospitals, in Stockholm (2), Huddingë, Malmö and Lund, Örebro and Uppsala, are highly specialised and cater for vast populations. They house units for the treatment of burns and plastic surgery for example, and seem to be accorded a status equivalent to that of London teaching hospitals.

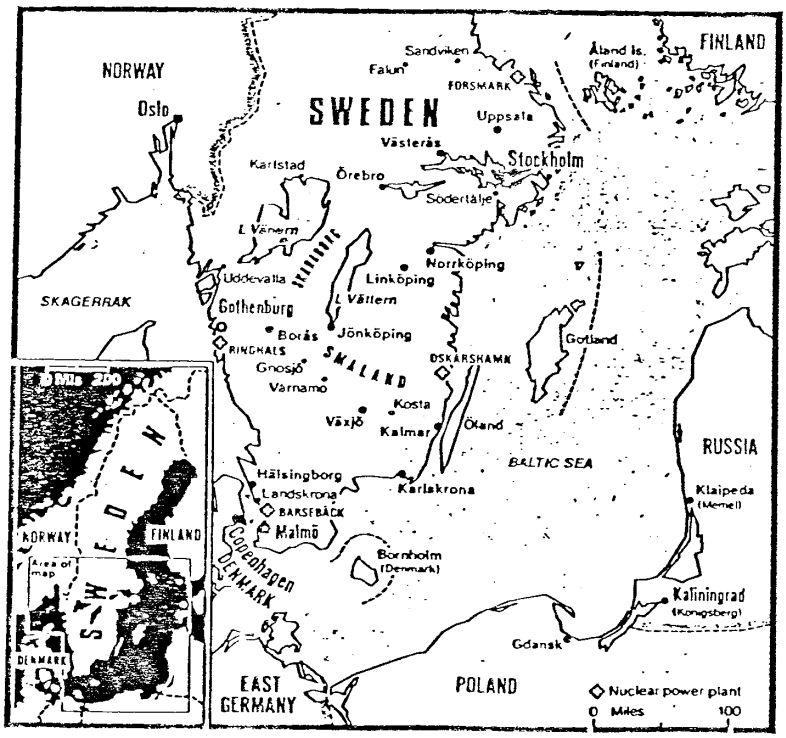

Figure 1

Politics and Acute Care

County Councils are elected bodies and therefore have a political outlook on life. Their prime responsibility is to maintain and improve the health service of the county and this task is undertaken with the considerable advantage of the power to levy health taxes on the local populace. This sounds as though County Councils have a wide freedom of choice as to how much money is spent on the health service, but political considerations aside, it is interesting to note that the levies have not risen significantly, and in some cases not at all, for several years. However, since political campaigns

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are fought on health matters when the County Councils are elected, public awareness of the health care system is heightened on those occasions. Hospitals become sources of intense local interest. It is in the interest of the County Council to provide the best and most comprehensive service possible.

A Federation of County Councils also exists which is not an elected body but a union for the mutual interest of County Councils with strong bargaining power with the State, or National Board of Health and Welfare which has state control of health care. The emphasis is on control by authorities rather than individuals such as a Secretary of State at Governmental level. Given the balance of control between the State and individual County Councils, and the administrative structure generally, there appears to be little flexibility for reorganisation of the health service in Sweden on a national basis, in contrast with its English counterpart, if the philosophy behind the delivery of public health care changes.

An Impression of Swedish Acute Hospitals

Swedish hospitals are lavish in comparison with many English hospitals. Even the older buildings which continue to be used are refurbished to an extent that would bring tears of joy to the eyes of a Regional Architect. It is obvious that a great deal of imagination goes into making acute hospitals welcoming, cheerful, and comfortable places that live up to the image of prestigious institutions. Many are built on a vast scale and although this allows for plenty of space, it also seems extravagant to the foreign visitor. Figures 2-4 showing Uddevalla Hospital, which is north of Gothenburg and provides a range of services in keeping with a county hospital, including intensive care, ENT, Accident and Emergency, psychiatry, paediatrics, obstetrics and gynaecology, dermatology, orthopaedics and the treatment of infectious diseases, give a general impression of the scale and design of a modern Swedish hospital.

It is interesting to note that the Swedes have continued to develop hospital buildings on a scale advocated in Britain over a decade ago in the Bonham-Carter Report. Limited progress emerged from the theory that 'big is beautiful' in Britain, due to the shortage of resources for wide scale capital building, a condition which has only become more acute over the years in this country. The Swedish on the other hand were relatively wealthy as far as health care was concerned and a number of large, spacious hospitals were built which are now proving expensive to run and severely underused in certain specialties. The unit for infectious diseases at Uddevalla for example (Block E on Figure 4) contains 60 beds and it is apparently unusual to see more than a handful of patients there at any one time. It was never expected that bed occupancy would be high, but when it was built it was believed that a unit of this kind must exist in case of need, rather than as a result of demand. Many of the wards at Uddevalla also have separate rooms for washing down beds in between admissions and to

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the practised eyes of British administrators, used largely to older, cramped conditions and hospitals which are not purpose-built for modern medicine, this seems an excessive waste of space. The Swedes are now facing an economic situation akin to that which the English faced several years ago, and they admit that the method of healthcare provision centred around hospitals and the size of hospital buildings are not cost-effective in practice.

Varberg Hospital in Hallands County, south of Gothenberg, is a modern purpose-built acute hospital with about 700 beds, including medical and surgical specialties, and some psychiatric beds. It is situated on the outskirts of the city. It would seem ample for the needs of the population, but it is one of two 'county' hospitals in Hallands lan. Bed occupancy is high but this is due in some measure to the fact that many more people are admitted to hospital in Sweden than in Britain. It has been estimated that Sweden has 17 beds per 1000 population compared to Britain's 7 per 1000. Since beds are available, they are used. This level of occupancy combined with high capital outlay and a large staff budget have made Varberg an expensive part of local health provision. Figure 5 illustrates the comparative costs of different kinds of health care as a percentage of the total amount and demonstrates that primary health care is still falling behind not only the emergency and acute care sector, but behind services for the chronically ill, psychiatric care, and other activities which include pathology, the blood transfusion service, pharmacy, and radiography.

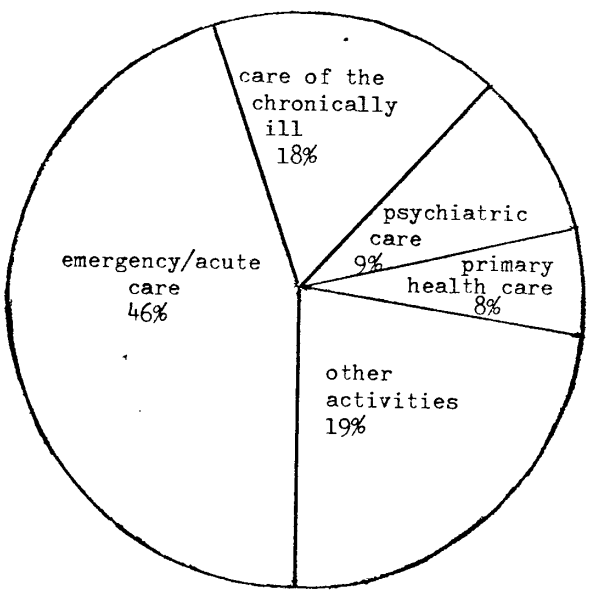

Figure 5

As with most other acute hospitals, the facilities at Varberg are more than ample to cope with the needs of the population. The diagnostic facilities in particular caught our attention. The medical unit, consisting of in-patient beds and an out-patient clinic had its own E.C.T. department, as did every other major "Unit" in the hospital. These facilities, obviously planned to cope with maximum capacity, reflect the attitude of the Swedish population to the hospital services. Approximately 50% of all visits to a physician are made at hospitals, as opposed to primary care health centres and private doctors. Accident and Emergency Departments are used by a significant number of the local population as a kind of general practitioner's surgery. The main force in Swedish health care planning is now geared to primary health care, to getting people to use the health services based in centres in the community, but it will take a long time to change the habit of referral direct to a hospital. Accident Departments and Out-patient clinics were built to cope with the demand on the services of hospital-based doctors. In consequence they are large, extensively equipped and heavily staffed. Searching for a characteristic that would make Varberg be seen to reflect the needs of the locality, I came across an interesting example in the Accident Department. In a covered courtyard where the ambulances set down patients, was a roped-off area containing a rubber floor covering, a metal bed and many large plastic containers. Everything was covered in yellow and black tapes with messages of dire warning of danger. It transpired that there is a large nuclear power station just outside the city and very near the hospital. Living in the daily expectation of a major incident that will seriously affect the hospital, staff in the department live in a state of readiness to receive injured workers from the power station so that they can learn how to cope with badly irradiated and contaminated victims. This again seems to be indicative of the historical contrast in the availability of resources for health care between Sweden and Britain, where major incident planning tends to revolve around priority-setting for areas normally in use rather than those kept for the occasion.

Sodersjukhuset in Stockholm is an even larger acute hospital with well over 1,000 beds. It is so massive that it has been divided into sections each with an administrator and a set of appropriate clinic chiefs, i.e. consultants. A tour of the Accident Department there illustrated the size of the alcoholism and drug abuse problem in Sweden. The majority of patients coming for treatment were reckoned to have those problems as the root cause of their need for hospitalisation. Most accident departments have an area set aside for the "drying out" of such patients. Where an English Accident and Emergency Department would have one wash out/recovery room, a similar Swedish Accident Department would have several. Large modern, purpose built acute hospitals are the norm in Sweden. Sodersjukhuset is unusual because it was built just prior to the second world war. With typical Swedish meticulous planning, it was decided that with the threat of war looming, the hospital should be constructed so as to be able to continue functioning even though the upper levels sustained damage. Below ground level, there is a replica of the nine floors above. These are not in use now, although the administrative directors have a gleam in their eye which says "expansion".

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With funds becoming more difficult to obtain though, it is unlikely that this underground hospital will be used. It seemed to us that the facilities above ground level were already under utilized because of excessive capacity. Figure 6 shows the hospital statistics in 1980 for Danderyd, another acute hospital in Stockholm with slightly fewer beds than Sodersjukhuset, and while the bed occupancy rate does not suggest severe under utilization, it is interesting to note the scale of provision compared with the number of admissions and average length of stay.

The National Institute for the Planning and Rationalisation of Health and Social Welfare Services (SPRI), which was created in 1968 to provide advisory services for the county communes on a consultancy basis, organised a study on the optimum size of acute hospitals It was found that the lowest costs were incurred in hospitals with 300-400 beds which conflicted with the trend towards large units of about 1,000 beds, and it was further discovered that the space planned per patient far exceeded that in other countries, with a norm of $40m^2$ per patient compared for example with $19m^2$ in Britain. The Swedish authorities are now saddled with a number of large, underused, and expensive buildings and the intention in the future is to look to phased development and upgrading of existing facilities in an attempt to rationalise supply and demand. The idea of nucleus hospitals has generated a great deal of interest and the British model, Newnham, has been included in the study on economies of scale.

Public Expectations and Usage

Despite the current trend of the emergence of primary care as the favoured way of caring for the health needs of the population, the Swedish public still tend to use hospitals as the first point of contact when there is a health problem.

The older generations have grown up with the idea of the hospital as the proper place to see a doctor. The British system of General Practitioners is not the norm in Sweden. People can choose which doctor to go to in their local hospital if they consider themselves to be ill. This system of self-referral is fascinating. It raises questions about the health awareness of the public. To allow self-referral is to suppose that the patient knows what is wrong with him and will choose the right kind of specialist to treat his illness. It verges on self diagnosis and our suggestion that this might lead to delays in obtaining the correct treatment which might in turn lead to serious consequences for the patient was accepted as a real problem by many health care staff. One also wonders whether self-referral to a specialist would exacerbate the problem experienced in Britain of patient pressure on medical staff to offer expensive drugs or diagnostic tests which would not ultimately be of benefit because of public expectation. The important counselling role of general practitioners would appear to be bypassed by the tradition of self-referral in Sweden. Other difficulties arising are that case notes are not always available to the doctor on a first visit so treatment has to be given with no prior knowledge of that administered previously. Continuity

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of care is a problem that the Swedish Health Service is trying hard to solve. By having a "family" doctor in primary care centres, continuity can be achieved to a greater extent than in the present hospital system. This multiple choice of doctors usually occurs only in city areas and the relative scarcity of doctors in most minor areas mean that people tend to use the same doctor for successive episodes of illness. Despite the system of self-referral, if a patient presents himself at a hospital asking for treatment it often happens that he will not see the same doctor as he did on an earlier visit. Patients frequently complain about this difficulty with repeated visits. Treatment in the same speciality does not mean care by the original doctor. As in Britain another frequent patient complaint is that waiting times are too long. The Swedish health care system seems to have paradoxes and this was probably the most difficult to fathom - why waiting times were felt to be excessive if Sweden has such a high number of acute beds. One answer may be that waiting lists tend to build up in heavily populated urban areas because of the size of the population. Another might be that the proportion of elderly in the population is rising steadily - as in Britain elderly patients use the majority of acute beds more frequently and for more prolonged periods than younger people.

There was no opportunity to discuss with hospital patients what they thought of the health service. This omission was for a number of reasons, mainly reluctance on our part to ask such questions when we weren't sure it was the tactful thing to do in front of our hosts. Professor Borgenhammer talked to us about the relationship between the public and the acute health service. People continue to use hospitals as the route to a doctor but are critical of the shortcomings of the service. Growing public demand for health care has helped bring about a re-think of Swedish health care strategy.

Doctors in Acute Care

There are some 42 major medical specialities covered by the health care sector, and approximately 200 sub-specialities. This diversification is considered by some health care experts to be a weakness in the system. The very small numbers of doctors in some of the specialities make it very expensive. As in Britain, every senior doctor who has a "clinic" expends a great deal of resources and in the very specialised clinics vast sums are in consequence expended on relatively few patients. Some commentators feel strongly that a political decision must be made to incorporate some of the minor specialities into the main body of acute medicine to make the total system more cost effective.

This tendency to multiply specialities is held in check to a certain extent by steering from a group of central authorities. The National Board of Health and Welfare regulates the number of posts allocated to specialities. It was interesting, however, to hear one hospital director say that in practice if a hospital decides to appoint another specialist and duly installs him, funding by the county council is not usually withheld,

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due in part to political considerations and the desire to provide the best possible health care, and this funding in turn usually prevents the National Board from taking steps to declare that the appointment cannot be approved. This turning of a blind eye is firmly squashed in the document that is a statement of Sweden's future plans for health care "Facing the 1980's", by Petersson and Ichimura, University Hospital, Uppsala. The authors recommend that there should be a reversion to large departments in both medicine and surgery.

Swedish doctors tend to concentrate on acute specialities, with general practice coming a poor second. This attitude will have to change if the plans to boost primary care are fully implemented. Acute care does not figure in the top priorities of Swedish health service planning. Current policies reflect the needs of anticipated future demand, and the priority fields are seen as general practice, psychiatry and long term care. Recently the allocation of posts has placed increasing numbers of doctors in out-patient care, and in particular in General Practice.

The senior medical staff are however involved closely in the planning of future services in the acute sector. The chief physician of each clinic is responsible for assessing current provision and planning a 'protocol' for his clinic which will set out plans for the development of the service over a period of 10 years. This will usually include the views of senior nursing staff, and the protocols are discussed with a multidisciplinary body of chief physicians, chief nurses and senior health officials. A representative is nominated from the group to attend a county commune conference on the future of the acute services in the area and a consensus decision is sought on the final plan. It is interesting to speculate whether the emphasis will shift to short-term operational planning as the availability of resources for large scale development decreases.

Hospital Management

The Swedish health care system is a national one, but the 23 county councils who implement and fund health care do not have to conform to a national pattern in the way hospitals should be run. Our impression was that though there were local variations, the acute hospitals were run as though they were business concerns. Each had a hospital director who was in sole charge of the management of the hospital. They did not have authority over the way medical staff treated patients but did have a say in the budget management of the clinics. In Hallans Lan as in the other counties, the county council controlled and was responsible for all medical facilities. Hospitals and other facilities were governed by a Health Board, a committee of the county council. The county council controlled by means of its authority to allocate resources and its legal responsibility to provide adequate health care. Resources were allocated to the hospitals through a year long budgetary cycle.

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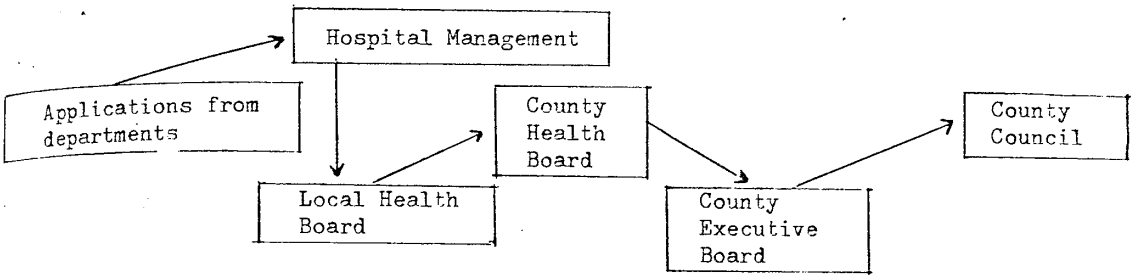

(Figure 7. Courtesy of Varberg Hospital)

The hospital director of Sodersjukhuset in Stockholm explained the administrative structure of a District, of which there are five under Stockholm County Council. The Chief Executive, known as the Managing Director, and his Deputy, have five District Administrators under them, plus a Secretariat and supporting Divisions. This structure has similarities to the organisation of a Regional Health Authority. A District covers several hospitals over a whole area. A typical District structure would be this:

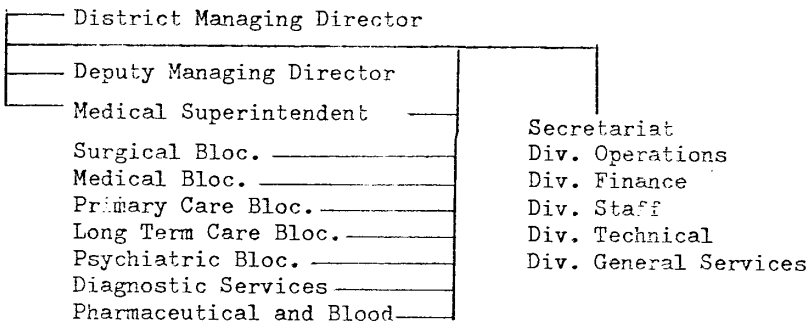

Figure 8

Each "Bloc" would have a staff consisting of an Administrator, a Nursing Director, supporting Administrative staff, a Medical Director and the appropriate number of clinic chiefs. The unit decides on policies for the hospital, regulates staffing levels, monitors budgets and ensure the service meets requirements. My impression was that the Swedish hospitals had a system of management similar to the type that had come about in the National Health Service since the last reorganisation. Like our new "Units", the Swedish acute hospital has Managers who are independent in the day-to-day running of the unit, who are responsible for the efficiency and effectiveness, both in economic and patient care terms, of their hospital. The Director answers to the District Managing Director who answers to the county council. The three tiers of responsibility match those of the reorganised N.H.S.

Unlike the British style Administrator, the Swedish hospital director is an executive who has the final say in decisions. The Medical Superintendent is an equal, but the Nursing Director is undoubtedly a subordinate. The Varberg Hospital Management Team could not be equated with a unit team in a British hospital. Responsibility for decisions lay entirely with the Director.

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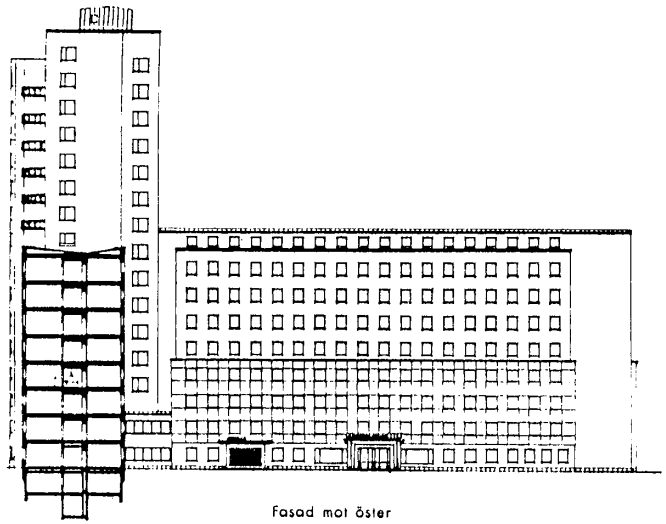
The concept of leadership is obviously an important one in Swedish hospital management. Heads of Department are referred to as "leaders" and seem to be expected to take a positive and highly active role in the managing of their departments. The senior doctors, the equivalent of British Consultants, are known as clinic chiefs, and not only had clinical responsibilities, but budgetary responsibilities as well. Each hospital we visited had a highly developed and high powered finance department, the leader of which was known as the Economic Director. The analysis of financial information was considered vital to the maintenance of the correct level of expenditure for not just the hospital as a whole, but for each clinic.

Conclusion

The Swedish acute hospitals we visited were large, complex and well maintained buildings full of expensive medical technology and run by managers who operate as executives. Direct political control by the county councils must be an incentive to keep standards high so as to keep the consumers and the medical professions satisfied, and a spur to keep the expenditure of resources on a tight rein. The acute services cannot expect the high level of funding they used to enjoy to continue now that health policy has placed primary care as the most important area of future expansion in the health service. It is unlikely that acute services will have to contract, but they will have to adapt to the needs of a radically different way of health care from the one in which they were first planned to serve. It would be an interesting exercise to visit Uddevalla, Varberg, Sodersjukhuset and Danderyd in ten years time to assess whether the current attitude towards the acute sector and the need to make this more cost-effective has been translated into practice.



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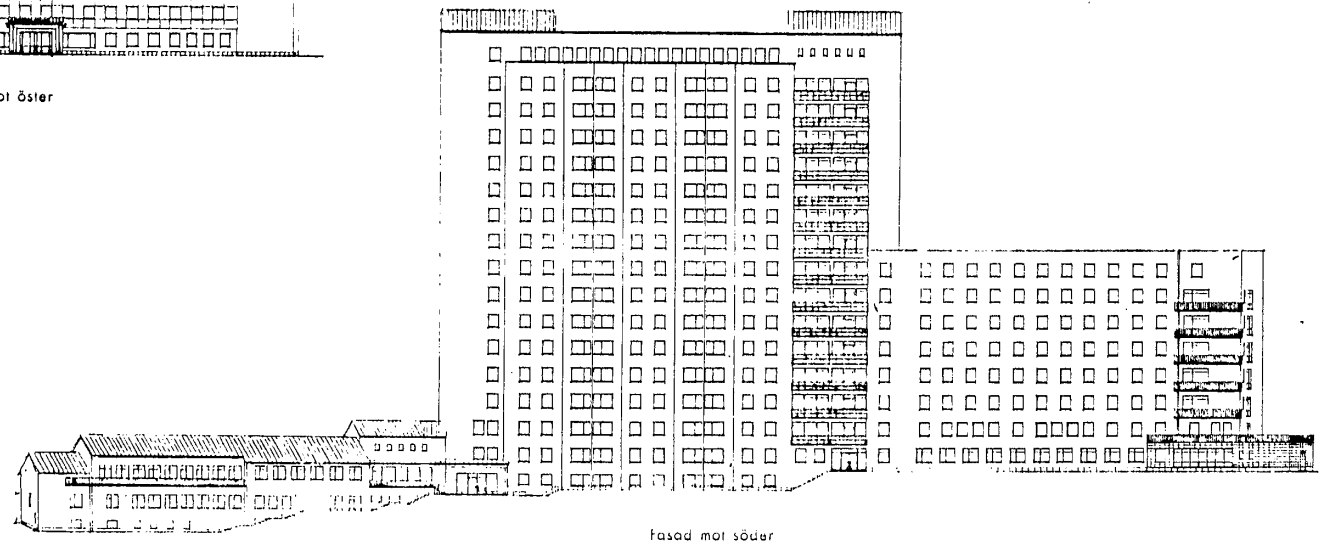

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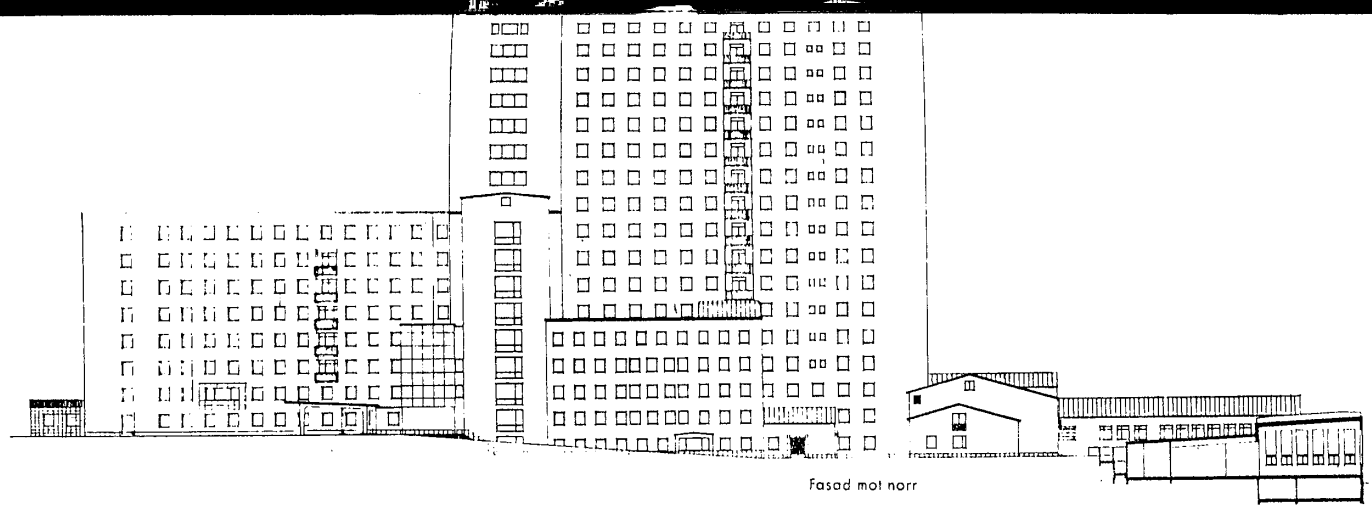
Figure 2



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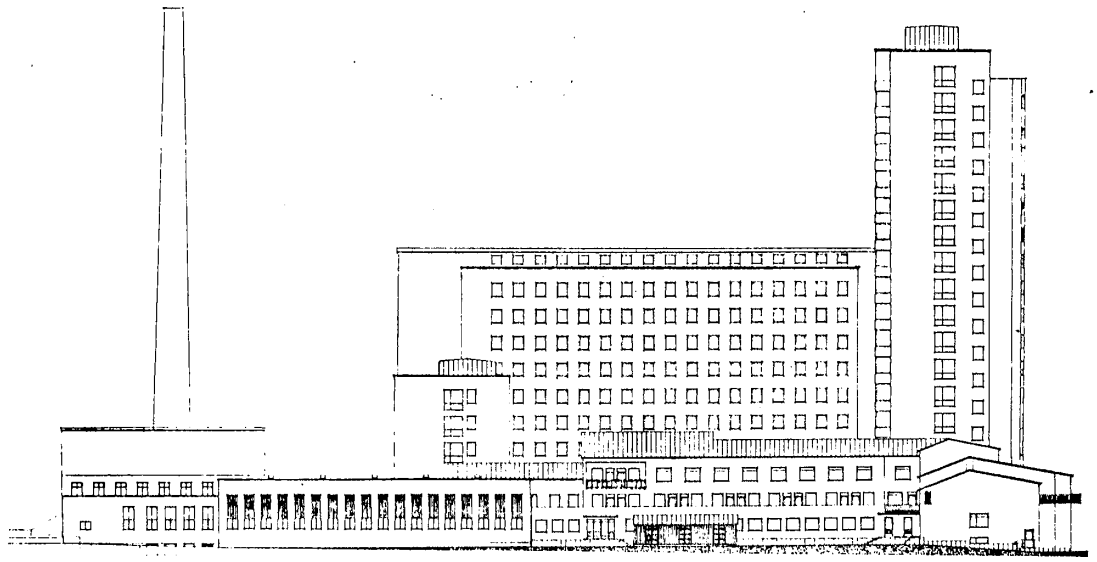

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Figure 3

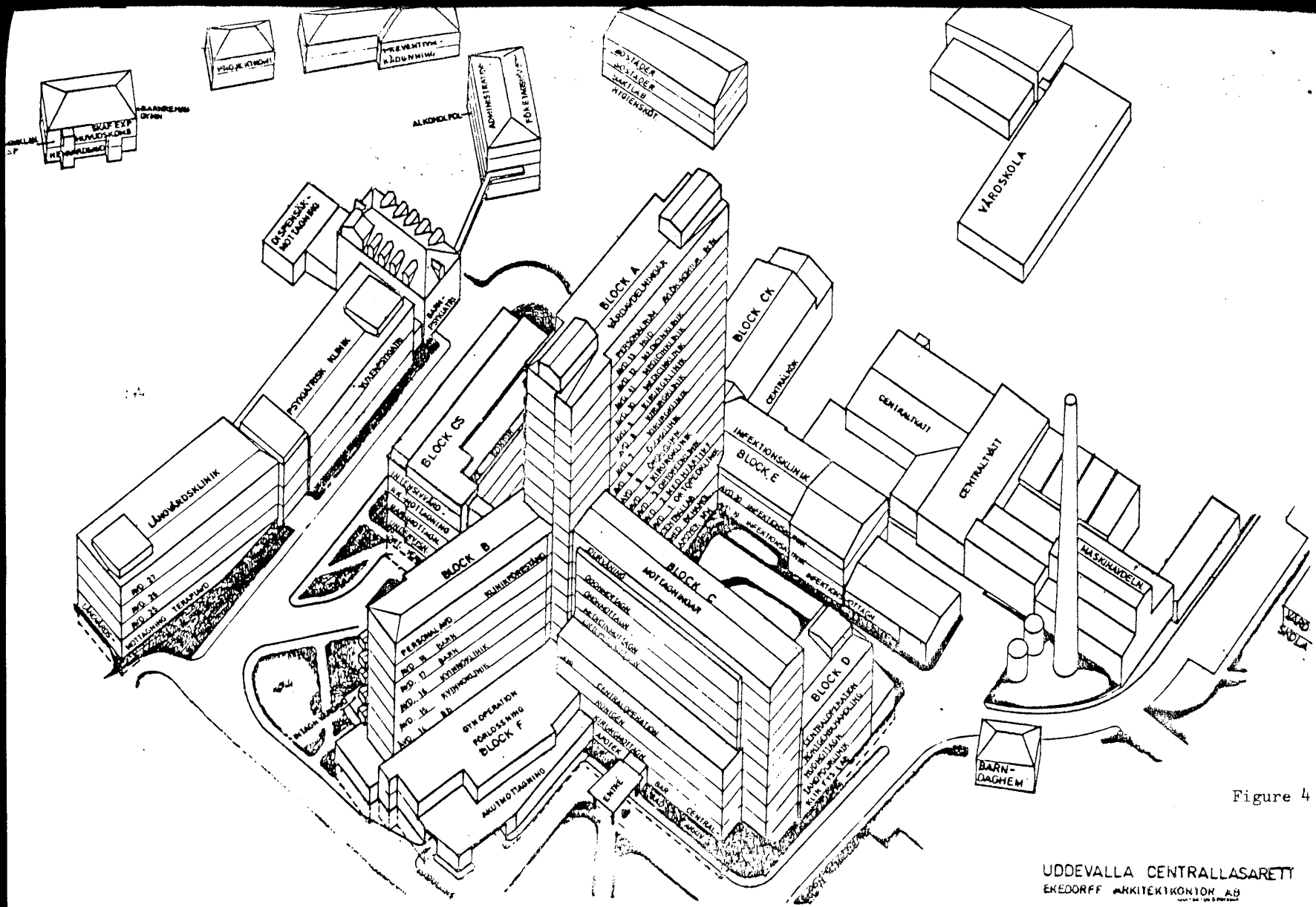


Figure 4

UDDEVALLA CENTRALLASARETT
EKEDORFF ARKITEKTKONTOR AB

DANDERYD HOSPITAL 1980 STATISTICS

Department/ Discipline	Beds	Admissions	Patient days	Occupancy rate % x)	Average length of stay	Outpatient visits
Internal medicine	186	4.443	54.947	95,4	9,4	47.707
Surgery	106	4.094	34.057	89,5	8,3	39.761
Urology	40	1.284	9.881	77,0	7,7	9.302
Gynaecology	73	3.436	17.345	73,5	5,0	
Obstetrics	71	4.039	25.677	99,7	6,4	
Internal medicine, children	63	2.430	14.097	89,0	5,8	13.646
Ear, Nose and Throat	20	1.111	3.093	71,9	2,8	14.139
Orthopaedics	75	2.235	22.325	91,5	10,0	36.445
Long-term Care	293	1.104	105.698	98,6		981
Psychiatry, adults	171	4.157	53.660	97,4		36.003
Psychiatry, children	18	119	3.626	64,7		4.222
Rehabilitation	22	167	6.108	84,6		11.944
Radiotherapy	20	397	5.837	86,9		20.032
Infectious diseases	93	2.024	17.601	88,7	8,7	9.328
Emergency/ Admission ward	(21)					
Anaesthesia and Intensive care	(36)					
Internally transferred patients deducted		(1.518)				
Clinic:						
Eye diseases						24.677
Logopedics						1.976
Skin and Veneral diseases						21.899
Audiology						5.056
Rheumatology						3.594
Neurology						2.180
Dialysis unit						1.090
Total	1.251	32.403	373.952	92,6		328.375

x) Percentage of the yearly average of available beds.

Figure 6

SWEDISH HEALTH CARE TODAY

INTRODUCTION

A group of thirteen National Trainees visited Sweden earlier this year under the auspices of the King's Fund College; the study tour within Sweden was organised by the Nordic School of Public Health. The tour visited primary health care centres, hospitals, various administrative departments and other areas of particular interest to the group such as a trip to the Volvo works. These visits covered topics as varied as planning, industrial relations, health legislation and employment legislation, medical audit, cost effectiveness hospital design, and the effect of standards of living on health.

Sweden is the fourth largest European country with 60% of its land being forests and lakes, and with a population of only 8.3 million (roughly that of London). The study tour was based in and around Stockholm (pop 1.4 m) and Goteborg (pop 0.7 m) the two major cities. Most of the remaining 75% of the population live in the southern part of Sweden with only about 10% scattered thinly in the far-northern regions. Sweden is a constitutional monarchy with a parliamentary government. The King, Carl XVI Gustaf, has only ceremonial functions, and is a very popular figure. Parliament has only one chamber and is elected for a three year term by a proportional representation system.

An introductory day was spent at the Nordic School of Public Health in Goteburg, which is an institution for higher education and research in public Health in the five Nordic countries - Sweden, Norway, Finland, Denmark and Iceland. The aim is to achieve a greater level of activity by combining the resources of money and

expertise of the five nations. This policy of co-operation is reflected in the freedom of movement of health care staff between the Nordic countries, for example a licensed doctor can practise in any country.

After a welcome by the Dean, our host Professor Edgar Borgenhammer, and Dr Marten Legergren explained the organisation of the health services in Sweden, how the patient enters the system and some of the current trends and problems in Sweden.

Like the UK Sweden's health system is financed largely from public sources (see Table I) with a comparatively strong emphasis on insurance. The remaining 8% is raised by the fees and charges paid by the patient, which are laid down by regulation eg: £4 on a visit to a doctor or £4 for a prescription.

TABLE I: FINANCING HEALTH CARE

	SWEDEN	UK
TAXES (County/Regional/ National)	79%	87%
COMPULSORY INSURANCE	13%	5%
CHARGES TO PATIENT	8%	6%

In 1975 8.5% of the Swedish GNP was spent on health[1] (see Tables II and III). However, despite this and the enormous growth in expenditure on health that the figure represents, the effects of international economic difficulties are now beginning to reach Sweden. In some years the rate of growth has been as high as 5%,

now the "harsh reality" of 1% growth has to be faced - and with the added problems of running pension and welfare schemes which are highly dependent on rapid growth. In the 1970's large amounts of money were allocated to health, but it is by no means self-evident that resources will be so readily available in the 1980's.

TABLE II: GNP SPENT ON HEALTH (in %)[2,3]

	SWEDEN	UK
1950	3.4	3.9
1955	4.1	3.4
1960	4.7	3.8
1965	5.6	3.9
1970	7.4	4.3
1975	8.5	5.5
1976	8.8	
1977	9.8	5.2

TABLE III: INTERNATIONAL RANKINGS IN % OF GNP SPENT ON HEALTH (1975 figures)[4]

Country	Rank
W.Germany	1st
USA	2nd
Sweden	3rd
UK	10th

Another similarity with the NHS lies in Sweden's current interest in organisational and structural changes. The health service is very much more de-centralised than in Britain (see Diagram 1).

This is partly due to the strong tradition of local self-government which reaches back far longer into the past than the century of legislation. The basic unit today is the County Council, an elected body of up to 150 members which administers the health services for about 250,000 people. There are 23 of these councils and 3 municipal councils. Thus "electioneering" and politics inevitably influence health issues in a way rarely seen in the NHS; conversely there is, at least in theory, far greater public accountability with no need for 'watch-dog' bodies to represent consumers since the county councillors are directly elected every three years. In a way which is unique in international terms these County Councils levy taxes to finance their public health services. The services provided are completely comprehensive and cover both in-patient and out-patient health care, the public dental service, care of the mentally handicapped, and the training of certain health care personnel. Their ambit will widen in the future as county planning and public transport functions are transferred to the Councils. The work of the Councils is carried out by a series of committees and by local officers, in a similar fashion to our Local Authorities. Each County Council sends representatives to the Federation of County Councils which co-ordinates the response of all the county councils to central bodies, co-ordinates terms of employment and salaries, and stimulates discussion and the production of information on matters of public interest. The only medical care not directly provided by the county councils are the so-called Regional specialities which are state run. The catchment areas cover a population of about one million and Regional hospitals are places of highly specialised services, research and education. Brain surgery, radiotherapy and certain diagnostic laboratories

are among the Regional clinical services while collection of data, the development of computing and reviews of hospital utilisation are other areas of interest.

On our visit we also discussed the role of central authorities. The Ministry of Health is the body which carries out the decisions of Parliament. However, advice is received from a variety of central sources including the National Board of Health and Welfare (NBHW) and SPRI (the Swedish Health Planning and Rationalisation Institute). Each has its own particular sphere: the NBHW supervises and inspects the provision of all health and pharmaceutical services and issues general policy statements while SPRI produces research programmes and guide-lines on planning and on buildings. The training of doctors comes under the universities; the Ministry of Education and the NBHW (which regulates staff appointments). The training lasts 7 years, $5\frac{1}{2}$ of which are spent in preclinical and hospital training and 21 months of which are based in General Practice. A further $5\frac{1}{2}$ years of specialist training follows for hospital doctors with a further $3\frac{1}{2}$ years for GP's. Nursing and paramedical training is undertaken by county councils. It is important to note that the NBHW is <u>not</u> an organisation equivalent to our DHSS, it is independent of government - for example a report on Swedish health services in the 1980's[5] has a standing in Sweden similar to that of our Royal Commission Report of 1979. Recently though its impact has been undermined to some extent by the growing influence of the "semi-official" Federation of County Councils - this non-elected league has strong bargaining power directly with the State. One interesting feature of this arrangement is that there is no coherent and decisively laid-down national

health policy, and one of the consequences of this has been the succession of "vogue" changes (for example on mental handicap policy). There are few national "campaigns" and most policies are de-centralised and dependent on local resources.

SPRI has close links with both the Federation of County Councils and the government (being funded by these bodies in the ratio $\frac{2}{3} : \frac{1}{3}$ respectively). There are three main sections and the work of each is shown in Table IV.

TABLE IV: THE WORK OF SPRI

DEPT OF PLANNING AND ORGANISATION	TECHNICAL DEPT	GENERAL ADMIN
i Organisation of Primary health care, health centres + hosps	i Construction + evaluation of primary care facilities + hospitals	i General and legal matters
ii Admin methods + Information systems	ii Building standards + materials	ii Extensive co-ordination + publication of projects
iii General planning	iii Biomedical engineering	iii Information services + reports
iv Nursing admin + training	iv Supply services	iv Banking services
v Health economics		

In the discussion of structure in the Swedish system this paper has so far concentrated on 'institutional' and administrative structure. We will now turn to the human side of the system - both staff and patients.

There exists a far greater tendency than in Britain for patients to go direct to specialists and the system seems to rely heavily on this "self-diagnosis", which in over 90% of cases is direct to a hospital. This coupled with a high degree of medical specialisation raises many problems - for instance patients can end up with many sets of medical records or can be under many different doctors for various forms of treatment, each working independently of the others. It was discovered recently when an elderly couple died that their house contained 200 bottles of medicine prescribed over three years by 17 different doctors. Of those who 'refer themselves' to hospitals, one-third go to an A + E Department while two-thirds go direct to a specialist clinic. While obviously the county councils have slightly differing policies overall this 'self-referral' system - only 12% of doctors work in general practice. It is hard to discover why this should be so; especially since General Practitioners are paid on the same scales as hospital doctors and Swedish Health Centres are extremely well provided centres of technology. It seems that the answer may lie both in the prestige of hospital practice and in public expectations of primary care. In the meantime, the system at present only serves to increase the number of "primary care" cases being presented at hospital departments. This in turn leads to very long waiting times for out-patient appointments and is linked to the noticeably 'bed-orientated' approach to health care. (See Table V)

Apart from these issues which arise from consideration of the way in which Swedish care is structured, lecturers from the Nordic School also discussed wider trends and patterns in Sweden. Her

particular problems lie in her ageing population and the provision for their needs; the changes in the composition of the work-force; the pattern of small households with weak social links or no tradition of voluntary care; and the universal problems of technologically induced demand and public expectations. In our visits we encountered examples of all of these trends and this account will discuss each in turn.

TABLE V: COMPARISONS OF PROVISION (per 10,000 pop)[6,7]

	SWEDEN	UK
DOCTORS/10,000	17.1	18.6 (14.9 hospital 3.7 GP's)
% CHANGE 1960-1975	+80	+25
TOTAL NUMBER OF HOSPITALS 1977	843	2241
GENERAL HOSPITALS	110	860
TOTAL BEDS/10,000	152.4	89.3
ACUTE BEDS/10,000	80.6	40.0
% CHANGE IN TOTAL BEDS, 1960-1974	-2.3	-14.4
PATIENT ADMISSIONS/ 10,000 1977/8	1820	1177
1950	1130	640
DRUGS AS % OF TOTAL HEALTH EXPENDITURE	9.0	12.7
DENTISTS/10,000	8.6	3.2
NURSES/10,000	59.1	71.5

The general question of demography and the problems posed in Sweden by her population structure are highlighted in Table VI (below).

TABLE VI: TO SHOW POPULATION DISTRIBUTION IN SWEDEN & (PERCENTAGE OF TOTAL)

AGE IN YEARS	DATE		
	1970	1982	1994
0 - 14	21	19	18
15 - 44	40	42	40
45 - 74	34	32	34
OVER 75	5	7	8

There are two important factors which are not drawn out in these figures; the first is the very rapid growth in the number of the very old (ie those aged over 80). The future picture in Sweden is of a society with a very high proportion of old folk and very few children. Sweden has an even higher geriatric population than Britain; and the care for these people is far more dependent on institutions. More than 12.5% of the Swedish population aged over 65 is under an institution, while in Britain the figure is 6.0% and in France 3.8%. The second factor of interest is the high proportion of immigrants in Sweden (1.1m out of the population of 8.3 m in 1981. The influx of immigrants accounts for more than half of the population growth; in the past many have come from Finland but the proportion of those coming from the Mediterranean and third World countries is increasing.

Other changes in society are becoming evident, such as the increasing number of women in the Swedish workforce and the changing pattern of households. For example there is a high level of

single-person households ($\frac{1}{3}$ of all households) while few old people live with their children and most rely not on familial but on public care. Since the role of voluntary care is very much lower than in Britain and since the number of women who work in the care sector is high the challenge to both expand the labour market and to provide more care publicly is strong. To tackle the latter either male involvement in the care sector should increase or working hours should be altered to take more account of working women. The changes in Sweden are backed up by legislation such as the separate taxation of husband and wife and the provision of child care facilities.

While awareness of health issues and health education in general is higher in Sweden than in Britain this is exceptionally marked in the question of women's health. However anomalies arise such as the fact that while mammography is provided on demand the Swedish breast cancer rate remains the highest in the world. All preventive, counselling and child health services are available free on demand. There are high child allowances, and benefits and leave available for both fathers and mothers. Breast feeding is encouraged but home deliveries are rare and seldom encouraged. Family planning advice is also free and birth control provided under the health services (however, interestingly, Depo Provero the injectable contraceptive is used in Sweden but <u>not</u> sent to the Third World).

Another area of concern in Sweden is that of "induced demand" for health care. Traditionally a lot of money has been spent on

health in the past, and the high-cost care provided is now more difficult to fund despite public expectations of high technology medicine. Sweden with a high proportion of GNP and the world's highest per capita expenditure on health finds herself particularly hard-hit by the changing relationship of prices of services and goods; by shorter working weeks and other personnel and welfare policies; and by technological and professionally initiated demands. The first assumes ever increasing productivity and does not always come to terms with the fact that providing a constant level of service will cost more in the future. Meanwhile changes in personnel policies lead to increased expenditure on such items as training or providing additional holiday cover or even building into the system provision for a higher proportion of part-time working. Lastly Swedes not only expect but demand very high standards not solely of "care" but of environment and technology. Resentment can be widespread when a high level of service is lacking - partly no doubt because the Swedes see such a direct link between the high taxes they pay and the services they benefit from. The provision of certain technological machines eg CAT Scanner is twice as high as in Britain, reflecting these expectations. We noted that the buildings and equipment throughout our visit were of a uniformly lavish standard, and in many cases over-lavish. There was a pleasant feeling of light and space but often in buildings that were obviously under used. It seems that projects were undertaken even where the surrounding population did not actually need the service provided.

These questions faced by Sweden will not simply fade away of their own accord; inevitably some of the issues raised will increase in

importance. As resources gradually become less readily available than in the past 'taking stock' will occur and is indeed beginning to occur within Sweden. The goals of equal access (both in geographical and income terms) and equal opportunity are being re-emphasised and another major aim is to solve problems nearer to their source. This implies not only engaging in further preventive measures and placing greater responsibilities in the hands of the population themselves but in tackling the whole general condition of life including the social framework. A study of mortality patterns indicates that lifestyle has a far greater impact on mortality (and hence by implication health) than the "health system" (see Table VII).

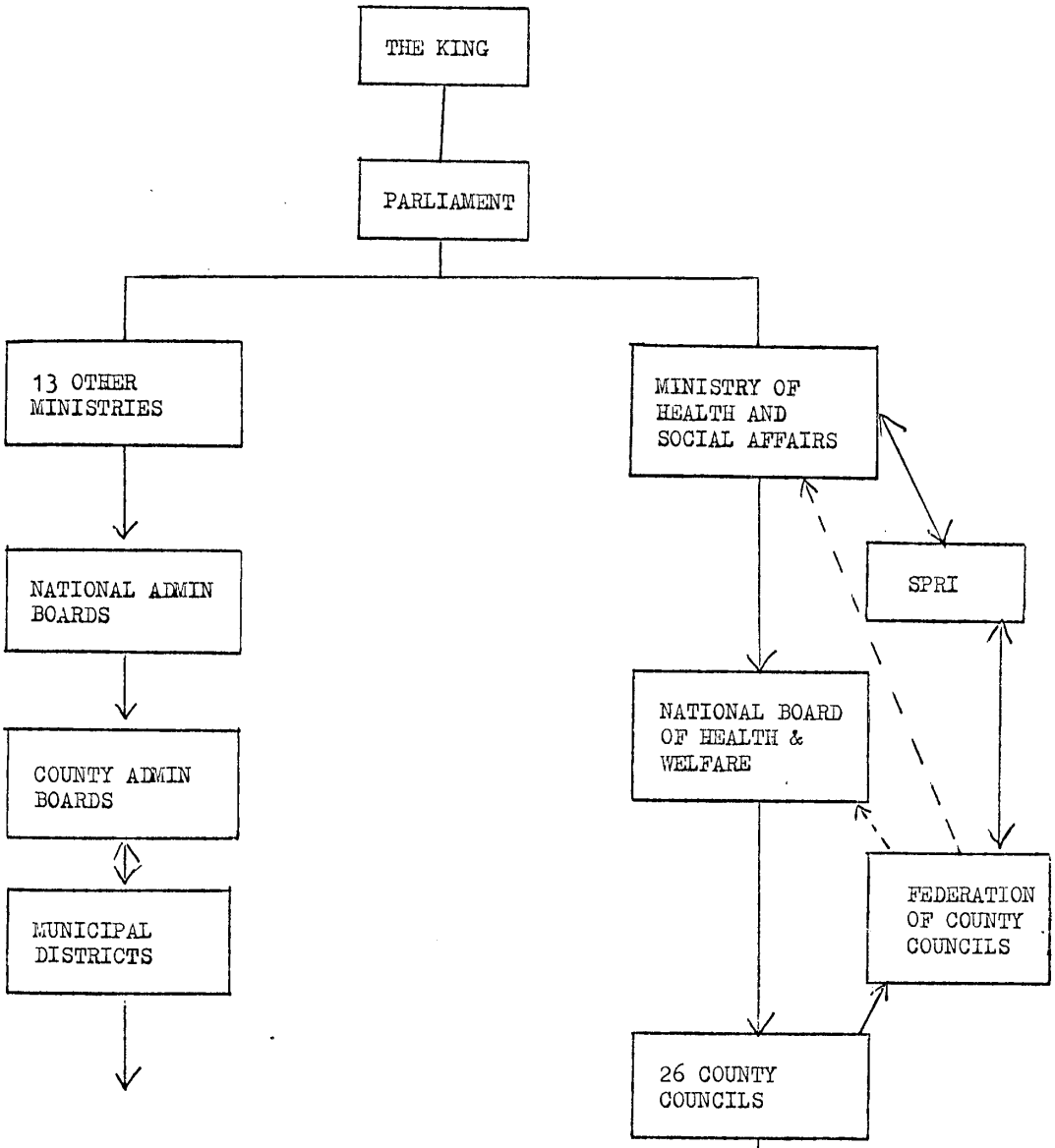
TABLE VII: GEORGIA STUDY OF MORTALITY PATTERNS

FACTOR	% EFFECT
LIFESTYLE	43
BORN FACTORS	27
ENVIRONMENT	19
"HEALTH SYSTEM"	11

This very "broad-brush" approach is embodied in the changing legislation to be introduced in 1983; currently the County Councils are responsible only for medical treatment while the 'municipalities' cover social service and environmental matters, while prevention is only undertaken as a voluntary commitment. In 1983 a legal responsibility for all aspects of preventive medicine including health education will rest with County Councils as part of an attempt to reform the whole gamut of social welfare legislation to meet the needs of society "the social welfare situation of an individual or group should be considered in relation to their

whole environment" (9). The divide between primary and secondary care should be bridged, and closer liaison in the planning of both health and social services should, in theory, lead to the provision of ever-more effective health services. This brings us back full circle to the introductory discussion. Adjusting to a slower rate of growth in the economy as a whole will lead to increasing economic competition between different interests, not only 'health' vs 'other fields of government expenditure' but between health sectors for example 'hospital' vs 'primary care' and probably most significantly between 'new' vs 'existing' activities. The challenges presented by the economic climate have so far caused a re-statement of a belief in, and commitment to, the goals of the 'welfare state' and this coupled with a high awareness of health issues led us to suppose that the Swedish health system will be able to rise to meet these challenges.

DIAGRAM 1: TO SHOW THE SWEDISH STRUCTURE AND THE RESPONSIBILITIES OF MUNICIPAL DISTRICTS AND COUNTY COUNCILS



RESPONSIBLE FOR:

HOUSING
EDUCATION
SOCIAL SERVICES
ENVIRONMENTAL HEALTH

RESPONSIBLE FOR:

IN-PATIENT & OUT-PATIENT
HEALTH CARE
PUBLIC DENTAL SERVICE
MENTAL HANDICAP
TRAINING PERSONNEL

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