# **Original Article**

# The Public Dental Service in Sweden: An Interview Study of Chief Dental Officers

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**Objective:** The aim of this study was to investigate how the Public Dental Service (PDS) in Sweden has managed to maintain a market position at a time of change in political ideologies and increased competition from a growing private sector.

**Materials and Methods:** All Chief Dental Officers (CDOs), who had held this leading position for at least 5 years (n = 22), were asked to participate in a semi-structured telephone interview. Sixteen of the 22 CDOs participated in this study. The questions were sent by mail in 2014 before the telephone interviews, which were audiotaped, transcribed and analyzed using a qualitative analytical approach. Since this was a quality study with just few participants, no statistical analysis was carried out.

**Results:** All the CDOs answered that they had influenced outcomes through brand building and core value work, related to both patients and employees, and to a lesser extent through competitor analysis. Some CDOs had a slightly different approach to the way they described visions, strategies and short-term goals. They used more business-oriented concepts, such as customers, market shares, and profits. Most CDOs regarded their actions as important for the successful development of their organization.

**Conclusions:** The PDS appears to have a stable, strong position in the Swedish dental care market, and a great deal of effort has been put into consolidating this position.

**KEYWORDS:** Chief Dental Officers, competition, interviews, leadership, organization, private dental care, Public Dental Service, qualitative study, Sweden, Swedish dentistry

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#### INTRODUCTION

**1** The Nordic countries, there are well-developed publicly funded oral health service systems, in which local governments have a high degree of autonomy in the organization of services. [1,2] In Sweden, a considerable share of oral healthcare is provided by the "Public Dental Service" (PDS; "Folktandvården"), which is run by the county councils or regions, financed by tax revenues and patient fees, and staffed by salaried personnel. The PDS provides oral healthcare across the entire country even in sparsely populated areas. In 2015, with some regional variation, 72%–91% of children and adolescents and 23%–47% of adults were treated at PDS clinics. [3]



Over the past few decades, the oral healthcare provision system has undergone a major change from a strictly regulated, government-controlled system to a more independent PDS with free-pricing, and increased competition. Historically, the PDS in Sweden was founded in 1938 to provide organized oral healthcare for 7–15-year-old children and adolescents alone. Its role was subsequently expanded to include emergency oral healthcare for adults.<sup>[4]</sup> In the following decades, government financing of public oral healthcare increased

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and adults were able to choose between private, out-of-pocket oral healthcare, and subsidized public services. The role of the PDS was developed through legislative changes, which, at that time, was thought to provide sufficient governance of public activities.<sup>[4]</sup>

In 1974, the national dental insurance ("Tandvårdsförsäkringen") introduced the same fixed patient fees in both the public and private sectors. During the next 25 years, all preventive and conservative treatment measures, including prosthetics, were generously reimbursed for all adults. For more expensive care, even higher reimbursement was offered. This reform led to a huge and rapid increase in the demand for oral healthcare in both the private and public sectors.

In 1999, the state dental tariff ("Tandvårdsstödet") was deregulated and free pricing was introduced. A reduced national reimbursement system was retained. Private dentists or companies were now able to set the prices as they wished, while the PDS prices were set by each council's political decision-makers. For children's dentistry, payments to care providers were determined by the county councils by means of capitation and the patient or the patient's parents were able to choose between the public and private sector.

In the 1990s, the social-political thinking changed and ideological commitment to market principles became popular. For example, in his paper "A public management for all seasons?", Hood[6] discusses the "New Public Management" concept. He raises questions about the contradiction between equity and efficiency values and privatization and quasi-privatization. It was hoped that this would lead to more efficient services. Le Grand and Bartlett in 1993<sup>[7]</sup> described this quasi-market development as a situation, in which a monopoly is exposed to competition. The result was a commercial market but not a "normal commercial market". In their paper, they stressed three major differences: (1) all suppliers do not view profit-maximization as the most important aspect, (2) in a quasi-market, the public budget restricts the demand not the customer's needs, and (3) customers do not always choose their supplier themselves, this can be done by the providers. According to these new ideas, the public sector had to open its own service provision to other providers. This change could be made by a purchaser-provider split, public tendering or using vouchers, according to Kähkönen.[8,9]

In 2001, the County Council Limited Companies (CCLC) appeared in the Swedish oral healthcare market. The first county council to transform its PDS into a company was Stockholm. It was soon followed by the county councils of Gävleborg, Sörmland, Västmanland and the Skåne

region. Since then, no other PDS organizations have become companies.

In 2008, a detailed reform ("Tandvårdsreformen") of the oral healthcare system was made. Since then, all adults only receive a low annual subsidy, but the national insurance against high-treatment costs is still in force. Moreover, new subvention concepts (to be financed separately by the county councils), such as "necessary dental care for the disabled and elderly", "short-term dental care in the event of serious medical problems" and "long-term dental support in the event of chronic medical problems, which can jeopardize the oral situation", were introduced for adults belonging to the special needs groups: Disabled, sick, and elderly. These groups represent about 3%-6% of the population. They pay for oral healthcare with a low-fixed fee per visit in the same way as for medical care. These services were also exposed to competition, and the patients had a free choice when it came to where to get their care, just like any other adult or child.

All county councils in Sweden have Chief Dental Officers (CDOs), so-called "Tandvårdschefer". As executives, they are expected to be able to embed new cultures and strategies into the PDS management systems and to create processes to meet the needs of the future.<sup>[10-14]</sup>

In recent years, there has been a tendency in the Swedish PDS, one of the largest dental organizations in the world, to move from planning to a more business-like approach. [15] Against this background, the aim of the present study was to investigate how the PDS has managed to keep a strong market position in Sweden and the kind of visions, strategies, and leadership methods the CDOs have chosen. This was felt to be of great interest at a time of changing political values and ideologies in the country and with increasing competition with the strong private sector.

# MATERIALS AND METHODS

### PARTICIPANTS AND DROPOUTS

This study was carried out from September to December 2014. All CDOs (n = 22) in the PDS run by the Swedish county councils, who had held this leading position for at least 5 years, were asked to participate in an interview study about the visions and strategies they had chosen, together with the leadership methods for realizing goals and securing productivity, to find out how the PDS had managed to maintain its market position. After two requests, 16 of the original 22 CDOs (73%), 12 men and four women, participated in the study; 11 of them led traditional PDS organizations and five CCLCs. The Ethical Review Board at the Faculty of Odontology at Malmö University approved the study in September 2015 (Dnr: OD2015/144).

#### **I**NTERVIEWS

Data were collected from semi-structured individual interviews by one of the authors (RP) in 2015. Five open questions were mailed to the CDOs before a telephone interview: (1) "How would you describe the visions and overall strategies of your PDS organization?", (2) "What are your own short-term goals?", (3) "How do you realize your goals – please describe your personal actions?", (4) "How do you think your personal leadership has impacted your business and the position of your PDS organization today?", and (5) "How do you view the competitive situation with the private sector in the past, today, and in the future?".

After receiving the written questions, the participants took part in a telephone interview, which lasted for 25–45 min. The interviews were audio-taped and transcribed word by word by an assistant. Analyses of the written text were then made by the author, PR, according to basic principles of qualitative content analysis, by looking for certain keywords and themes. [16,17] Examples of answers are given as quotations.

#### RESULTS

# VISIONS AND OVERALL STRATEGIES OF THE PUBLIC DENTAL SERVICE ORGANIZATIONS

The visions presented by the CDOs focused on organizational core values, such as continuous oral health improvement among the patients or the population in the PDS's geographical area. The respondents felt that their PDS units enjoyed a strong position in the oral health-care market and are financially stable [Table 1]. Most CDOs highlighted broad health-political goals relevant to oral health. These visions were expressed as "a healthy mouth for your whole life" or "a healthy mouth – for everyone". A new consideration was that some CDOs also included the elderly and ill as a special target group: "we should have the healthiest 70+-year olds" or "we aim for a good life for the sick and elderly". Patient-centred oral health-care provision means availability, for example, no

waiting lists for treatment and was measured by various customer satisfaction indices.

In most of the 16 organizations, the CDOs' vision also included the employees. This was expressed in terms like "job satisfaction," "employee participation in the decision-making process in terms of their own work" and "co-operation with other health-care sectors." Teamwork and team members' personal responsibility for their share of the total provision, which means that every single employee has to take a personal share of the volume of the oral treatment provision and the income for the clinic at which they work. One of the respondents concluded "the vision is realized by the employees".

As regards the market position, there was a dividing line between the CCLCs established in the 2000s and the PDS organizations governed by the traditional management model. The CDOs of the CCLCs talked more in terms of "customers instead of patients and gross margins". They also used competitive expressions, such as "becoming the best dental company" or "the market leader in the region", with the aim of expanding to a certain number of patients per year. The traditional CDOs talked more about "the positive development of dental health in general or in specific target groups". The CDOs of the CCLCs also described their visions more regarding "business plans than care plans". One of the respondents commented on the CCLC foundation by stating that "Unfortunately, I can see that the commercialization of the PDS appears to have removed the PDS away from sociopolitical engagement".

In the overall strategies for working toward the visions, the employees were regarded as key factors in almost all 16 organizations. This was expressed as the strategy being "team development to achieve highly professional treatment" or "visible leadership with strong employee influence" and "giving intermediate-level managers the freedom to make decisions independently within their area of responsibility". Many respondents talked not

Table 1: Subjects highlighted in the visions and strategies (keywords) of the regional Public Dental Service organizations listed by the Chief Dental Officers

Visions	Strategies to implement the visions
A healthy mouth - for all	An oral healthcare provision system built on availability and quality
	and adapted to patients' needs and demands
Improvements in oral health	Care plans and business plans
	Health-oriented oral care using teamwork
Patient centred care production	Easy access to care and satisfied customers
Good terms for the employees	Continuing skills development and career development (clinical,
	administrative) and team development. Individually set salaries
	Employee influence at all levels
A strong market position for the organization	Good working conditions, good dental equipment
The leading alternative/choice in oral healthcare in the county co	ouncil Nonprofit dentistry working with prevention toward health for patients

only about upgrading the competence of the existing employees in their strategies but also of striving "to become the most attractive employer in dentistry" and "to attract valuable *employees*", which were regarded as valuable in terms of competition and provision.

#### SHORT-TERM GOALS

As far as the short-term objectives were concerned, the responses were more "hands-on" and more "in the present". Most CDOs mentioned customer satisfaction and easy access to care of high quality leading to increased numbers of customers. "Good staffing, dedicated employees and having the opportunity for continuous skills development in the workplace" were mentioned. Economic objectives also played a role here. The efficiency of the PDS organization, with the expectation of an increase in productivity, was a recurring theme, as well as an increase in the number of contractors in the PDS organizations' new capitation payment system, called "Frisktandvård" (contract care). "A stable economy that created the scope for manoeuvre" was mentioned by several respondents, not as an isolated objective but as a means of developing the business. Here too, there was a slightly different type of response between the traditional CDOs and the CDOs of the CCLCs, where the latter were more focused on increasing the number of customers, profitability, and profit margins. Some respondents also suggested an increased rate of return to the owners (the county councils).

#### PERSONAL ACTIONS IN REALIZING GOALS

When asked about the CDOs' personal actions as described by the keywords "freedom of responsibility to subordinates", "good relations with principals", "assistant managers", "management and governance, and "activity monitoring", the majority of the respondents were convinced that one of the most important aspects was to handle all issues and cases at the right level of management: "overall issues at the top-management level, middle-management issues at that level," and "the floor questions by the employees at this level". This meant that broad strategic issues were a responsibility that belonged to the PDS management and more operational questions were to be handled at middle-management level. This was the dominant view of the CDOs in large, hierarchical organizations, while CDOs in flatter, smaller organizations also acted together at operational level or instead of subordinate commanders. All the CDOs claimed that "a positive economic result" was an important objective for their organizations, but some also mentioned pure economic output as a control model. Statements such as "in addition to economic goals, there are goals relating to market shares" and "we want to increase our patient stock by 2,500–3,000 a year and the profit should be at least 2.5% a year" characterized this sentiment. As tools in their leadership, three CDOs mentioned "a balanced scorecard" as an important strategic performance management tool.

#### PERSONAL LEADERSHIP

An individual organizational culture and the personal core values of work were mentioned as important issues at meetings on different levels in the organization (PDS or county council). Building further on the brand names of "Folktandvården" (PDS) and "Frisktandvård" (contract care) was also regarded as crucial for market share size. One of the PDS organizations even gave a bonus to employees who successfully marketed the contract model. Some of the PDS managers did not feel that their personal leadership had influenced the actual market share, but that this had grown on its own (keywords: Skilled employees, visible leadership, brand values, market success, customer orientation; Table 2).

Thirteen of the 16 CDOs (81%) were convinced that their personal actions had had an influence, or even a great influence, on the development of the PDS organization they were leading or had led. Personal leadership and their own visibility in the organization were regarded as important by most respondents when it came to maintaining or expanding the organization's market shares. The CDOs regularly visited PDS clinics and had dialogues about their mission with subordinate leaders and employees. Those who gave contrasting responses pointed to their orders from above or other factors beyond their individual control, such as political decisions. These could be directives from owners or clients.

# COMPETITION WITH THE PRIVATE SECTOR

The perception of competition varied across the country (keywords: No obvious competition, the PDS is getting stronger in the market, collaboration with the private sector, it was tough yesterday—but tougher today).

Table 2: Issues describing personal leadership stressed in some keywords by the Chief Dental Officers

some keywords by the Uniet Dental Officers	
Keywords	Activities
Skilled employees	A strong economy, which allows development
Visible leadership	Communicate the mission, short-decision
	paths. Management-by-walking-around
Brand mark values	Preventive dentistry, contract care
Market success	PDS - the obvious choice for both patients
	and employees. Strong market shares in both
	dentistry for adults and pediatric dentistry
Customer	Satisfied patients. No waiting lists.
orientation	Appointments through Internet

PDS=Public Dental Service

In regions with traditional private dentistry, the CDOs felt that they collaborated effectively with the private sector and they were not concerned about competition. The tradition of "everyone does what they are expected to do" was an advantage for the PDS providing mainly pediatric dentistry, as this is where the PDS in Sweden was born, and it is still an important target group for success. Children grow up and become adults and remain in PDS care. In this context, the introduction of the concept of "Frisktandvård" (contract care) was also regarded as a key factor for success.

A few respondents expressed concern about competition. They led the PDS in regions with a stronger element of new private dental chains offering both general and specialist care. Competition was mentioned in terms not only of patients but also of recruiting and retaining employees. Most CDOs mentioned "branding" aimed at both patients and new employees, in a new market situation.

# **DISCUSSION**

There is little research on leadership and management in the public sector in Sweden<sup>[10,11]</sup> and on the PDSs, in spite of their long history.<sup>[4]</sup> However, the topic of leadership in public organizations appears to have attracted more interest recently<sup>[12,13]</sup> and several PDSs mention "leadership" on their websites as an important subject for their employees and are organizing further education courses. Some more research in this area can be found in the other Nordic countries, which have fairly similar oral health-care provision models.<sup>[18-22]</sup>

In the present study, a qualitative approach was chosen because of the small number of PDS organizations and CDOs and because of the lack of previous studies in this area. The trustworthiness of the method depends on several phases, from the preparation of the interview questions, and data collection to reporting the results. A checklist for researchers using this method has been compiled, and it was used by the authors.<sup>[23]</sup>

One strength of the present study is that the authors are familiar with the topic from their own experience, whereas a weakness might be that one of the authors (RP) is a former CDO in Sweden. However, he left his position a few years ago. Only five questions were asked in the present study because the CDOs are very busy leaders with 500–3,000 employees. We were therefore afraid that the drop-out rate would be higher if there were more questions.

Public organizations have some special features that commercial organizations do not.<sup>[8,9]</sup> The PDS is guided by values of common good and sociopolitical goals

relating to equal access and equal treatment and reducing financial barriers in the use of services and so on. The PDS also has an owner, the citizens, represented by their democratically elected politicians. It might be more complex for a CDO in the PDS to have a political board consisting of politicians representing different political values than to have a solely commercial board. CDOs in the PDS had to satisfy several stakeholders, i.e., the population in the geographical area of the PDS, the patients at the PDS, the employees, the politicians and the local media. Even if the CDOs can be regarded as busy individuals, the participation rate of 73% (16 of 22) in the present interview study was relatively high.

All the CDOs emphasized the importance of working together with their employees and many others to achieve the desired results. It was obvious that the CDOs did not feel lonely and isolated like their colleagues in the smaller municipal PDS organizations in a neighboring country.<sup>[24]</sup> On the contrary, the interviewed CDOs appeared to feel fairly safe and content in their roles as leaders. They did not need to work too much on competitor analyses. Instead, they were able to concentrate on brand building and core value work related to both patients and employees.

The CDOs' visions and also their strategies appeared in some contexts to be somewhat weak and not particularly challenging. Dramatic visions were probably not necessary due to the long history of a strong PDS, with firm support from both politicians and the public. It has to be noticed that the Swedish economy has been stable for a long period, and there has not been severe cuts to the public sector supply of dental services or subsidy of adult treatment as has happened in some other countries, for example, Ireland. [25]

The promotion of oral health and a good service level are still important in Sweden. [26,27] CDO's short-term aspirations and efforts were extremely concrete. Working and talking with their employees and "being seen" regularly in the workplace were key elements of their leadership. The traditional hierarchy of a public organization [10,11] could be seen in the delegation of responsibilities and decision-making power at different levels. Teamwork has been regarded as one of the cornerstones of modern oral healthcare and a great deal of effort has been put into developing this. The number of dental hygienists in the PDS is the highest in the Nordic countries and in Europe, [1,2] and the effective use of dental auxiliaries is also known to reduce costs. [9]

A stable economy and a positive economic result were mentioned by all the CDOs as essential prerequisites for all the activities in the PDS, where adult care was mainly financed by patient fees and children's and special needs groups' care by tax revenues. It appeared that the productivity-based salaries helped keep the economy in balance.

The interviewed CDOs gave fairly similar answers to most of the five questions, even if there was some variation. However, regarding the five limited liability companies (CCLC), the CDOs spoke a different language and used business concepts, such as customers, market shares, and profits in their conversation. They also expressed different attitudes toward the economic aspects of their business. Due to the small number of respondents, no questions about true business success could be asked.

It was hoped that the marketization of healthcare would increase efficiency and accessibility to oral healthcare without damaging equity. More recently, the quasi-market system has been criticized for not being so efficient and having unexpected dimensions<sup>[8,9]</sup> and discussions about various market forms in the public sector have moved to so-called "customer-choice" models. In practice, adult oral healthcare has always been open to free choice for patients in Sweden<sup>[15]</sup> and the interviews gave the impression that the most intense marketization period had already passed. Competition was assessed differently, depending on the activity of local players. Worries related to the new private dental companies, which acted "more aggressively" than traditional private dental care when it came to the recruitment of patients and employees. Established public health dentists could be recruited through personal contacts, which does not happen in the PDS, where vacancies are advertised in the traditional way. The new players also organized "market stalls" at supermarkets to recruit customers (patients) at weekends and even offered "family dentistry". This approach is alien to the PDS, which only acts on the "streets" with its health messages, such as during the "International Oral Health Day" or the so-called "Fluoride Aunt's Day" ("Fluortantens Dag").

All PDS units provide specialist care, if not always in all the eight specialties recognized in Sweden. Unexpectedly, specialist care was not mentioned as being of primary importance in the interviews. General dentistry appeared to be more important to the CDOs. This may have been because most patients have all their oral healthcare needs taken care of by general practitioners, although the specialists are an important resource when treatments are more difficult. The continuing strong market position in child dental care enjoyed by the PDS (85%–90%) was assessed as a clear competitive advantage when recruiting adult patients. The large proportion of children aged between 3 and 19 years, who pay regular visits to

the PDS until they are over 16 years of age, must be perceived as good encouragement for these patients and their parents to seek oral health care from the PDS as adults. For example, one of the CDOs had extended child dental care up to 24 years.

One of the main findings in the present study was that most CDOs were convinced that their personal leadership had played a crucial part in positive activity development in their organizations. This indicates a high level of self-confidence among the CDOs. To delegate the right tasks to individuals at the right level in the administrative hierarchy of the PDS organization and at the right moment was considered to be one of the most important methods of leadership.

#### **CONCLUSIONS**

The CDOs had handled a situation of increasing competition through brand building and core value work related to both patients and employees but less using competitor analysis. These findings suggest that the PDS' position within Swedish oral healthcare is strong, as it accounts for almost 45% of the total oral healthcare market. A great deal of effort appears to have been made to consolidate this situation. When it came to the CCLC, the CDOs had slightly different views compared with those leading traditional PDS units.

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## **C**ONFLICTS OF INTEREST

There are no conflicts of interest.

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