

OCCASIONAL REVIEW

Geriatric medicine in Sweden: a study of the organisation, staffing and care production in 2000–2001

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Abstract

Objective: the organisation of long-term medicine and geriatric medicine has undergone many changes during the last 15 years. The aim of this study is to gain an overall perspective of the present organisation of geriatric medicine in Sweden.

Design: questionnaire survey.

Methods: The Swedish Society for Geriatric Medicine and Gerontology, in collaboration with the Federation of County Councils and the Swedish Association of Local Authorities, sent out a survey to people in all county councils in Sweden. The subject of the survey was the speciality of geriatric medicine in the Swedish healthcare system, with regard to healthcare organisation, staffing and care production in 2000/2001.

Results: there were 52 separate geriatric units, 41 independent 'clinics' and 11 'sections' within other departments. There were a total of 3,101 geriatric inpatient beds. On average, there was one geriatric bed for every 799 individuals within the local population aged 65 years and over, with a 10-fold variation between counties. Four counties had no geriatric provision. The 'geriatric clinics' were mainly located in university towns and averaged 85 beds per clinic, again with a 10-fold variation. There were 604 established positions for doctors within geriatrics, of which 63% were at geriatric clinics. On average, the clinics had 16 positions each (of which 75% were filled with geriatric specialists) with 7 beds per doctor. The corresponding averages for nurses and paramedics could not be summarised due to organisational differences between the county councils. In general, there were very few nurses with specialist training in geriatric medicine.

Conclusions: the field of geriatric medicine in Sweden is very heterogeneous regarding terminology, designations, structure, staffing and care production. There is no overall structural plan for the role of geriatric medicine in Swedish healthcare, with the desired close connection between content and dimensioning of geriatric specialist training and the practical organisation of the activities. The county councils designate geriatric medicine so differently that it is hardly possible to compare different geriatric facilities today. Considering how many patients at hospitals today are elderly and suffer from multiple illnesses, it is a major quality issue to ensure that these patients have access to geriatric specialists.

Keywords: *geriatric medicine, organisation, care production, heterogeneity, structural plan, quality*

Introduction

The speciality of geriatric medicine was founded in Sweden in 1992 to replace the previous speciality, 'long-term medicine', which was established in 1969. The name change in 1992 coincided with the implementation of a structural reform (ÄDEL), which aimed to create socially focused, modern care for the elderly that placed emphasis upon the healthy individual and the functional perspective, rather than focusing on disease and medical treatments [1].

Throughout the 1990s, geriatric medicine has developed differently in different parts of the country. It is very difficult to gain an overall perspective of the organisation of geriatric medicine in Sweden. To help provide a better understanding in order to allow improved decision-making, the Swedish Society for Geriatric Medicine and Gerontology (SFGG) decided to survey the organisation of the speciality of geriatric medicine in the Swedish healthcare system. The study was conducted in collaboration with the Federation of County Councils and the Swedish Association of Local Authorities.

Materials and methods

A structured questionnaire was sent to the contact persons for matters concerning the elderly in all county councils, asking them to specify:

- All independent geriatric clinics and geriatric sections within other departments, e.g. internal medicine, within the county.
- The hospital at which each clinic/section was located.
- The number of full-time equivalents for doctors, nurses and paramedical staff.
- The number of geriatric specialists and nurses with geriatric specialist training on the staff.
- The number of beds for inpatient care as well as positions in outpatient rehabilitation and home rehabilitation.
- The number of inpatient admissions per year.
- The number of bed days per year.
- Whether or not each clinic/unit has outpatient care.

The deadline was 15 September 2000, but we received responses until 28 February 2001.

Information on the number of people aged 65 years and over in all counties as of 31 December 2001 comes from Statistics Sweden. In December 2001 the population of Sweden was 8,909,128, of which 1,532,064 individuals (17.2%) were aged 65 years and over.

Results

The response rate was 100%. In most cases, the questionnaires were answered by the county council's contact persons for the elderly or other representatives of the county council, generally after consulting with the county's hospitals. A few random checks of the validity of the data were made through personal contacts with local managers. In some figures, there are missing data due to incomplete responses.

Organisational structure

Inpatient beds

Table 1 lists the various county activities that include the word 'geriatric' with or without the word 'rehabilitation' in the name. Table 1 also shows the average number and spread of beds per type of unit.

Appendix 1 (all the appendices are available as supplementary data at <http://www.ageing.oupjournals.org>) shows the number of inpatient beds per county for all six types of geriatric activities defined in Table 1. Nationwide, there were 3,101 geriatric beds, averaging 182 per county. Appendix 2 illustrates that, on average, there was one geriatric inpatient bed per 799 local population individuals aged 65 years and over, with a 10-fold variation between counties.

The map in Figure 1 illustrates the distribution of inpatient beds in units designated as 'geriatric', per resident aged 65 years and over in each county. Four counties did not have any geriatric clinics or sections.

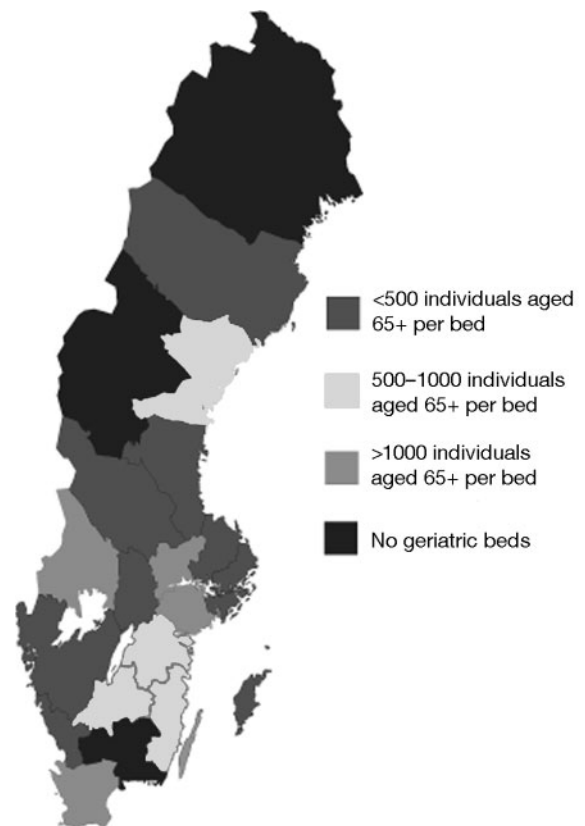


Figure 1. Distribution of in-patient geriatric beds in relation to the number of individuals aged over 65 per county.

Table 1. Organisational structure 2000/2001. Number of inpatient units, inpatient beds and doctors in geriatric facilities in Sweden, with or without the word 'rehabilitation' or 'medicine' in the name of the unit

	Number of units	Number of in-patient beds		Percentage of all beds in geriatrics	Number of doctors
		Total	Average per unit		
Clinics	41	2,828		91%	487
Geriatric clinic	24	2,051	85 (20–237)	66%	379
Geriatric/rehabilitation clinic	13	686	53 (24–122)	22%	82
Medical-geriatric clinic	4	91	23 (16–30)	3%	26
Sections	11	273		9%	47
Geriatric section of medical clinic	5	146	36 (24–51)	5%	24
Geriatric/rehabilitation section of medical clinic	5	109	22 (12–35)	3%	20
Geriatric/neurological rehabilitation section	1	18	18	1%	3
Total	52	3,101		100%	534

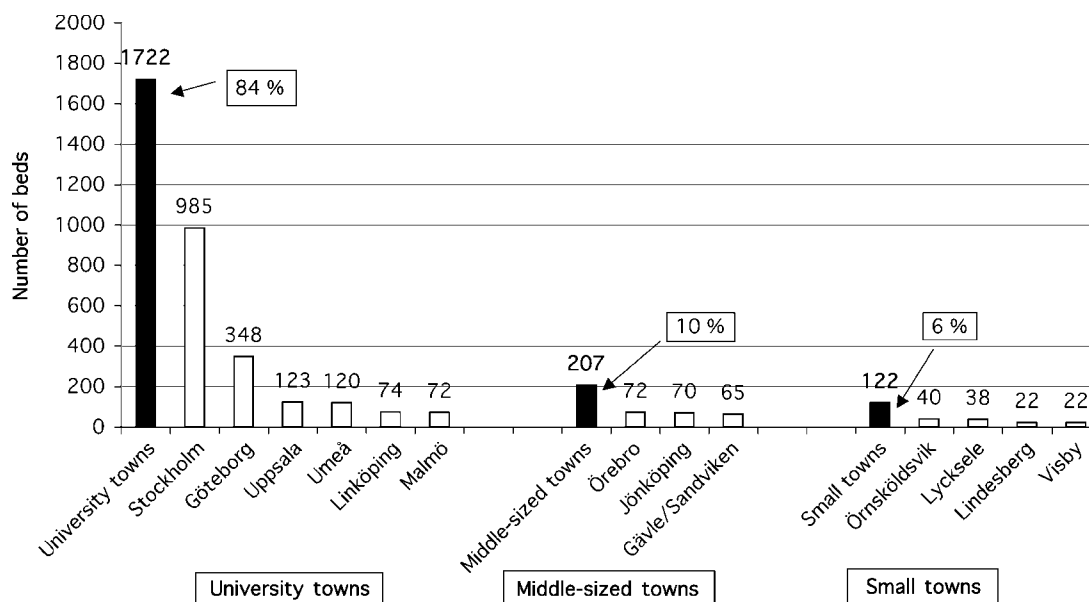


Figure 2. Number of beds at Sweden's 24 geriatric clinics, broken down by types of cities. The university towns had 84% of all beds at geriatric clinics. Stockholm had 48% and Göteborg 17% (a total of 65%) of all beds at geriatric clinics.

The following summary focuses on the 24 geriatric clinics (see Table 1), since they represent independent geriatric departments. Clinics and sections whose names contain both the words 'geriatric' and 'medicine' or 'rehabilitation' are more diversified and often treat younger patients.

The geriatric clinics averaged 85 beds per clinic, with a 10-fold variation (20–237) (see Appendix 3). Figure 2 shows the distribution of geriatric clinics per types of cities. Stockholm County had a total of 985 beds at 11 geriatric clinics, which is nearly half (48%) of all beds at geriatric clinics in Sweden.

Outpatient and home rehabilitation

Appendix 4 shows the number of inpatient beds in relation to the number of positions for outpatient rehabilitation and home rehabilitation. Fifteen of the clinics had outpatient rehabilitation and ten had home rehabilitation to varying extents.

Outpatient care

Since the concept 'outpatient care' was interpreted in such widely varying ways, the responses are not reported in detail. However, visits to doctors in the outpatient clinics or outside the hospital appear to be a small part of geriatric medicine in Sweden as a whole.

Staffing

Table 1 shows the number of doctor and nurse staff positions reported.

Doctors

A total of 604 geriatricians were on the staff at the nation's 70 hospitals. Table 1 shows 534 of these 604 positions (88%)

in the six types of 'geriatric' units. The remaining 70 geriatric positions are employed in other areas of activity. Of the total 604 geriatricians, 379 (63%) were at the 24 geriatric clinics (see Table 1). There was a large variation from the average of 16 doctors per clinic (2–35) and 12 specialists per clinic (0–26). The number of geriatric specialists at the geriatric clinics averaged 75% (0–100%) of all doctors. Only three clinics had geriatric specialists in all permanent positions (see Appendix 5).

On average, there were 7 geriatric beds per doctor, with a wide variation (2–14) in the country. There was no connection between the number of doctors and the number of beds at the clinics (see Appendix 6).

Nurses and paramedics

Nurses in geriatric clinics may be employees of the county council or the municipality, whereas all doctors are employees of the county council. Since the people who responded to the questionnaire only reported nurses employed by the county council, the information is incomplete and therefore not detailed here. The paramedical personnel exhibit even more diversity regarding which organisation they are employed by, and the data are therefore not reported.

Care production

An average of 1,447 inpatient care episodes were produced per clinic per year (176–2,925) (see Appendix 7). Appendix 8 shows that the average duration of inpatient care was 19 days (10–28). There was no correlation between the number of beds and the average duration of care. There was also no correlation between the average duration of care in relation to the number of beds per doctor or nurse at the geriatric clinics (not shown).

Discussion

This survey shows that the organisation of geriatric medicine varies widely between counties, with regard to the designations, extent and focus of the activities, number of beds per doctor and nurse, paramedical organisation and average duration of care. This reflects great local variations in the assessment of the role of geriatric medicine in Swedish healthcare. This makes it very difficult to compare geriatric activities nationwide and therefore to establish rational quality improvements. The organisation of geriatric medicine in Sweden is essentially the same in the spring of 2003 as it was 2 years earlier.

A similar survey was conducted in 1994, but major terms and designations were used differently and the results therefore cannot be compared to any great degree [1].

One significant problem is that the field of geriatric medicine appears to be perceived very differently in different parts of the country. Some geriatric clinics receive elderly patients with a wide range of medical problems under the designations 'acute geriatric care', 'outpatient clinics', 'outpatient and home rehabilitation' – or 'palliative care', while others have a more or less limited focus. In some places, such as Stockholm, the county councils mainly order unspecified 'acute geriatric care'. Others have chosen to focus wholly, or in part, on inpatient care units for various problem areas affecting the elderly as a sort of sub-specialisation, e.g. stroke, osteoporosis/fracture rehabilitation, dyscognitive conditions and Parkinson's disease. Outpatient follow-up after discharge, however, appears to be very limited in geriatric care in Sweden. The situation is complicated by the fact that key terms and concepts like 'geriatric patient', 'acute geriatric care' and 'rehabilitation'/'geriatric rehabilitation' are not uniformly defined and employed throughout Sweden.

Whilst undergraduate training in geriatric medicine is only provided in the six university towns, postgraduate training (specialist training) is available at most of the geriatric clinics throughout Sweden. The concentration of geriatric units at university hospitals is thus not solely due to educational/training opportunities, but probably in part due to the fact that internal medicine is most sub-specialised at such hospitals. This has led to a need for generalist units for the elderly.

The large number of geriatric beds, and doctors per bed, in Stockholm is probably related to the strong focus on acute geriatric care. In smaller towns, geriatric units are more focused on rehabilitation and are often organised as sections of medical clinics.

In all, the evidence suggests the need for a better overall structural plan for the role of geriatric medicine in Swedish healthcare. The conditions for specialisation in geriatric medicine define only how to attain specialist competency in geriatric medicine. The county councils can order and organise geriatric activities as they wish, with no connection to the specialist training.

The different types of organisation in different parts of the country make it very difficult to analyse whether the varying geriatric activities described here make rational use of available resources. The county councils have such different demands for geriatric medicine today that it is hardly possible to compare one geriatric unit to another.

In order to facilitate continued quality development, it is important that we develop an overall structural plan that clearly defines the role of geriatric medicine in Swedish healthcare. Considering the high percentage of patients in hospitals today who are elderly with multiple diagnoses and disabilities, in conjunction with the fact that demographic forecasts indicate that the number of elderly people will increase dramatically in coming years, ensuring the right to geriatric specialist competency in all situations is crucial. It would also be helpful if the structural plan provided a clearer relationship between the conditions for specialisation in geriatric medicine and the organisation of the field in healthcare. A structural plan of this kind should be formulated in such a way as to allow comparison between geriatric clinics and sections, as well as with other specialities that work with the elderly.

Key points

- Geriatric medicine in Sweden exhibits extensive heterogeneity in terminology, designations, structure, staffing and care production.
 - It is very difficult to compare different geriatric facilities with each other.
 - A structural plan is needed for the role of geriatric medicine in Swedish healthcare, with the desired close connection between content and dimensioning of geriatric specialist training and the practical organisation of the activities.
 - It is a major quality issue to ensure that elderly patients have access to geriatric specialists.
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Acknowledgements

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