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Mapping Household-Based Health Security – The Case of Sweden

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In spite of good health indicators and an overall good coverage of health services and universal insurance coverage, a number of problems have challenged Swedish health policy in recent years: demographic shift towards an elderly population, increased occurrence of minor mental illness, increased long-term sickness absence. As responsibility for these problems are shared by several sectors in society, increased efforts of collaboration between sectors and authorities have been made. The paper reviews some of these efforts: the reform of the care of the elderly, the mental healthcare reform and various reforms involving health services, social services and social insurance. Some of the reforms have had a major impact in shifting service utilization and increasing awareness within municipalities on groups in need of care and rehabilitation. It is more difficult to find effects on patient outcome. Also, while shared responsibilities may have overall positive effects, some groups risk falling between the stools. Thus, while housing and home care have been improved for large groups, critics have pointed out lack of medical attention and long waiting lists to health services. In addition to financial incentives and organizational changes, major efforts in training, leadership and capacity building are needed to achieve efficient and cost-effective health and social services while maintaining high quality and social equity.
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INTRODUCTION

Sweden has pursued a number of initiatives over the past 15 years that seek to develop a broad health security approach to policymaking. While some of these measures have been experimental in nature, others have been permanent and system-wide. This article, after briefly reviewing the health

system context within which these efforts have taken place, examines the logic and degree of success of these various reform measures.

BACKGROUND

Population and basic health indicators

The Swedish population reached 9 million in 2004. On average, there are 22 inhabitants per sq km land area, with a high concentration of people living in the coastal regions and in the south of the country. Stockholm, the capital, is the largest city with 771,000 inhabitants in the municipality and 1.9 million in the metropolitan area. Although the pace of the demographic transition has levelled off compared to some other countries, the proportion of elderly persons is high, with more than 17 percent of the population aged 65 years or older, 5.2 percent aged 80 years or over and 2.5 percent 85 years or older.

In 2005, life expectancy at birth was 78.0 years for males and 82.4 for females, which is among the highest in the world. Also, Health Adjusted Life Expectancy (HALE), 73.3 years according to the WHO report 2004, is among the highest in the world. There has been a steady increase in life expectancy during the past 30 years. This can largely be explained by a reduction in mortality due to cardiovascular disorders. Deaths caused by injuries, including suicides and traffic accidents, have also been substantially reduced. Currently, Sweden, together with Norway and Great Britain, account for the lowest mortality due to traffic injuries in the world. Also, the infant mortality is among the lowest in the world: below 3/1000.

A less positive development is that of minor mental illness and stress-related disorders. Between 20% and 40% of the adult population report minor mental illness, and 10%–15% report that they might need psychiatric services; however, only 3%–5% have been in contact with psychiatric services. Increasing rates of stress-related disorders and work-related psychosocial problems have been reported in different surveys (Persson *et al.*, 2001; National Board of Health and Welfare, 2005).

As will be discussed below, the increasing rate of sickness absence has been of major concern during the last decades. The variation over time has been considerable during the past decades but there was a particularly strong increase in the number of persons on sick leave, especially long-term sick leave, during the period 1997–2002. The number of sick leave spells >30 days increased from 71/1000 to 167/1000 for women and from 48/1000 to 97/1000 for men between 1997 and 2002 (Alexanderson and Norlund, 2004). During the past years, the increase has levelled off, probably due to an intense

debate and increased awareness among the parties concerned, but the rate is still among the highest in Europe.

Healthcare, social services and social insurance

The Swedish healthcare system is regionally based and publicly operated. It is organized on three levels: national, regional and local. The regional level, through the county councils, together with central government, forms the basis of the healthcare system. Overall responsibility of the healthcare sector rests at the national level, with the Ministry of Health and Social Affairs and the National Board of Health and Welfare as executive body for the ministry. A number of reforms during the 1990s aimed at introducing an internal market system, giving more freedom of choice for patients and a higher degree of acceptance of private providers. Nevertheless, the main characteristics of the Swedish health system remain intact, and public support for the general welfare model is still strong (Bergman, 1998).

The 18 county councils (and 2 regions) are the lynchpin of the Swedish healthcare system. During the last few decades, county councils became the owners and became responsible for operating the major part of the healthcare system. In 1993, the 290 municipalities became responsible for long-term care and care for the elderly.

The responsibilities of municipalities include issues in the immediate environment of the citizens, for example, schools, social welfare services, roads, water, sewage, energy, etc. Besides financial assistance, social services in Sweden include childcare, school health services, environmental hygiene and care of the elderly, the disabled and long-term psychiatric patients. The municipalities also operate public nursing homes and home care.

The social insurance system, managed by the National Social Insurance Board, provides financial security in case of sickness and disability. Subsidies for dental care and prescription drugs are also paid for by national social insurance. Insurance is mandatory and covers part of individual income losses due to illness and healthcare services. The majority of national health insurance (for outpatient physician visits) is financed by employers' contributions and the rest by specific transfer payments from the central government. Private healthcare insurance is very limited in Sweden. In 2003, about 2.3 percent of the population had supplementary insurance.

Basic characteristics of health services

The funding of the Swedish healthcare system is primarily through taxes. Both county councils and municipalities have the right to levy proportional income taxes on their respective populations. In addition to these taxes, financing of health-care services is supplemented by the national government

and by user charges. The expenditure in terms of GDP was estimated to be 9.0% in 2005, including health services to the elderly provided by the municipalities as explained below.

In 2006, 72 % of the county councils' revenues originated from regional taxes. The remainder consisted of state grants (19%), user charges, (3%) and other sources (6%).

It is up to each county council to decide how to serve the population with primary care. Primary care is mainly publicly provided, but there are also private providers at this level. In addition to local health centres and family physician, primary care is provided by private physicians and physiotherapists, at district nurse clinics and at clinics for child and maternity healthcare. In 2005, Sweden had around 1000 health centres, out of which approximately 30% were run by private providers. From an international perspective, Sweden has relatively few physician contacts per person. During 2006, the number of outpatient (health centre units, hospital outpatient clinics and private providers) contacts in Sweden was 2.8 contacts per person.

Total inpatient care decreased during the past 10 years from an average of 1.6 days per person in 1994 to 1.0 days per person in 2005. The total number of beds per 1,000 population decreased from 5.5 in 1993 to 2.9 in 2005, which marks a relatively sharp decline to one of the lowest numbers in the EU15.

The number of staff employed in the healthcare sector expressed per 1,000 inhabitants declined from 45 in 1992 to 29 in 2005. While comparison over time is difficult due to changes in classification of staff, employment, working hours, etc, there has still been a considerable reduction due to structural changes in the health services, such as a shift from inpatient hospital care towards day care, outpatient surgery and primary care. The total number of hospital beds was reduced by more than 40 percent between 1993 and 2003 and this reduction has been coupled with a decrease in the average length of stay. There are approximately three physicians per 1,000 inhabitants, which is below the EU15 average. Physician density varies among counties from approximately 2.3 to 4.4 physicians per 1,000 inhabitants. Sweden has a relatively high proportion (more than 60%) of physicians working at hospitals compared to the other Nordic countries.

Current challenges

In spite of good health indicators, an overall good coverage of health services and a compulsory universal social insurance, there are several problems that, over the past one to two decades, have posed major challenges to the health services and social insurance system:

1. Increased life expectancy and the related demographic shift.

2. Increased occurrence of minor mental illness and stress-related disorders at the same time as services for the chronically ill mental patients have been inadequate.
3. Increased long-term sickness absences.

1.1. The increased life expectancy and demographic shift, with an increasing proportion of the population over 65 years, and particularly over 85 years, is a phenomenon shared by most western countries. The consequences for the health services are not yet known – recent data suggest that this may represent both more healthy life years lived, and increasing needs of care at the end of life (Rosén and Haglund, 2005; Brønnum-Hansen, 2005). As Sweden went into this transition earlier than many other countries, some reforms have already been implemented in attempts to cope with this challenge. One is a reform of the pension system, which will not be further discussed here. A second is the reform of care of the elderly, which will be discussed below.

2.2. As mentioned above, in spite of overall good health indicators, there has in recent years been an increase in the reported occurrence of minor mental disorders, such as anxiety and depression, and stress-related disorders, and also an increase in the occurrence of reported pain (National Board of Health and Welfare, 2005). Furthermore, care and rehabilitation of persons with long-term mental disorders has been debated during the last decades and several reforms in this area have been implemented.

3.3. During the period 2000–2004, the number of days people received sickness benefit or were on disability pension was equivalent to around 14% of all persons in the ages 20–64 years being absent from work on any given day. An additional 6% were unemployed or in labour market programmes in 2004. The total cost of social insurance expenses was 125 billion Swedish crowns in 2004, that is, somewhat higher than healthcare expenses the same year. The increase in the cost of social insurances has been roughly twice the growth of GNP (Marklund *et al.*, 2005), which many have pointed out as a threat to the welfare system.

DIVISION OF RESPONSIBILITIES BETWEEN PLAYERS

Main responsibilities for different players

Table 1 presents a schematic illustration of the division of the main responsibilities for different players within the Health Security system in Sweden. Three asterisks indicate the highest degree of responsibility.

Table 1. Division of responsibilities among the main players within the Swedish health security system

	Healthcare	Rehabilitation	Income transfer	Change of work
Employer		***	*	***
Health services	***	**		
Social services	**	**	**	*
Social insurance	*	**	***	**
Labour market board		**	***	***

Number of stars indicate level of responsibility, with one star the lowest and three stars the highest level of responsibility. (No star indicate no responsibility)

In recent years, the role of the employer in rehabilitation has been strengthened. The rationale is that by giving the employer responsibility for rehabilitation, it serves as an incentive to strive for a good working environment and to take care of the employed. Also, the extent of co-payment by the employer for sickness compensation has increased. The employer now pays the whole sickness benefit (around 85% of the salary) during the first three weeks of sickness absence and 15% of the compensation after that time.

The main responsibility for healthcare lies of course within the healthcare system, which is also responsible for the initial medical rehabilitation of chronic disorders. In Sweden, the municipality-based social services have major responsibilities for individuals in cases of need. They are responsible for care and services for long-term handicaps, both physical and mental. This means that the social services often have to coordinate and often buy services from other players.

The Labour market board is a governmental body, working on the central as well as the local level with multiple tasks: 1) it is a 'job-seeking market' for individuals looking for jobs as well as for employers looking for staff, 2) it serves to assist unemployed persons with tests and courses to help find a suitable job and 3) it can give support to persons who have difficulties on the ordinary labour market by offering special incentives to employers or by providing sheltered jobs.

Types of support given for different types of health problems

The types of support given to individuals by the players enumerated above vary according to the type and severity of the health problem. Table 2 makes an attempt to illustrate what types of support are typically offered for different types of health problems.

The healthcare system is good at providing care and treatment for classical diseases and medically defined conditions. As mentioned above, an increasing part of perceived health problems are conditions for which the

Table 2. Types of support given for different types of health problems

	Healthcare	Rehabilitation	Income transfer	Workers compensation	Unemployment compensation	Social welfare
Injuries	***	***	***	**		
Acute diseases	***	***	***	**		
Chronic diseases	***	**	***	**	(**)	
Mild conditions (medical, treatable)	**	***	***	*	(*)	
Mild conditions (eg anxiety)		*	**		(*)	**
Behavioural problems		***	**		(**)	***

Number of stars indicate level of responsibility for providing support, with no star indicating no responsibility and three stars the highest responsibility for providing support.

mainstream healthcare system has little to offer. Some rehabilitation units, in healthcare as well as other types of units, do have the capacity to deal with conditions such as chronic pain, chronic anxiety, 'fibromyalgia', chronic fatigue and other types of ill-defined conditions. Such conditions imply much suffering for individuals as well as a high level of sickness absence. Some problems that can be defined as behavioural, for example, personality disorders and conduct disorders, imply considerable problems on the labour market for the individual, as well as problems with family and social life. Thus, social services often become involved in these types of cases, for which health services generally have little to offer.

The Swedish system for workers' compensation in case of disease or injury incurred at the workplace has varied. Although ordinary sickness benefit does compensate for economic loss, workers' compensation in cases of job-related injury gives a higher compensation rate and for a longer time. For many years, compensation was only given in cases of accidents occurring at work. In 1977, the concept of 'work-related disease' was introduced, which led to a substantial increase in the number of claims and also to the amount of compensation granted. As it turned out to be impossible to distinguish the role of the workplace in relation to other risk factors, in for example, cardiac disorders, the ever-increasing amount of compensation granted was untenable, and a restriction was introduced, restricting compensation to cases in which a strict work-related causation could be established.

Unemployment compensation should in theory not be related to the health security system, which is why I have put the stars within parentheses. It is clear, however, that the different systems are commensurable in several ways. Persons with health problems do have problems on the labour market. The health security system is well designed to give care and treatment for illness and medically defined disorders. But persons with ill-defined

conditions and behavioural problems may not be entitled to sickness compensation, and often have problems on the labour market. These persons may have periods of unemployment, and receive unemployment compensation. The situation may also be that unemployed persons do have a condition for which sickness compensation might be applicable. The fact that sickness absence is much higher in regions with higher unemployment is one of several indicators that sickness compensation is actually granted in cases where unemployment compensation would be more appropriate. This phenomenon creates several problems, among them, the individuals are maintained in a sick role and the incentives for seeking jobs are abolished.

EXAMPLES OF INTEGRATION STRATEGIES FOR HEALTH SECURITY

Collaboration between services has long been promoted in different ways by governmental bodies. In the 1970s and 1980s, many attempts were made to strengthen the collaboration between healthcare and social services. Projects were set up in which primary healthcare and social services within a given area were given incentives to collaborate within teams, common premises and for specific purposes, but with no formal political or economic partnership. Some of these projects, such as Tierp and Dalby (Ministry of Social Affairs, 1981), also formed the basis of research in primary healthcare and social services. They have not, however, come to serve as model projects to the extent that was expected. What is new in the integration strategies is that, to a larger extent than previously, they have been promoted by national legal frameworks and been accompanied by shifts in financial responsibility.

Overall national integration projects

As mentioned above, there were two major areas of concern that during the 1980s and the beginning of the 1990s caused much debate and called for national reforms requiring new legislation. As a result, two major reforms were voted and implemented that have had a profound effect on the organization and delivery of health and social services in Sweden.

The reform of care of the elderly in 1992

In 1992, the planning and financial responsibilities for long-term care of the elderly, including health services (although not physicians' services), were transferred from the county councils to the municipalities. This so-called ÄDEL reform (acronym for ÄldreDelegation, commission on the elderly) was the most dominant structural reform in the 1990s that substantially affected healthcare organization in Sweden. The main reason for this was that there

was a lack of incentives for municipalities to provide adequate care and living arrangements for elderly, as a large number of geriatric hospitals had come to serve as long-term residences for elderly who had problems in taking care of themselves. Also, specialized hospital services were occupied by patients waiting for rehabilitation, nursing care or palliative care, the so-called 'bed-blockers'. The Federation of County Councils reported that in 1989–90, 15% of all beds at acute somatic care departments were occupied by 'bed-blockers' waiting for discharge and that 60% of all waiting patients were 80 years or older. In addition to this basic integration problem, Anderson and Karlberg (2000) in their review pointed out two more arguments that were important in the political debate: the need for better quality, autonomy and freedom of choice in the lives of elderly people and the high cost of maintaining elderly people in specialized hospital care who did not need these services.

The reform consisted, among several things, in defining the responsibility for municipalities to provide healthcare to elderly residents within institutional housing and care facilities. The municipalities are responsible for long-term institutional care also in facilities that they do not operate. Municipalities were further obliged to establish a special medical nurse function, although care by physicians for these elderly was still provided by county councils although paid for by the municipalities.

In order to accomplish this, tax revenues corresponding to 20% of the total cost of healthcare in 1992 were transferred from the county councils to the municipalities. The government also transferred to the municipalities considerable sums as incentive grants to improve the quality of housing for the elderly and disabled in the community.

The mental healthcare reform of 1995

A similar reform concerning patients with long-standing mental illness was adopted in 1995. It was felt that specialized psychiatric services had not fulfilled the political aim of decentralizing health services for long-term mentally ill by providing community-based treatment in collaboration with social services. Medical care needs were in general adequately met in hospitals and specialized psychiatric services, but the needs for social support were not adequately met, although this was a responsibility for the municipalities according to the Swedish Social Services Act of 1982. In order to improve this, the municipalities were given the financial responsibility to pay for the care of the patients who, after three consecutive months of in-patient psychiatric treatment, were still in hospital although this was not medically needed. Special subsidies were given to counties and municipalities to facilitate the transition to community-based independent living or sheltered housing and the setting up of systems for case management and integrated care (Stefansson and Hansson, 2001).

National reforms to stimulate local integration strategies

As mentioned above, in recent years, the rising cost of social insurance, and in particular long-term sickness absence, has been a major concern for Swedish health security. A number of attempts have been made to stimulate collaboration between the several public services and agencies. It is easy to enumerate some of the problems that such a collaboration might help: 1) If waiting time for medical care is a reason for long sickness absence, funding from the sickness insurance fund might be transferred to healthcare to cut waiting lists. 2) Physicians and health services may not be fully aware of the possibilities for rehabilitation that are offered by other players, and so team work and collaboration may increase mutual knowledge. 3) If a new or improved service is needed for a group at risk, and if one player alone cannot fund it within its budget, the possibilities of common funding between services might enable such an initiative.

The types of problems enumerated above seldom are as clear-cut as they might seem. Furthermore, counterarguments can be given to collaboration as a panacea. For example, necessary limits and division of responsibilities between services may be dissolved and financial collaboration can undermine budget responsibilities given to the different services.

A series of trials have been conducted in recent years that focus on collaboration between healthcare, social services and social insurance. The main orientation of these trials has been to enhance local collaboration between players. By local agreements on co-financing and collaboration, the intention was to achieve a better quality of services and a higher cost-effectiveness in the delivery of services. As these trials involve different authorities with different legal frameworks, special laws have been needed to enable county councils, municipalities and social insurance to pool resources and to create special boards, etc. The strategy can thus be described as national reforms to enable local collaboration.

Finsam

FINSAM (acronym for financial collaboration) was introduced by the government through a special law in 1993 to form a trial project involving five areas in the country. It enabled the allocation of maximum 10% of the social insurance's resources for sickness and rehabilitation funds to be used for health services. This implied the setting up of local agreements between health services and and social insurance to share responsibilities for targeted initiatives to enhance rehabilitation. The trial involved both this type of financial agreements and practical ways of collaboration, such as relocation of staff for teamwork activities.

Frisam

The FRISAM (acronym for voluntary collaboration) legislation came into force in 1998 in order to promote financial coordination between healthcare services and sickness insurance. The legislation, permanent from the beginning, made it possible for different authorities to set up financial agreements to reach a more effective use of available resources. Healthcare, social insurance, social services and labour market boards were given the possibility to make local agreements for financial collaboration

Socsam

The SOCSAM (Acronym for collaboration involving social services) trial legislation came into force in 1994 as a more substantial reform than FRISAM, as it involved participation of health services, social services and social insurance in local projects in which the parties involved should form a joint political board and pool resources to a common budget. Socsam was implemented in 8 trial areas in the country. Upto 5% of the budgets of the authorities in the trial area could be transferred to a joint SOCSAM budget, but the proportions of how much the different authorities allocated have varied between the trial areas.

EVALUATIONS

The reform on the elderly

The immediate results of the reform were a reduction of the number of 'bed-blockers', which went down from 15% of all patients to 6%. The average length of stay was reduced to four days for surgery and five days for internal medicine, which led to the already mentioned considerable reduction in the number of hospital beds. The effect on the municipalities was a considerable increase in special housing alternatives for the elderly, a considerably increased awareness of needs of the elderly and disabled in the community and a higher general standard of quality in nursing care, due to the 'special medical nurse' function. However, partly as an effect of the increase load of elderly due to a demographic shift, partly as an effect of the municipalities not having fully adapted to their new roles, there are still quality problems in the care of the elderly, such as excessive use of tranquilizers and sedatives and patients with pressure sores.

Another effect of the reform, pointed out by the Swedish Welfare commission (Palme *et al.*, 2003, p. 57), is that an increasing number of elderly living at home means that women to a higher extent than men are taking active part in care and rehabilitation of their partner, and also that a higher

burden is placed on children and other relatives. This, in combination with a growing role of private initiatives in care and home rehabilitation, has introduced what Palme *et al.* (2003) have called an informalization and market orientation of the care that may have undesired effects with regard to gender and social balance.

The mental healthcare reform

The National Board of Health and Welfare was commissioned by the government to evaluate this 1995 reform. Approximately 85% of the municipalities (corresponding to 93% of the population) were surveyed to assess the situation of the target group. In total, around 43,000 persons with mental disabilities were identified, that is an overall prevalence of 0.63% of the population. The prevalence was much higher (0.96%) in the three major cities Stockholm, Göteborg and Malmö compared to the rest of the country (0.56%). 72% lived in their own homes and 8% in accommodation within social services. However, only 14% were employed, including sheltered work, 25% were occupied within social services and 58% were unemployed.

As a result of the reform, around 4,000 patients and 400 rehabilitation programmes were transferred from psychiatric care organizations to municipal services. This is equivalent to a transfer of 15% of the psychiatric care budget. Overall, the reform has had the positive effect of putting the life and care situation of mentally disabled on the agenda, to stimulate municipalities to develop living alternatives for these patients outside hospitals. Funding has been allocated to a large number of projects and initiatives to develop collaboration and new types of services.

On the other hand, studies of patient groups and relatives have shown that there are still shortcomings in the care and rehabilitation of long-term mentally ill (Bengtsson-Tops and Hansson, 1999; Östman and Hansson, 2000). There are still problems in the collaboration and integration between social services and psychiatric services. Relatives and voluntary organization play an important role, but often complain of unmet needs by social services. Furthermore, particularly in the cities, patients without relatives and support and sometimes homeless, might seem worse off today, as many of these earlier spent years in institutions of poor quality.

Finsam

Evaluation of the trial was performed by the National Board of Health and Welfare and the National Social Insurance Board (National Board of Social Insurance, 1997).

Evaluations showed that the 'unhealth rate' (a combined measure of transfer costs due to sickness absence and early retirement) was reduced by

2.5% in the trial areas, while across Sweden generally there was an overall increase by 2.1%. Overall public expenses were reduced in four of the five trial areas, while they increased in one of them. The overall impression was that resources were being used more effectively.

Although a maximum 10% of resources were allowed to be used for collaborative activities, only 1%–2% came to be used. The major part of these resources were used for strengthening resources within health services.

Socsam

Evaluation of the trial was performed by the national authorities according to the same model as the evaluation of FINSAM (National Board of Social Insurance, 2001). In addition, some local areas performed evaluation of specific activities (Hultberg *et al.*, 2002).

The national report concluded that the collaborative structure and joint financing enabled collaborative efforts of value for target groups. Staff involved in projects have appreciated the new models of collaborative work made possible by the political and administrative structure that the law enabled for project areas. It was perceived as particularly valuable that the labour market boards could join the projects, which had not been the case before.

The evaluation could not, however, show any reduced cost for the authorities involved. One explanation for this is that only part of the authorities' budgets could be used for the Socsam project and that any effect therefore must be marginal. Another explanation is that needs have been identified that have prompted intensified activities with more staff involved.

A study comparing services within an area included in the Socsam project in Göteborg with those not included in the project showed positive effects of the model on staff and organization. It could not be shown, however, that the Socsam resulted in a better outcome for patients (Hultberg *et al.*, 2005).

CONCLUSION

The Swedish experience with broader health-security-oriented reforms provides several observations about the likely usefulness of this health system approach. While all implemented efforts appear to improve outcomes (either for patients and/or for the provider system), the one that involved clear financial incentives for cooperation – for example, the 1993 ÄDEL Reform of elderly care – appears to have had the greatest impact on overall system activity and costs. A future challenge will be to differentiate between reforms that can succeed based solely on well-intentioned organizational cooperation and those that will require more explicitly designed financial incentives.

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