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A qualitative study of patient experiences of decentralized acute healthcare services

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ABSTRACT

Objective: Municipality acute wards (MAWs) have recently been launched in Norway as an alternative to hospitalizations, and are aimed at providing treatment for patients who otherwise would have been hospitalized. The objective of this study was to explore how patients normally admitted to hospitals perceived the quality and safety of treatment in MAWs.

Design: The study had a qualitative design. Thematic analysis was used to analyze the data.

Setting: The study was conducted in a county in south-eastern Norway and included five different MAWs.

Patients: Semi-structured interviews were conducted with 27 participants who had required acute health care and who had been discharged from the five MAWs.

Results: Three subthemes were identified that related to the overarching theme of hospital-like standards (“almost a hospital, but ...”), namely (a) treatment and competence, (b) location and physical environment, and (c) adequate time for care. Participants reported the treatment to be comparable to hospital care, but they also experienced limitations. Participants spoke positively about MAW personnel and the advantages of having a single patient room, a calm environment, and proximity to home.

Conclusions: Participants felt safe when treated at MAWs, even though they realized that the diagnostic services were not similar to that in hospitals. Geographical proximity, treatment facilities and time for care positively distinguished MAWs from hospitals, while the lack of diagnostic resources was stressed as a limitation.

KEY POINTS

Municipality acute wards (MAWs) have been implemented across Norway. Research on patient perspectives on the decentralization of acute healthcare in MAWs is lacking.

- Patients perceive decentralized acute healthcare and treatment as being comparable to the quality they would have expected in hospitals.
- Geographical proximity, a home-like atmosphere and time for care were aspects stressed as positive features of the decentralized services.
- Lack of diagnostic resources was seen as a limitation.

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Acute healthcare; decentralization; general practice; hospital-primary care interface; Norway; patient experiences; quality of care

Introduction

The Norwegian Coordination Reform (CR) has been gradually implemented in the period 2012 to 2016, but financial, juridical, organizational and professional measures were first presented in a national healthcare plan in 2010 [1]. The reform aimed at increasing the proportion of patients receiving health services within their local community, as well as to increase general rather than specialist services if patient observations

and treatment could be achieved without hospital admission [2].

A key CR measure was the establishment of municipal acute wards (MAWs) (in Norwegian: kommunale akutte døgnplasser - KAD) [2]. MAWs provide a 24-hour acute service (maximum 72-hour length of stay). The aim was to target patients frequently admitted to hospital. In practice, patients should be stable enough to be examined and treated based on general practice methods, which typically include (1) patients with a

clarified diagnosis, (2) patients with worsening chronic illness in need of treatment adjustments, or (3) patients with an unsettled diagnosis who are not perceived as critically ill, but in need of observation [3]. MAWs are organized in several ways: in nursing homes, in “houses of health”, in local medical centres, in close proximity to casualties or hospitals/General Practice Hospitals (GPHs), and as municipal or inter-municipal acute wards [4].

The idea of decentralization of care to municipalities in Nordic healthcare systems is not new [5,6]. In the 1970s, community healthcare services were offered in GPHs (“cottage hospitals”), with the aim of reducing hospital admittance and costs [7]. Findings indicated that patients had positive experiences of GPHs [8]. In 2002, Norway switched to a centralized healthcare model. During this period, most GPHs were closed.

Donabedian postulated that quality of care depends both on care providers’ technological prowess as well as on their interpersonal competencies [9,10]. Although patient-reported experiences of quality of care are more frequently used in health care, some have questioned their importance due to the influence of factors such as a patient’s general mood or response tendencies. Consequently, these perspectives may not mirror the actual quality of care, as measured by infection and complication rates, although a relationship between patient perceived care and technical quality of care has been reported [11]. Moreover, patient perspectives have been positively associated with clinical effectiveness as well as patient safety [12,13]. As healthcare professionals (nurses and medical doctors), we were interested in exploring the affect of establishment of MAWs on the patients treated in those facilities experience of quality of care and patient safety.

The aim of this study was to explore how patients who would normally get admitted to hospitals perceived the quality and safety of treatment in MAWs.

Methods

Setting and participants

The study presented here is part of a larger, mixed-method study using quantitative (Picker Patient Experience Questionnaire [14] and health-related quality of life (EuroQoL-5 dimension-3 level version [15]) and qualitative measures (interviewing patients and primary-care physicians) following the national launch of the coordination reform in Norway in 2012.

Participants were recruited from five MAWs, all situated in Østfold county in the south-eastern part of

Norway. Patients who were discharged in the twelve-month period June 2014 to June 2015, who were aged 18 years or older and who spent a minimum of 24 hours at the MAW were invited to participate. At each participating MAW, a standardized inclusion procedure was followed: study nurses gave patients written and oral information about the purpose of the study before the patients completed a questionnaire at home.

The initial one-hundred patients who were discharged from each of the MAWs received, in addition to the questionnaire, an invitation to participate in semi-structured interviews to explore patient perspectives on quality and safety. Patients who agreed to be interviewed signed an informed consent and returned it to the study investigators with the questionnaire. After consent was received, participants were telephoned by the first author (ACLL) to schedule an interview.

A total of 28 interviews regarding patient experiences in the five MAWs were analyzed, including three that took place beyond theme saturation (as indicated by data replication and the identification of no new themes), to ensure that no additional themes were identified [16]. Data on gender, age and length of stay for participants are presented in Table 1. One participant was excluded due to staying at a MAW for less than 24 hours. Of the remaining 27 participants, 16 were women and 11 were men, with an even gender distribution amongst all five MAWs.

Table 1. Descriptive of study participants ($n = 27$).

Gender	Female $n = 16$	Male $n = 11$
Age (mean-years)	70, 44	71, 91
Age (median-years)	69, 5	75
Age (range-years)	53–90	50–85
Length of stay (mean-days)	3, 38	3, 82
Length of stay (range-days)	1–7	1–6

Data collection

An interview guide was developed over several iterations and was based on the existing literature as well as discussions among the authors (ACLL, LDB, VAG, LPJJ) (Table 2).

The interviews were conducted in each patient’s home (ACLL) and lasted 25 to 90 minutes (average of 52 minutes). The interviews were conducted from 14 to 21 days after discharge. All interviews were audio-recorded and transcribed verbatim the same or the next day (ACLL).

Data management and analysis

Thematic analysis was performed following the recommendations of Braun and Clarke [17]. The

Table 2. Interview guide. Examples of questions.

Quality	Safety	Comparison to hospital	Finishing questions
Can you please tell me a bit about your stay [at the MAW]? (Follow-up: What was important to you during your stay?)	Can you please tell me about your perception of safety/lack of safety during your stay [at the MAW]? (Follow-up: Did you trust the doctor's professional competence?)	Have you received treatment in hospital before? If yes: how would you compare your previous experiences with the treatment you received [at the MAW]?	Overall, what did you find most positive about your stay?
How would you describe the treatment you received [at the MAW]?	How did you feel the personnel treated you if you asked any questions? (Follow-up: Did you have questions? How did the personnel act if you were anxious or worried about something? Can you please describe a concrete situation in which you had this experience?)	Do you think your experience would have been different if you had been admitted to the hospital? If yes: In what way?	What did you find most negative about your stay?
How did you experience the communication with the staff? (Follow-up: Can you please describe a concrete situation in which you had this experience? Did you feel that they were interested in your situation? Did you participate in decision-making regarding your treatment and care? Were there differences between different personnel?)	If you compare hospital and [the MAW], what are the similarities and differences regarding patient treatment?		Is there anything I haven't asked you about, that you would like to add?

analytic process consisted of four steps identifying, analyzing and reporting patterns/themes within the data.

Two researchers independently coded the transcripts inductively in Norwegian to minimize subjectivity (ACLL, LPJJ), identifying the most basic elements of the raw data that carried meaning in relation to the research question. Although time consuming, we chose to code for as many potential themes/patterns as possible to ensure that no information was lost. The codes were then compared and discussed until agreement was reached (ACLL, LPJJ). The codes, themes and final analysis were discussed and interpreted throughout the process until consensus was achieved by the authors (ACLL, LPJJ, LDB and VAG). A process of reflexivity, including continuous scrutiny of the first authors' impressions, positioning and emotional investments, was applied throughout the data collection phase, as well as during the analysis, to achieve ethical and fair interpretations [18]. Accordingly, the first author (ACLL) noted impressions and pre-assumptions that may influence the interview before conducting each interview. After each interview, the first author (ACLL) made detailed notes on contextual observations, what the patient said about his/her own life situation, and the researcher's and the participant's verbal and non-verbal communication during the interview.

The study was based on the principles stated in the Declaration of Helsinki and on written, informed consent.

Results

Almost a hospital, but ...

Participants experienced the MAWs as hospitals but found that the MAWs contrasted with traditional hospital care, which all of the participants had experienced. Only three of the 27 participants were familiar with the establishment of MAWs. Most thought that they would have to be admitted to the hospital, and they had limited knowledge about the nature of the services that the MAWs provided. The overarching theme "Almost a hospital, but ..." consisted of three subthemes: "Treatment and competence", "Adequate time for care", and "Location and physical environment". Subthemes and representative quotes are presented in Table 3.

Treatment and competence

In reflecting on their stays at MAWs, several aspects were perceived by the participants as being comparable to a hospital, such as the administration of antibiotics, intravenous fluids or analgesics. Patients were also confident that their nurses and physicians were able to perform their tasks to the expected standards. John, who had experienced several earlier hospitalizations, explained:

Actually, it was the same. I got medicines, and someone came in, asking me if I needed something! (John, 80)

To John, treatment and accessible personnel symbolized responsiveness and indicated that personnel

Table 3. Themes, subthemes, and representative quotes related to theme I (“Almost a hospital, but ...”).

Theme	Subthemes	Representative quotes
<i>Almost a hospital, but ...</i>	<i>Treatment and competence</i>	<i>But it was a hospital! To me it was! I got all the help I had expected. They started examining me at once, took blood samples, blood pressure, and the whole package! (Rebecca, 80)</i> <i>... and then I got to stay there, where there were doctors and nurses available. Got an IV cannula in my hand. (Mona, 53)</i> <i>... then they started giving me intravenous medications instead of oral-so I understood that they had the knowledge. (Sarah, 66)</i> <i>It was very hard to come home. To find out that I actually hadn't received any treatment, only analgesics (.) (Thomas, 51)</i>
	<i>Location and physical environment</i>	<i>It is obvious that it has a lot to say. It is, after all, straight up the street. (Harry, 66)</i> <i>It is much closer. Otherwise you have to travel all the way [to hospital] in order to visit. Family and relatives nearby, you see. It is easier for them. (Harry, 66)</i> <i>I appreciate more coming to the MAW, because you always meet someone you know, and it's easy for relatives to come visit. (Kate, 71)</i> <i>Yes, we call it a mini-hospital. (Judy, 74)</i> <i>I felt more like I was (.) well (.) not in an ordinary hospital, because I was kind of more free (Stacey, 61)</i>
	<i>Adequate time for care</i>	<i>It seemed like they had the time to take care of you, to sit down and talk. What really helped me was the doctor who took his time, explaining things to me, and had the time to listen to what I asked. (Andrew, 50)</i> <i>Yes, it is much bigger in the hospital! More patients and (.), they do not have that much time for each patient there [hospital] as in the MAW. I realize that (.) And perhaps more people are in need of help (.), many more in need of food and ... (Sarah, 66)</i>

Participant pseudonym and age- in years, in parenthesis. A list of collated codes is available upon request.

took responsibility for his well-being. For the other participants, the knowledge of being cared for by professional nurses and physicians allowed them to trust that the quality of treatment was comparable to what they would have received in a hospital. Sarah spoke in a quiet voice:

And I trusted them! Because they were real nurses and doctors working there! (Sarah, 66)

Sarah, as well as the other participants, found the clinical follow-up identical to what she would have expected in a hospital, since blood samples were drawn and analyzed, and she underwent physical examinations and monitoring (e.g. measuring blood pressure and pulse). To Carol, the MAW personnel fulfilled her expectations:

They were here with me, measuring blood pressure, following up on my temperature, how it developed, and looking after the IV (intravenous fluid) (Carol, 68)

The personnel's ability to observe and continuously evaluate each patient's condition and take necessary action was recalled by the participants when they described their experiences at the MAWs.

I felt safe! I felt that they had lots of medical competence there! They had doctors' rounds every day (Mary, 64)

Mary was surprised that the MAW had medical rounds every day. This impression was emphasized by several of the participants, who were pleasantly

surprised. Ben, an 80-year-old man, specifically referred to the MAW as a hospital based on the treatment he had received and the healthcare professionals working there:

It was a hospital. To me it was (Ben, 80)

In four of the five municipalities in this study, district hospitals had been shut down some years ago. Looking back, some regarded the MAW as a municipal health service that was comparable to what was in place previously. However, some did not find the services comparable and felt more unsafe than before. Peter stated:

We were safer when we had an emergency department (...) But I am not as safe now as then (Peter, 70)

A vast proportion of the participants also experienced that the MAW represented something very different from a hospital. Most described limited diagnostic options, including a lack of access to x-ray, ultrasound, and advanced laboratory facilities:

They cannot do everything at the MAW. That is why they made them! So that we can have one hospital, and the MAWs for the rest (Doris, 72)

The comments made by Doris indicated that she thought if she needed more specialized medical interventions, she would have to be admitted to the hospital. Several of the participants reported that the [MAW] personnel seemed to be aware of the

limitations they had regarding treatment options and diagnostic equipment, sending patients to the hospital as needed.

Three participants expressed scepticism about the quality of the services offered at the MAWs based on the lack of diagnostic equipment and possibilities for more thorough investigations:

It means a lot to be met with kindness and things like that, but that is not the main thing (.). It is to know what is wrong with me, if it is possible to get a diagnosis (Fred, 82)

Participants also underscored that the MAW represented a new healthcare level, a “new need”, because it was not a hospital, and nor was it a nursing home, but something in between. Others talked about MAWs being “a higher level than the casualty and a lower level than the hospital” (Andrew, 50) and noted that the differences in treatment levels were related to the “severity of the condition” (Peter, 70).

One of the participants was critical of the competence of the MAW staff. Harriet related an episode of atrial fibrillation, for which she had to be hospitalized one week after discharge from a MAW, to a lack of necessary treatment and competence during her stay. To her, these services were safe for some medical conditions but not all:

I would not want to be admitted there if I needed to get a diagnosis or had severe abdominal pain. No, that would have been dangerous! So, it has to be under controlled circumstances, things they can handle! (Harriet, 60)

Location and physical environment

When participants described the MAWs, they most commonly referred to the possibility of having access to treatment within their local community, in contrast to the hospital. Participants used descriptions such as “walking distance” (Judy, 74), “close to home” (John, 80), “straight up the street” (Frank, 75), “local” (Harry, 66), “easily accessible” (Andrew, 50), and “short distance” (Thomas, 51). Having access to care close to home instead of having to travel to the hospital was seen as a great advantage. Patients not only described the geographical location of the MAW as important for their own satisfaction but also thought that a treatment facility within their local community made it easier for relatives to visit.

Participants frequently described the facilities as physically similar to those of hospitals. However, they focused more on how the physical environment of the MAW differed from that of the hospital, describing the MAW as follows: “comfortable”, “calm environment”,

“small”, “intimate”, “free”, “quiet”, “relaxing”, “ability to rest”, “home-like” or “a home”. More than half of the participants described the atmosphere of a hospital as stressful and noisy. Additionally, the perception of a calm atmosphere was related to having a single-room. This permitted privacy, as well as the opportunity for self-chosen seclusion or socializing with other patients. Stacey explained:

I had all the time in the world to calm down and get well. I did not have to be considerate to others in the room or be afraid of even coughing (.). It is much easier with single-rooms. Easier to ask (Stacey, 61)

Having a single-room provided a better opportunity for Stacey to relax. Sharing meant that she did not get to ask the questions she wanted or get the information she needed. Mary, as well as eleven other participants, emphasized similar, positive experiences:

Often, you are placed in a room with other patients (.). I do not particularly like the doctor telling my co-patients about what is wrong with me and what the future plans are (Mary, 64)

Adequate time for care

Participants spoke about adequate time in relation to efficiency and waiting time, as well as time for healthcare personnel to engage with them. In total, 21 participants reported that doctors and nurses at MAWs had more time available to care for them than those in hospitals. The participants had experienced extensive waiting times in hospitals, waiting for doctors, waiting for treatment, and waiting to be assigned a bed. Conversely, they experienced not having to wait before receiving help at the MAW, as Sarah (66) described:

... a doctor came almost at once. You didn't have to lie down and wait. In the hospital, you may have to wait for two hours before a doctor arrives (Sarah, 66)

As this quote illustrates, waiting-time had made Sarah feel insecure in the past, causing her to worry about what was wrong, what was going to happen next. This feeling was supported by most of the participants. The sentiments expressed by the participants related to other important aspects of time were as follows: “time to talk” and “time to pop in”, “had time” and “took time”.

They stopped by if they heard me struggling to breathe (.), even if I had not rung the bell. They seldom do that in hospitals, because they don't have the time! (Nina, 60)

Nina noted adequate time as a necessary resource for healthcare personnel to be able to observe and follow-up. Adequate time was also the premise of her

sense of being cared for and of feeling safe, knowing that someone would come into her room without her having to ask. Although patients experienced that [MAW] personnel had more time for their patients, they also attributed this to a limited workload and less stress compared to their colleagues in hospitals, as Frank described:

It is easier to talk to those who work there! Because if you go to the hospital, they have a thousand different things to do at the same time (Frank, 75)

In reflecting on experiences from prior hospitalizations, participants noted factors such as “urgency”, “in a hurry”, and that doctors and nurses were in “a rush”. These experiences prevented them from asking further questions due to concerns about receiving limited information. Stacey had a very different experience at the MAW:

I understood that they were interested in listening to what I said, and in hospitals, the doctors gather around the bed, a whole bunch of them. At the MAW, one lady came that I could talk to in peace and quiet (Stacey, 61)

Discussion

This study is, to the best of our knowledge, the first to explore patient experiences with municipal acute wards after the implementation of the Norwegian coordination reform. Our findings indicate that although participants described the treatment they received as being comparable to that administered in hospitals, most of them also appreciated several aspects that were different. The MAW was seen as beneficial due to its proximity to home and was described as an environment in which treatment and care were delivered in a quiet and calm home-like environment, and personnel had more time to care for patients. Lack of diagnostic equipment and possibilities were seen as a limitation.

Although the MAW is a new service that may evolve over time and consequently influence patient experiences, the findings of this study provide important insight into patient perspectives regarding this service. However, the study presented here has some limitations. First, the sample came from only one geographical area. However, participants from both urban and rural areas of the county were included, which may be viewed as a strength. Second, the criteria for admission to MAWs indicate that patients' conditions may be less severe than the conditions of those who are admitted to hospitals. This difference may have affected participants' perspectives on earlier

hospitalizations. Finally, we chose to perform a descriptive, thematic analysis of the data. Different methods of analysis, such as narrative analysis [19], might have contributed to a more rich and nuanced understanding of the participants' experiences [20,21].

There is growing recognition that patients' perspectives are essential in the assessment of quality of health care [12]. An important question is however, whether patients health care experiences reflect the quality of care or not. Indeed, there are several critical aspects, such as e.g. the fact that most patients lack formal medical training. Consequently, it may be argued that patients' cannot adequately assess quality of care. For instance, Rao et al. [22] investigated the relation between older patients' assessments of the quality of primary care and good clinical practice based on data from administrative and clinical records. Interestingly they found that the patients' reports were not sufficient to assess the technical quality. In the current study, a lack of diagnostic equipment at the MAW was seen as a limitation by patients, but to them it did not imply insecurity. On the other hand, from a healthcare professional perspective, this may be viewed as a clear limitation of these wards.

The Norwegian coordination reform aligns with an increased focus on organizing acute healthcare services in more efficient and patient-centered ways. The main idea is to provide healthcare services at an appropriate level and avoid unnecessary hospitalizations. In a Swedish study, Norberg and colleagues [23] found that 16% of patients in contact with emergency medical services were potential candidates for primary care. Moreover, they found that these patients were generally healthier than those judged to be in need of hospital emergency services. Consequently, observation and treatment at the primary health care level may be suitable. In the United Kingdom, several models for urgent care have been developed and implemented. For example, intermediate care (IC) has been introduced to promote quicker recovery, prevent unnecessary hospital admissions and support timely hospital discharges [24]. These interventions have, however, mostly targeted older patients, whereas the MAW treats patients aged 18 years and older. In Norway, decentralized acute care has traditionally been offered in GPHs or community hospitals (CH), and there are some indications that patients view these services positively [8,25]. However, the GPHs provide treatment for other aspects than MAWs, such as, for example, rehabilitation [8]. Thus, patient experiences from these units and MAWs are not necessarily comparable.

Participants described receiving medical treatment at MAWs that was similar to what they had experienced in hospitals, and they were confident that they would be transferred to a hospital if specialized treatment and follow-up were needed. Competence—which was described by participants as the ability to observe, evaluate and act on observations—was regarded as a factor that increased their sense of safety. The definition of competence has been debated [26], but professional competence often includes the combination of knowledge and experience, communication skills, and procedural- and physical examination skills, as well as the ability to make clinical judgements [27,28]. All of these aspects were highlighted in the current study, which is in keeping with prior findings that identify these as key qualities that influence patient satisfaction [29]. These aspects may, in turn, influence their evaluation of health care [30].

Although MAWs, GPHs and IC units are not directly comparable, our findings support prior studies of such units; the patients were treated in a peaceful, relieving environment, in contrast to the stressful and hectic hospital environment [31–33]. Patient experiences have also been found to be more positive in small and rural hospitals than in larger and more urban hospitals [8,25]. In the current study, participants also emphasized that the geographical proximity to home was a great advantage, enabling relatives to visit, which is consistent with studies on CHs [25]. Similar findings have been reported in studies of community hospitals in England [34,35]. There are, consequently, clear parallels between the findings of prior studies, as well as patient statements, and the findings of the current study.

Studies have shown that ideal features of the hospital work environment, such as better staffing ratios of patients to nurses and decreased mental workloads for providers, are associated with improved patient outcomes and satisfaction, and even with increased quality [36–38]. Participants perceived that MAW personnel had adequate time to care for them, to perform observations and to engage with them, indicating a lower workload than in hospitals. Interpersonal attributes become the most important indicators of perceived quality of care when technical competence is assumed [28]. Furthermore, the comfortable physical care environment, which resembled a home rather than an institution, has been identified as an important quality of care measure [12].

Conclusions

This study indicates that patients felt safe at the MAWs, even though they realized that the diagnostic

equipment were not similar to that in hospitals. However, since patient experiences is not sufficient to assess technical quality of care, further studies, using other methodological approaches, are needed to assess treatment outcome in MAWs. Despite these limitations, our findings are similar to patient input from other decentralized organizations, which emphasize the need to consider these experiences in the development and implementation of new healthcare services. Moreover, since modifiable aspects like communication helped to positively differentiate MAWs from hospitals, our findings should also influence hospital administrators and healthcare professionals in efforts to improve health care quality.

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Ethics

The necessary approval was sought and obtained from the Regional Committee for Research Ethics in Norway (REK) (ref. no 2013/1276/REK sør-øst D), as well as the Norwegian Social Science Data Services (NSD) (ref. no 38585).

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Disclosure statement

None to declare.

References

- [1] Helse- og omsorgsdepartementet. Nasjonal helse- og omsorgsplan (2011–2015) [National health- and care plan 2011–2015]. St. meld.16, 2010–2011 [cited 2015 Oct 10]. Available from: <https://www.regjeringen.no/contentassets/f17befe0cb4c48d68c744bce3673413d/no/pdfs/stm201020110016000dddpdfs.pdf>.
- [2] Helse- og omsorgsdepartementet. Samhandlingsreformen. Rett behandling-til rett tid-på rett sted [The Coordination Reform. Right treatment-in right time-at right place]. [Internet] Helse- og omsorgsdepartementet; 2009 [cited 2015 Feb 3]. Available from: [http://www.regjeringen.no/upload/HOD/Dokumenter INFO/Samhandling_engelsk_PDFS.pdf](http://www.regjeringen.no/upload/HOD/Dokumenter/INFO/Samhandling_engelsk_PDFS.pdf).
- [3] Norsk forening for allmenntilleggsmedisin [Norwegian Federation of General Practice]. Medisinsk faglig veileder for kommunale akutte døgnplasser (KAD)

- [Medical guideline for municipality acute wards (MAWs)]. Oslo: Den Norske Legeforening [The Norwegian medical Association]; 2014. [cited 2016 Aug 12]. Available from: <https://legeforeningen.no/PageFiles/176624/140507%20KAD%20veileder.pdf>
- [4] Sundlisæter Skinner SM. Skeptiske leger og tomme senger? Bruken av de kommunale akutte døgnplassene [Sceptical doctors and empty beds? The utilization of the municipality acute wards]. Høgskolen i Gjøvik/Senter for omsorgsforskning øst, rapportserie 10/2015; 2015. Available at: www.omsorgsforskning.no
- [5] Bergman SE. Swedish models of health care reform: a review and assessment. *Int J Health Plan Manage* 1998;13:91–106.
- [6] Vrangbæk K. Towards a typology for decentralization in health care. In: Saltman R, Bankauskaite V, Vrangbæk K, editors. *Decentralization in health care-strategies and outcomes*. Maidenhead & New York: McGraw-Hill; 2007.
- [7] Aaraas I. The Finnmark general practitioner hospital study. Patient characteristics, patient flow and alternative care level. *Scand J Prim Health Care* 1995;13:250–256.
- [8] Aaraas I. Sykestuer i Finnmark. En studie av bruk og nytteverdi. Tromsø: Institutt for samfunnsmedisin; 1998.
- [9] Donabedian A. Evaluating the quality of medical care. *Milbank Fund Q* 2005;83:691–729.
- [10] Donabedian A. The quality of care. How can it be assessed? *JAMA* 1988;260:1743–1748.
- [11] Isaac T, Zaslavsky A, Cleary P, et al. The relationship between patients' perception of care and measure of hospital quality and safety. *Health Ser Res* 2010;45:1024–1040.
- [12] Doyle C, Lennox L, Bell D. A systematic review of evidence on the links between patient experience and clinical safety and effectiveness. *BMJ Open* 2013;3:3. doi:10.1136/bmjopen-2012-001570.
- [13] Rathert C, Brandt J, Williams ES. Putting the 'patient' in patient safety: a qualitative study of consumer experiences. *Health Expect* 2012;15:327–336.
- [14] Jenkinson C, Coulter A, Bruster S. The Picker Patient Experience Questionnaire: development and validation using data from in-patient surveys in five countries. *Int J Qual Health C* 2002;14:353–358.
- [15] EuroQol Group. EuroQol - a new facility for the measurement of health-related quality of life. *Health Policy* 1990;16:199–208.
- [16] Strauss AL, Corbin JM. *Basics of qualitative research*. Newbury Park: Sage; 1990.
- [17] Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;3:77–101.
- [18] Gough B, Finlay L. *Reflexivity: a practical guide for researchers in health and social sciences*. Oxford: Blackwell Science; 2003.
- [19] Langdridge D. Hermeneutic phenomenology: arguments for a new social psychology. *History Philosophy Psychol* 2003;5:30–45.
- [20] Kvale S. *InterViews: an introduction to qualitative research interviews*. California: Sage Publications; 1996.
- [21] Langdridge D. *Phenomenological psychology: theory, research and method*. Harlow, UK: Pearson Education; 2007.
- [22] Rao M, Clarke A, Sanderson C, et al. Patients' own assessments of quality of primary care compared with objective records based measures of technical quality of care: cross sectional study. *BMJ* 2006;333:19.
- [23] Norberg G, Sundström W, Christensson L, et al. Swedish emergency medical services' identification of potential candidates for primary healthcare: retrospective patient record study. *Scand J Prim Health Care* 2015;33:311–317.
- [24] Young J. The development of intermediate care services in England. *Arch Gerontol Geriat* 2009;49:21–25.
- [25] Lappegard Ø, Hjortdahl P. Perceived quality of an alternative to acute hospitalization: an analytical study at a community hospital in Hallingdal, Norway. *Soc Sci Med* 2014;119:27–35.
- [26] Norman GR. *Defining competence: a methodological review*. New York: Springer; 1985.
- [27] Epstein RM, Hundert EM. Defining and assessing professional competence. *JAMA* 2002;287:226–235.
- [28] Calman L. Patients' views of nurses' competence. *Nurse Educ Today* 2006;26:719–712.
- [29] Anderson R, Barbara A, Feldman S. What patients want: a content analysis of key qualities that influence patient satisfaction. *J Med Pract Manage* 2007;22:255–261.
- [30] Vedsted P, Heje HN. Association between patients' recommendation of their GP and their evaluation of the GP. *Scand J Prim Health Care* 2008;26:228–234.
- [31] Martinsen B, Norlyk A, Lomborg K. Experiences of intermediate care among older people: a phenomenological study. *Brit J Commun Nurs* 2015;20:74–79.
- [32] Griffiths P, Edwards M, Forbes A, et al. Post-acute intermediate care in nursing-led units: a systematic review of effectiveness. *Int J Nurs Stud* 2005;42:107–116.
- [33] Johannessen AK, Werner A, Steihaug S. Work in an intermediate unit: balancing between relational, practical and moral care. *J Clin Nurs* 2014;23:586–595.
- [34] Green J, Forster A, Young J, et al. Older people's care experience in community and general hospitals: a comparative study. *Nurs Older People* 2008;20:33–39.
- [35] Small N, Green J, Spink J, et al. Post-acute rehabilitation care for older people in community hospitals and general hospitals—Philosophies of care and patients' and caregivers' reported experiences: a qualitative study. *Disabil Rehabil* 2009;31:1862–1872.
- [36] Kane RL, Sharliyan TA, Mueller C, et al. The association of registered nurse staffing levels and patient outcomes: systematic review and meta-analysis. *Med Care* 2007;45:1195–1204.
- [37] Weigl M. Work conditions, mental workload and patient care quality: a multisource study in the emergency department. *BMJ Qual Saf* 2015;25:1–10.
- [38] Aiken LH, Clarke SP, Sloane DM, et al. Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *JAMA* 2002;288:1987–1993.