



# Decentralised health services

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## KRONIKK

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In recent years, Norwegian health services have pursued the goal of transferring service provision from the specialist to the primary level. A number of different solutions have emerged at the intersection of these two administrative levels. What do we know about these solutions, and how can we create better health care in this grey zone between municipalities and hospitals?

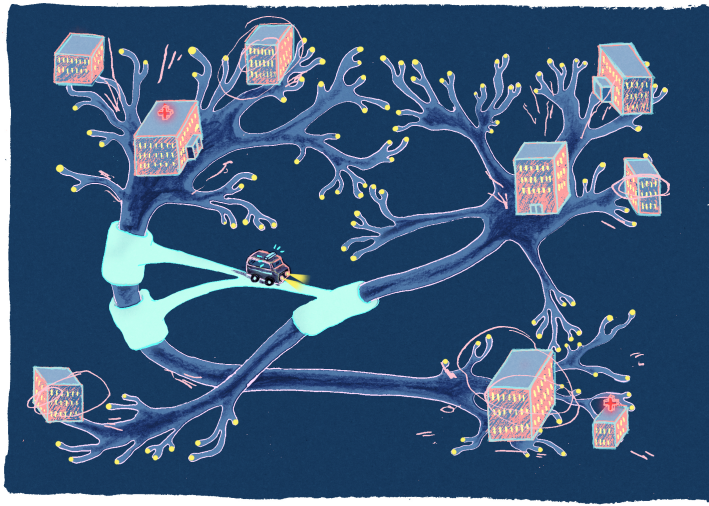


Illustration: Sylvia Stølan

Norwegian health services have developed in the area of tension between decentralisation and centralisation (1). In recent years, focus has been placed on decentralising specialist healthcare services to the municipalities, enhancing efficiency and improving coordination of the services (2). The incumbent minister of health and care services has introduced the slogan 'the patient's health services', reflecting how a better understanding of patients' values and preferences is essential to provide good-quality health services.

The implementation of the Coordination Reform with its 'right treatment, in right time and place' has spurred a further upgrade of the municipal health services (3). Municipal acute care units were introduced to provide local, 24-hour emergency services to patients who need medical treatment and care, but not necessarily hospitalisation. The primary admission criteria is that the patient otherwise would have needed to be hospitalised. The government has stipulated that this service must have the same quality as the hospitals or even better. The establishment of municipal acute bed units has evidently led to a reduction in the number of hospitalisations. This is especially well documented for patients older than 80 years, in cases when a doctor is available at all hours and where the unit is co-located with a local casualty clinic (4).

This article will present findings from the authors' PhD theses, which have investigated decentralised health services in local medical centres, intermediate care units and municipal acute care units. We wish to elucidate how such local treatment options may be appropriate in a societal as well as a patient perspective and should not be restricted to merely providing an alternative to hospitalisation.

## The general practitioner hospitals in Finnmark county

In an old series of articles in the Journal of the Norwegian Medical Association, Andreas B. Wessel (1858–1940) shed light on the historical development of general practitioner hospitals (GPHs) in the period 1850–1929, with an emphasis on the clinics in Finnmark county (5). These were burnt down during the Second World War, but later rebuilt. After the war, GPHs were established all over the country. In 1972, there were 64 GPHs with just over 1 000 beds spread out over 15 counties. The current establishment of intermediate care units and municipal emergency inpatient units aims to provide many of the same services as these local clinics. During the expansion of the hospital sector in the 1970s, the local GPHs were closed. In 1994, only 171 beds remained, most of which were in Finnmark county. Aaraas conducted his PhD study in the 1990s, using data from hospital and local GPHs in Finnmark county (6). Prospective and retrospective registrations of 395 admissions to local GPHs, 2 496 patient-doctor contacts and 35 435 hospitalisations showed that in general, seriously ill patients who were later transferred to hospitals suffered no loss of health during a primary admission to a GPH. Emergency treatment at the local clinic before further transport to a hospital helped prevent permanent health loss/death for some

patients. The stays in GPHs replaced hospitalisations, primarily with regard to short-term admissions and observations of specific medical conditions. In addition, service provision by local GPHs also entailed lower costs to society than the alternative options.

## Intermediate care units

Intermediate care units have less staff and less medical-technical equipment than regular hospitals. Their target group includes elderly patients who otherwise would have been inappropriately hospitalised or subjected to an unnecessarily extended stay, and the objective is for the patients to become independent and able to cope with life at home. The treatment period tends to be limited to 1–2 weeks (7).

An example of a Norwegian intermediate care unit is provided by Søbstad health centre where in 2002, a number of beds were reorganised into an intermediate care unit. The unit could provide treatment, care and rehabilitation to patients over 60 who had been examined and had started their therapy in a hospital. In other words, this was not an alternative to hospitalisation, but a post-hospital facility. Patients with serious dementia or mental illness were excluded. As part of his PhD, Garåsen conducted a randomised, controlled study at this unit in 2008 (8). The study compares a number of outcome measures among 72 patients over the age of 60 who were discharged from hospital directly to their homes, and 70 patients over the age of 60 who were discharged from hospital via the intermediate care unit to their own homes. Completion of the therapy at the intermediate level in a nursing home resulted in fewer readmissions, improved ability for self-care after the return home and lower mortality after six and twelve months of follow-up. The intermediate care unit was also shown to be cost-effective, primarily because of the reduced hospital costs (8). Further health centres modelled on the Søbstad facility have been established in Norway, such as the Øya health centre in Trondheim as well as others in Lillehammer and Oslo.

## Hallingdal sjukestugu

Hallingdal sjukestugu (local medical centre) has been operated by the specialist health service for more than 30 years, and since 1995 as a department of Ringerike Hospital, which is located 150 kilometres away. The centre includes a somatic inpatient unit, a somatic outpatient clinic with ambulatory specialists and x-ray facilities with digital transmission to the hospital. The somatic inpatient unit provides services before, instead of and after hospital treatment. In his PhD thesis, Lappégard elucidated health outcomes, perceived quality and economy of emergency admissions to Hallingdal sjukestugu ( $n = 33$ ) and Ringerike Hospital ( $n = 27$ ) respectively. The study was based on registry data, a randomised, controlled study, a survey and interviews with patients admitted to the two institutions. There were no significant differences in functionality, mortality or readmission rates between the two groups. However, decentralised admissions showed a tendency towards a lower consumption of health services after discharge. Moreover, the patients' perception of quality was significantly higher for the local medical centre than for the hospital. The patients spoke positively about the homelike atmosphere, well-organised environment, proximity to the local community and continuity in the patient-therapist relationship. The costs of emergency admissions were also significantly lower at Hallingdal sjukestugu (the local medical centre).

## Municipal acute bed units

In accordance with the Coordination Reform, municipal emergency inpatient units were made mandatory from 1 January 2016. Such units are being established all over the country as an alternative treatment option for patients who need medical treatment and care, but not hospitalisation. In her PhD thesis from 2017, Leonardsen investigated the experiences gained from five such units in Østfold county (9). Questionnaires were used for patients

who had been discharged from municipal acute bed units ( $n = 479$ ), supplemented by interviews with 27 patients and 23 GPs. The study showed that the GPs were uncertain as to whether the follow-up provided by the decentralised units was sufficient and safe in light of diagnostic limitations. The patients reported that in their opinion, the treatment was comparable to that provided in hospitals, although they perceived some limitations in terms of diagnostic opportunities. Despite this, they felt that the treatment was safe and of good quality. Many of them highlighted the advantages of having a single room, a quiet and homelike environment and proximity to their own homes. The patients perceived their stay as positive when compared to previous hospitalisations, which were described as hectic, stressful and with time constraints on the part of the staff. A study of 189 patients discharged from a department for general internal medicine/geriatrics in a hospital, conducted in parallel with the above study, showed that a larger proportion of the patients reported problems after admission to hospital when compared to admission to municipal acute bed units (10).

## The patient's health service

In Norway, we have numerous examples of local inpatient facilities at the intersection between specialist and municipal health services. These are to some extent part of a long tradition, such as the GPHs in Finnmark county, and partly of a more recent origin, such as the municipal acute bed units. Their designations, forms of organisation and functions all vary, although they all target those parts of the patient pathway where the need for services is in a grey zone between the options provided by hospitals and municipalities respectively. Nevertheless, all these services require highly skilled healthcare personnel.

Our studies have shown that local units may offer safe and high-quality services, and that the patients prefer the local alternative close to home to treatment in a large hospital. This finding is in line with international studies showing that patients prefer treatment in less hectic local units (11).

In 2014, the Knowledge Centre for the Health Services summarised results from Norwegian and international studies that compared the effect of admitting patients to a local, supplemented primary care unit with admitting the same kind of patients to a hospital. Only three studies fulfilled the inclusion criteria. The results showed that compared to hospitalisation, an admission to a supplemented primary care unit may lead to higher patient satisfaction, but it could not be determined whether such admissions had an effect on physical functioning and quality of life or on the number of readmissions (12). It has also been shown that elderly patients in particular are admitted to the municipal acute bed units and that the occupancy rate is lower than expected (13). Broadly formulated statutory provisions have permitted a variety of solutions and adaptations at the municipal level. The major differences between the units nationally and internationally and the resulting difficulty in making comparisons and drawing conclusions have been part of the discussions about the local medical centres, intermediate care units and the municipal acute bed units.

Service provision in smaller units may be an appropriate alternative to hospitalisation. Such units provide relief for the hospitals and may have positive health consequences for the patients at a lower cost. In this way, these options represent a service that provides an alternative to the hospitals, but they also add an independent quality that matches the needs, especially those of patients who are elderly or suffer from chronic diseases. This includes solutions with local service provision (proximity, small, 'homelike' and transparent services without the hospital's stress level), continuity and a holistic approach. However, certain reservations need to be made. Not all local services can be deemed to provide alternatives equal to those of hospitals. The facility needs to have a correctly selected group of patients, medical services with a satisfactory skill level and a systematised observation competence (14).

The Norwegian policy to 'let the thousand flowers bloom' represents a challenge. There is no consistent approach to the provision of intermediate services. These range from half a bed in a nursing home to 116 beds at Øya health centre in Trondheim. They are differently organised with a variety of owners and funding schemes, and they provide a variety of treatment options with the aid of a varied range of medical skills. In the encounter with the increasing number of elderly people and a growing group of patients with chronic ailments, the hospitals as we know them today, with their constantly increasing requirements for efficiency and specialisation, will be unable to provide satisfactory services to these groups of patients. To face the future with sustainable health services we need a national study that investigates existing service provision at the intersection between the specialist and municipal service levels. This study should serve as the basis for a new national health plan. There is a need to clarify responsibilities as well as what these service options should look like. The health plan should be based on 'the patient's health service', in which the requirements for enhanced efficiency should be kept subordinate to the patients' needs.

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#### REFERENCES:

1. Magnussen J, Hagen TP, Kaarboe OM. Centralized or decentralized? A case study of Norwegian hospital reform. *Soc Sci Med* 2007; 64: 2129 - 37. [PubMed][CrossRef]
2. NOU 2005: 3. Fra stykkevis til helt – en sammenhengende helsetjeneste. <https://www.regjeringen.no/no/dokumenter/nou-2005-03/id152579/> (8.6.2017).
3. Forskningsrådet. Evaluering av samhandlingsreformen. Sluttrapport fra styringsgruppen for forskningsbasert følgeevaluering av samhandlingsreformen (EVASAM). Lysaker: Norges forskningsråd, 2016.
4. Swanson JO, Hagen TP. Reinventing the community hospital: a retrospective population-based cohort study of a natural experiment using register data. *BMJ Open* 2016; 6: e012892. [PubMed][CrossRef]
5. Wessel A. Hygiene, social medicin, lægeforhold mv. Bidrag til Finnmark fylkes medicinalhistorie. *Tidsskr Nor Legeforen* 1929; 49: 992 - 1006.
6. Aaraas I. General practitioner hospitals: Use and usefulness. ISM skriftserie nr. 45. Tromsø: Institutt for samfunnsmedisin, 1998.
7. Garåsen H, Magnussen J, Windspoll R et al. Eldre pasienter i sykehus eller i intermediaeravdeling i sykehjem – en kostnadsanalyse. *Tidsskr Nor Laegeforen* 2008; 128: 283 - 5 [PubMed]. [PubMed]
8. Garåsen H. The Trondheim Model. Improving the professional communication between various levels of health care services and implementation of intermediate care at a community hospital provide better care for older patients. Doktorgradsavhandling. Trondheim: Norges teknisk-naturvitenskapelige universitet, 2008.
9. Leonardsen A. Experiences with decentralized acute healthcare services from different stakeholders' perspectives. A mixed methods study. Doktorgradsavhandling. Oslo: Universitetet i Oslo, 2017.
10. Leonardsen AL, Jelsness-Jørgensen LP. Patient experiences and predictors in an acute geriatric ward: A cross-sectional study. *J Clin Nurs* 2017. [PubMed][CrossRef]
11. Small N, Green J, Spink J et al. The patient experience of community hospital – the process of care as a determinant of satisfaction. *J Eval Clin Pract* 2007; 13: 95 - 101. [PubMed][CrossRef]
12. Forsetlund L, Holte HHGS. Lokale akutte døgn tilbud sammenlignet med innleggelse i sykehus. Rapport nr. 24. Oslo: Kunnskapssenteret, 2014.
13. Skinner M. Øyeblikkelig hjelp døgnopphold. Oppsummering av kunnskap og erfaringer fra de første fire årene med kommunalt øyeblikkelig hjelp døgnopphold. Gjøvik: Høgskolen i Gjøvik, 2015.
14. Lappgard Ø. Acute admission at Hallingdal sjukestugu. Can and should local medical centres play a role in Norwegian healthcare services for acute admissions of a specified group of patients? Doktorgradsavhandling. Oslo: Universitetet i Oslo, 2016.

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