### Healthcare Management System Lessons from Sweden for Vietnam

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**Abstract:** Healthcare is a service industry, and its quality is determined in collaboration with the patients it serves. The long-term success of healthcare is, arguably, dependent on our system's ability to appreciate the needs of every single patient as well as those of the entire population we care for. The purpose of this paper is to introduce management in the medical profession and administration in the Swedish healthcare system. Based on an overview of the current situation of the Vietnamese healthcare management system and some main points of recent reforms from Sweden, some lessons for improving the Vietnamese healthcare system also are proposed in the paper.

Keywords: Healthcare management system, decentralization, lean healthcare.

## 1. Introduction to the Swedish healthcare management system

Sweden is recognized internationally for having a highly performing and innovative health system. The country has gained significant achivements in delivering high quality care and achieving better health outcomes while maintaining moderate costs. Sweden's healthcare expenditures account for 9.9 percent of its GDP. The Swedish healthcare system is publically funded and largely decentralized with shared responsibility distributed between the central government, 21 county councils (typically includes several municipalities)/regions and 290 municipalities.

Healthcare services are financed through taxation (national and local taxes), national subsidies, government grants and user charges (17 percent). About 4 percent of the public population has voluntary health insurance that is predominately paid by their employers. the local government in Sweden is split into county councils that oversee public health provision at a regional level, whilst municipalities situated within county councils are responsible for primary, social and long-term care services. The provision of healthcare services is managed by county councils while the central government sets standards, oversees regulations and determines the national priorities. Sweden's municipalities are responsible for the provison of healthcare services for the elderly, people with physical disabilities and mental health disorders, and home-based care and other

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supportive accommodation (i.e. care homes). From the management view-point, the healthcare system can be characterized as highly decentralized which is supported by the control of the management via medical profession and administrative activities.

#### 1.1. Decentralization of the healthcare system

The provision of healthcare is decentralized to the county councils and, in some cases, municipal governments. The county councils are political bodies whose representatives are elected by county residents every four years on the same day as national general elections.

In conformity to the Swedish policy, every county council must provide residents with good quality health care, medical care, and work toward promoting good health for the entire population. The county councils are also responsible for dental care for local residents up to the age of 20.

Decentralization is the key word when describing the development of the organization and management of the Swedish healthcare The county councils sector. and local municipalities enjoy a considerable degree of autonomy in relation to the central government. Except for some national policy development, legislation and supervision, the responsibility for healthcare is decentralized to local governments. The political responsibility for financing and providing health services has been decentralized to the county councils. Local municipalities, on the other hand, responsible for delivering and financing longterm care for the elderly, the disabled and longterm psychiatric care. The local municipalities are not subordinated or accountable to the county councils. The laws on healthcare and social services allow the county councils and municipalities to impose taxes to finance their activities. The decentralization of management within the Swedish healthcare system not only refers to legislative devolution between the central government and the local governments, but also to the decentralization within each county council. Since 1970s, the financial responsibility has been decentralized within each county council and the degree of decentralization, organization and management varies substantially among county councils.

#### 1.2. Management in administration

The Swedish 18 county councils (Landsting), two regional bodies (Skåne and Västra Götaland) and one municipality without a county council (Gotland) are in charge of the healthcare delivery system from primary care to hospital care, including public health and preventive care. The county councils have overall authority over the hospital structure and responsibility for all healthcare services delivered. In 1999, 66 percent of their total income was generated through county taxes, 21 percent through state grants, 3.3 percent from user fees and 9.7 percent from other sources. About half of the county councils are divided into 3-12 healthcare districts, each with the overall responsibility for the health of the population in its area. A healthcare district usually consists of one hospital and several primary care units, where the latter are further separated into primary healthcare districts. A primary healthcare district is usually the same geographical area as the local municipality although larger cities have more than one healthcare district. In 2000, there were about 370 primary healthcare districts. The 290 Swedish municipalities (Kommuner) responsible for most of the other welfare services, including the care for the elderly and children. Each municipality has an elected assembly called the municipal council, which makes decisions on municipal matters. The municipal council appoints the municipal executive board, which leads and coordinates municipal work. The central Swedish government has overriding political

responsibility for the health of the population, and can institute national laws governing certain aspects of the healthcare system, such as basic patient rights or regulations regarding contagious diseases. Through the National Board of Health and Social Welfare, the government can also issue guidelines regarding medical practices and evaluate developments of county council level.

As shown in Figure 1, the politicians control the Swedish healthcare system at different levels. The national level controls healthcare through laws and regulations, the regional level controls healthcare through goals and guidelines for the approach and extension of healthcare and decides also the structural changes in the production, the local level is responsible for controlling the operative processes. The political management control is characterized by a distance between the political decisions and the care process. The politicians control the political process and thus influence the administrative process, but have limited influence over the care process. The administrative hierarchy is focused on coordination, planning and control the healthcare system. Mindsets from market and business corporations are transferred to

healthcare sector implying that rationality, productivity, conformity and shorter care times become the framework standards in the new hierarchy. Administrators in healthcare rely new management ideas, such as total quality management management, market-driven controlling mechanisms when following-up and controlling healthcare. Relating to performance measurements, the administrative hierarchy has traditionally been focused on business economic measures, such as patient turnover, cost per patient, expenditure for salaries to care personnel, etc. However, since mid-1990s, Swedish healthcare has been extensively influenced by the introduction of new management tools in order to develop and improve the healthcare services. The introduction of the new management tools resulted in the question that how professionals may give strong influences in managing the healthcare system. The lean management can be seen as a new management concept, which has shown that the financial focus in the administrative domain in healthcare can be changed with other aspects of the organization. A visualization of the needs of the different domains may provide an explanation for the increased interest within the healthcare organizations.

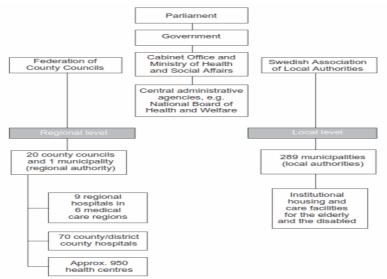


Figure 1: Organizational structure of the healthcare system. *Source:* Landstingsförbundet, 2002 [3].

Sweden's total healthcare budget is determined by tax revenues and patient fees for physician visits, nursing visits, bed-days, etc., along with consumption volume and drug mixture, which generate revenues in terms of patient fees and reimbursements from the National Social Insurance Board. The county councils' total healthcare budget is determined by generated income tax revenues, state grants, patient fees and reimbursements from other sources for treatment of patients from outside the county council. In Figure 2, the financial flows within the healthcare system are described (excluding care of the elderly and disabled). Money flows from the central government to county councils. A part of the county councils' income also comes from income tax paid by the county's citizens. The county councils then allocate their monetary resources to hospitals, health centers, private specialists and dentists. The financing of dental care for adults above the age of 20 is carried out by the National Social Insurance system based on fee-for-service. Drugs are currently reimbursed through the social insurance system, although the latest pharmaceutical reform aims at giving county responsibility councils full. pharmaceuticals. In a transition period, the social insurance system will continue to subsidize pharmaceuticals until an agreement is made for the county councils to fully take over this responsibility.

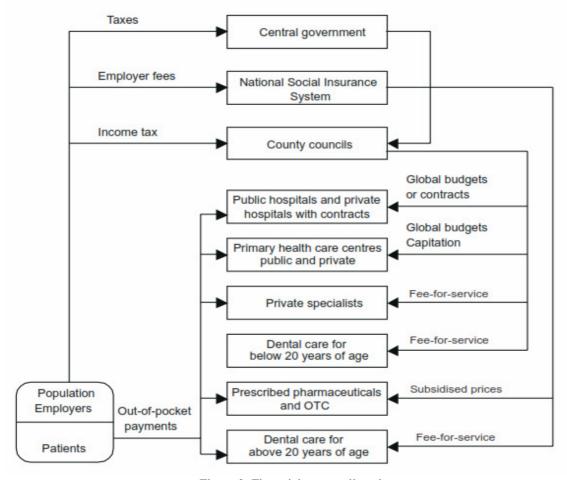


Figure 2: Financial source allocation. *Source*: European Observatory on Healthcare Systems, 2001.

#### 1.3. Management in the medical profession

medical hierarchy The is primarily controlled by doctors and then by others having professions with shorter education and status. Status also differs between doctors, thus, surgeons have higher rank than general practitioners. The control of the medical hierarchy is mainly based on the doctors' values. The individual patient is the focus of the medical work, and it is the doctor's responsibility to assure that the patient obtains the best possible treatment. Control within the professional hierarchy means that doctors work independently from colleagues, but close to the patients that he or she serves [4]. The performance standards are set in association with colleagues, and mainly focus on the care process rather than on the result [2]. This means that diagnoses and treatment should be based both on science and experience. Consequently, science indicators are often used as performance measure KPIs, such as number of diagnoses, operations and treatments, and time for care and the patient's physical status. Hence,

controlling the medical hierarchy the professionals' loyalty to patients and the professional association is the basis for performance standards rather than standards set by the own organization and its management.

# 2. Some recent improvements in the Swedish healthcare system

Hospital reforms in the 1990s focused on two main objectives: increasing specialization and concentrating on services. 24/7 emergency care services were concentrated in larger hospitals, while smaller hospitals provided more specialized care like outpatient treatment and community services. As the focus shifted away from acute, episodic care to primary and preventative care, the average length of stay (ALOS) for surgical procedures in hospitals gradually decreased following an initial spike between 1997-2009. Today, the ALOS in Sweden is still low compared to other European countries (Figure 3).

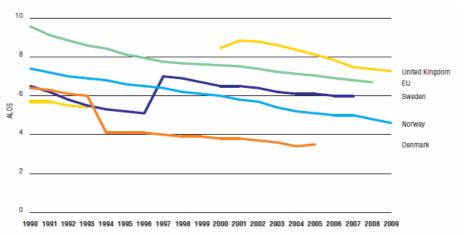


Figure 3: Average length of stay in acute hospitals between 1990-2009. *Source*: Anell et at., 2012; WHO Europe, 2011 [3].

National reforms over the last decade have strengthened the development of primary and preventative care models and movement of services to the community.

In 2003, reforms were initiated to improve collaboration between county councils and municipalities and encourage integration and continuity of care. These reforms addressed the

financial responsibilities of municipalities to provide care resources for patients discharged from hospital.

In 2005, a new "waiting times guarantee" was introduced to the healthcare management system. This system required appointments within seven days; consultation with a specialist within 90 days; and the receiving of treatment no longer than 90 days after diagnosis. This also included all elective care treatments. These reforms were designed to increase patient choice of providers whereby patients were not restricted to their home county; this increased competition between the private and public sectors.

In 2006, the reform placed an emphasis on the quality and efficiency indicators between county councils and municipalities. This reform was designed to increase transparency and to promote good practice and innovative ways of care delivery.

# 3. Current situation of healthcare management system in Vietnam

#### 3.1. Healthcare network

According to the review "Joint Annual Health Review 2012" introduced by the Vietnam Ministry of Health and Health Partnership Group, Vietnam's healthcare network consists of a wide range of facilities from hospitals, to polyclinics, to specialized clinics and to commune health stations [4]. Up to December 31, 2010, Vietnam had a total of 1,087 hospitals. As a developing country, Vietnam has developed a wide coverage of its healthcare system, including some facilities that have dual functions of both curative and preventive care. The healthcare system has been organized ranging from the central level to commune level as in Table 1.

Table 1: Vietnam Healthcare System

Order	Facilities	Number		
At the central level				
1	General hospitals	17		
2	Specialized hospitals	23		
3	Traditional medicine hospitals and nursing and rehabilitation hospital	3		
At the pr	ovincial level			
4	General hospitals	153		
5	Specialized hospitals	125		
6	Traditional medicine hospitals	48		
7	Dermatology hospitals	16		
8	Rehabilitation hospitals	34		
9	Specialized clinics	47		
At the di	strict level			
10	General hospitals	615		
11	Regional polyclinics	686		
12	Regional maternity homes			
At the co	ommune level			
13	Commune health stations	10,926		
Other see	ctors such as agriculture, public security, defense and transportation			
14	Hospitals	23		
15	Clinics	15		
16	Rehabilitation centers	29		
17	Health centers in the workplace	710		
Private s	ector			
18	Private hospitals	102		
19	Private clinics	35,000		

Source: Joint Annual Health Review, 2012.

As it was reported in the review, the total number of hospital beds amounts to 194,435; that is equivalent to 22.4 beds per 10,000 population. This figure does not include regional polyclinics and maternity homes. Altogether, the total number of hospital beds in the country is 204,620 beds, that is, 23.5 beds per 10,000 population. As shown in Table

2, the input indicator (number of doctors per 10,000 population...) has been increasing gradually. Further information (Health insurance coverage in Vietnam, 2005–2012; Health insurance coverage rate by insured groups, 2011; State budget health spending per capita by region, 2012) can be seen in Figures 4, 5, and 6.

Table 2: Status of implementing basic health targets in the Five-year Plan, 2011-2015

	Indicators	2010	2011	2012	2015 target
	Input indicators				
1.	Number of doctors per 10 000 population	7.20	7.33	7.46 (7.4)	8
2.	Number of university-trained pharmacists per 10 000 population	1.8	1.9	(1.4)	1.8
3.	Proportion of villages served by village health workers (%)	78.8	82.9	81.2 (87)	90
4.	Proportion of communes with a doctor (%)	70.0	71.9	76.0 (74)	80
5.	Proportion of communes with obstetrics/pediatrics assistant doctor or midwife (%)	95.6	95,3	93.4 (>95)	>95

Source: Joint Annual Health Review, 2012.

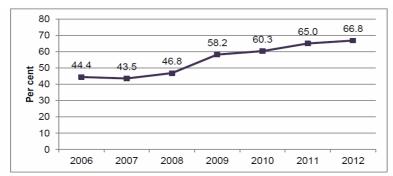


Figure 4: Health insurance coverage in Vietnam, 2005-2012. *Source:* Joint Annual Health Review, 2012.

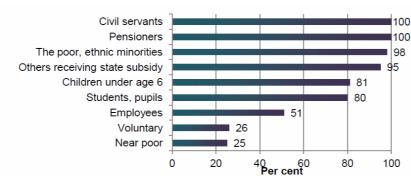


Figure 5: Health insurance coverage rate by insured groups, 2011. *Source:* Joint Annual Health Review, 2012.

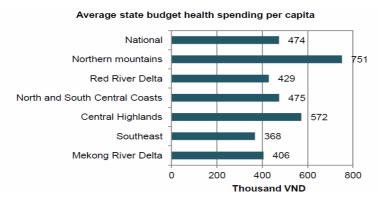


Figure 6: State budget health spending per capita by region, 2012. *Source:* Joint Annual Health Review, 2012.

#### 3.2. Management in administration

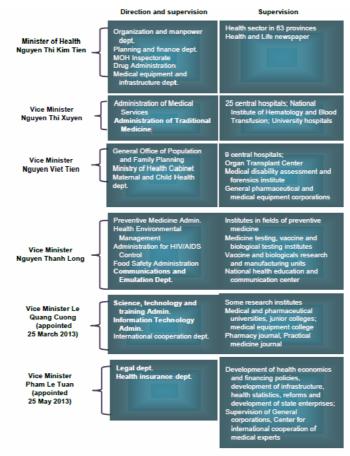


Figure 7: Division of responsibilities of the Minister and Vice Ministers of Health, 2013. *Source:* Joint Annual Health Review, 2013.

The responsibilities in governance at the central level are assigned separately to different vice ministers and the responsible minister (see the Figure 7). These persons have the right to direct and supervise the activities of the units and facilities they are responsible for.

According to the "Joint Annual Health Review 2013" presented by the Vietnam Ministry of Health and Health Partnership Group, there are several shortcomings and difficulties that the system has been facing as follows [5]:

- *Firstly*, the system of health sector legislation suffers from inconsistencies and does not yet meet the requirements for good governance.
- Secondly, the network of preventive medicine facilities at the provincial and district levels is fragmented, lacks linkages for management and provision of services. The organizational structure and regulations on functions and tasks of medical service facilities, especially at the grassroots level are inadequate.
- Thirdly, the volume of policies and policy documents required in the health sector is very large while the capacity of policy-making units of the Ministry of Health remains limited. In addition, financial resources for implementing strategies and plans are not always secured, thus impeding implementation.
- Fourthly, planning at the provincial level lacks initiative, and is constrained by many local factors. Information and health data are still lacking and not updated in a timely fashion. Data reliability is low thus weakening evidence-informed policy formulation.
- *Fifthly*, medical and pharmaceutical inspection faces difficulties due to weak organizational structure and a shortage of health manpower; there are only a few health inspectors

in each province; the district level does not have inspection functions.

- *Sixthly*, despite much effort, the involvement of stakeholders in the policy-making process, and in the development and implementation of healthcare activities is limited; some channels used for soliciting comments are ineffective due to their complicated procedures.
- Seventhly, the policy on reforming health sector planning has been approved and has begun to be deployed. However, the involvement of local government remains limited due to demanding regulations on planning and budget estimation. The budget of most provinces is predetermined, especially for provinces with inadequate local revenues to balance their budget.
- *Finally*, incentive policies to attract investment for private health sector development are inadequate to maximize mobilization of social resources for healthcare.

### 4. Issues facing healthcare quality in Vietnam

According to the "Joint Annual Health Review 2012" healthcare quality in Vietnam is assessed in different dimensions, such as: technical competence, effectiveness, professional ethics, efficiency, continuity, safety, and amenities [4]. Beside achievements and improvements in recent years, an assessment of healthcare quality in Vietnam has shown that there are issues that need to be solved as Table 3:

Table 3: Some issues	facing	healthcare	quality in	Vietnam

Order	Dimensions	Issues	
·	Technical competence	Technical competences remain limited in lower level facilities. The	
		excessive overcrowding in tertiary hospitals and some specialties	
		is an obvious consequence of the low level of technical	
		competencies in responding to the population's healthcare needs,	
		especially at district level health facilities.	
	Effectiveness of health	There is no mechanism in place for assessment or verification of	
	service provision	compliance with guidelines by external agencies. The risk of over-	

Professional ethics	prescription of unnecessary drugs and diagnostic tests and imaging has many roots, one of which is the financial autonomy mechanism and lack of external quality control.  The press and public opinion often criticize and condemn incidents and reports of medical ethics violations and misconduct of health workers such as poor communication, indifference, coldness, lack of enthusiasm, expressions of anger when interacting with patients
	and taking envelopes from patients during inpatient treatment or prior to medical interventions. These have caused negative impacts on the physician-patient relationship.
Efficiency	Overcrowding at high-level facilities, including treatment of mild cases that could be treated at lower level facilities, due to patient preference to seek care at higher levels, entails unnecessary costs
	for the patient (long travel and accommodation) and results in overcrowding that negatively affects quality of care.
Continuity	Continuity of care across levels and coordination between curative and preventive care have been affected by new laws and restructuring at the provincial and district level.
Healthcare safety	Despite patient safety indicated in many legal documents, there is still no comprehensive guideline for patient safety, nor continuing
Amenities for patients	medical education program on patient safety.  Facilities have paid little attention to ensuring basic amenities for patients seeking care or during inpatient treatment episodes, which negatively affects service quality especially in public hospitals.
	Overcrowding in tertiary hospitals forces patients to share beds, which is disagreeable and detrimental to patients.
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Source: Joint Annual Health Review, 2012.

#### 5. Lessons for Vietnam

#### 5.1. Decentralization of the healthcare system

In the current situation in Vietnam. responsibility for arranging, planning and includes the system facilitating organization and facilitation by setting the regulatory institutional framework for the system. This entails decisions on the actors involved e.g. through licensing and regulation, decisions on the rules for interaction such as rules for contracting, rules for coordination, surveillance and control of access, quality and service levels and decisions regarding general incentives and sanctioning mechanisms. Some degree of this responsibility will probably always be maintained at a central level, but varying levels of authority can be transferred to decentralized administrative units. This will

reduce the work load for the central administration level and encourage local level to facilitate the improvement of healthcare service quality.

In Vietnam, both public integrated and social health insurance usually rely on combinations of central and decentralized authority to arrange healthcare services. It is possible to have the responsibility for organizing healthcare decentralized to an institutional level within a public hierarchy, to network structures of public and/or private actors or to market mechanisms. Thus, a series of administrative reforms resulting in a decentralization of management power should be implemented. In addition to the privatization of certain units and greater autonomy for units that remain in public hands, this separation will lead to financial decentralization.

# 5.2. Focus on quality and system improvements by gradually applying lean healthcare

Both Swedish examples place a lot of emphasis on the patient's journey and engaging patients in service redesign. By mapping a journey and transition between sectors and systems, a comprehensive care pathway was developed with involvement from key stakeholders. Promoting a patient-centered approach by improving service quality is necessary for the Vietnamese healthcare system.

The biggest potential for improvements is sub-processes, functions between departments. People may accept poor quality, because it is not their responsibility if things go wrong, and the hospital management or department management try to use "fire fighting", when "things go too much wrong". They do not understand that the root cause for problems and waste is related to lack of ownership/responsibility for the crossfunctional processes. The primary customers -

the patients - suffer because of this situation, and the hospital suffers because of too much waste. This does not only apply at the operative level in the organization, but also at a managerial level. Managers seem to take the responsibility/challenge of improving the organization too lightly, even if improving the system is the management's job.

From the lesson of Sweden, lean healthcare should be applied. Lean healthcare is a management philosophy which develops a hospital culture characterized by increased patient and other stakeholder satisfaction through continuous improvements, in which all employees (managers, physicians, nurses, laboratory staffs, technicians, administrative staffs, etc.) actively participate in identifying and reducing non-value-adding activities). Figure 4 shows the model for applying lean thinking in a healthcare management system. This model could be a good source of reference for improvement.

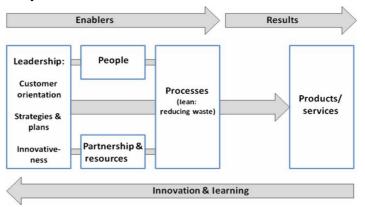


Figure 8: Model for applying lean healthcare. *Source:* Park-Dahlgaard, 2010 [6].

#### 6. Conclusions

This research has reviewed the healthcare management systems in Sweden and Vietnam. Sweden's recent experience shows us that it is possible to increase the efficiency of the system by means of market mechanisms while

maintaining universal care. Lessons from the Swedish healthcare management system are good references not only for the policy makers, but also for the practitioners and researchers in Vietnam.

Some findings in the research include: the need for decentralization of the healthcare

system, and the need for application of lean healthcare for improving service quality and management quality.

Some further empirical research should be conducted which focus on a number of detailed topics, such as how Vietnam can creatively apply the above-mentioned countermeasures; how Vietnam can focus on the impact of decentralization of the healthcare system; and how lean management can be applied at the organization and process levels.

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