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Role of general practitioner-led rural community hospitals in Sweden: a qualitative study

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ABSTRACT

Objective To explore rural general practitioners' (GPs') experiences of providing care in rural community hospitals (CHs) in northern Sweden.

Design An interview study, using qualitative content analysis.

Setting The study was conducted in Norrbotten and Västerbotten counties in Sweden and included eight rural CHs.

Participants Semi-structured interviews were conducted in 2018 with 15 rural GPs.

Results Two themes were identified: 'Being the hub in the patient's healthcare pathway' and 'Offering person-centred care far from hospital'. CHs are suitable for elderly, multimorbid and end-of-life patients, emphasising proximity, familiarity and discharge planning. They serve as primary care and intermediate hospital care hubs, collaborating with general hospitals and municipal caregivers. The rural GPs interviewed, as generalists, value holistic hospital patient care, and benefit from longitudinal patient knowledge. They highlighted these advantages and the cost-effectiveness of the CH model, arguing that it should be extended to urban regions. The rural GPs described their work situation as stimulating, but role conflicts in tight-knit communities, geographical distances and limited medical resources pose rural-specific ethical dilemmas.

Conclusions Rural GPs value the holistic generalist perspective of CH care and emphasise the high-quality care that the CH setting enables them to provide. Despite rural-specific ethical dilemmas, they value the CH model and are concerned about its closures.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ In this study, both the interviewer and interviewees possessed professional expertise related to the topic under investigation, and so the researcher was a vital instrument in the research process.
⇒ The majority of Swedish community hospitals (CHs) were visited, and the study participants were male and female doctors of diverse ages and experiences.
⇒ International comparisons should be approached with caution, as variations in the organisation, size, and roles of CHs may hinder transferability.

INTRODUCTION

Rural community hospitals (CHs) play a crucial role in providing healthcare services in various sparsely populated regions worldwide,[1 2] including northern Sweden. These hospitals often serve as local primary care units, providing medical services via general practitioners (GPs), registered nurses and other healthcare professionals. Additionally, they have hospital wards, emergency rooms, and limited diagnostic facilities.[1 2]

The role of CHs that are similar to those in Sweden has been researched in other rural areas worldwide,[1–7] and in 2013, a World Summit in Cairns, Australia, stated a consensus on rural generalist medicine,[8] which defines Rural Generalist Medicine as comprehensive medical care provided by doctors in rural areas, encompassing primary care, hospital care, emergency services and specialised practices tailored to community needs. It emphasises a multidisciplinary, community-responsive approach essential for sustaining rural health services and recognises the unique contributions of various medical professionals.

Sweden's primary care system is decentralised, managed by 21 county councils and regions, and funded primarily through taxes. Patients register at primary care centres (PCCs) and they can change their chosen PCC at any time. Care is delivered by multiprofessional teams with a focus on preventive care and chronic disease management. In contrast, many other countries have more fragmented primary care systems, with different professionals working in separate practices or facilities. Swedish GPs and other staff are salaried with standardised working conditions across public and private PCCs.[9] Key findings from The Commonwealth Fund's 2015 International Health Policy Survey[10] highlight that Swedish GPs report high levels of patient-centred care, similar to the Netherlands and the UK.[10] In Sweden, regional county councils organise primary and secondary care (including CH care) based on the Health

and Medical Care Act;[11] while nursing needs due to age and morbidity are addressed by municipalities under the Social Services Act[12] and can include home service or accommodation in nursing homes.

The Swedish rural CH model has not been studied until recently, when the clinical profiles of CH patients in northern Sweden were studied.[13] The key findings were that CHs predominantly admit and treat elderly, often multimorbid patients who require acute care, postoperative rehabilitation and end-of-life care; this is consistent with international findings.[1–7] One significant difference between CH care and GH care is that medical responsibility lies with a GP in the CH context and with a hospital specialist doctor in the general hospital context. To meet the need for broader medical competences, a rural medicine addition to the GP specialist training programme in Sweden was developed in 2009.

Understanding the perspectives and roles of rural GPs and CHs within the Swedish healthcare system and local communities is crucial due to their distinct responsibilities, training and medical approach.

Aim

The aim of this study was to explore the experiences of rural GPs regarding providing care in rural CHs in northern Sweden.

METHODS

Study setting

This study was conducted in northern Sweden's Norrbotten and Västerbotten Counties, where 13 rural CHs serve sparsely populated municipalities. This area represents almost a quarter of the country's land area and has an average population density of 0.8/km^2. In comparison, Sweden's average population density is 24/km^2, and that of the EU is 120/km^2. The CHs are publicly owned and function as local PCCs, offering services with general GPs, registered nurses, physiotherapists and other healthcare professionals. Alongside primary care, they have hospital wards, emergency rooms, basic X-ray facilities and a limited range of point-of-care (POC) tests for acute diagnostics. Compared with some other community hospitals studied internationally, Swedish CHs and their GPs have a wider responsibility including primary care, acute care and in-patient care.[4 13] For secondary and tertiary hospital care, the municipalities with CHs rely on general hospitals, which are typically more than 1 hour away by road ambulance.

In CH areas, the local ambulance takes most acute patients to CH emergency rooms instead of the nearest general hospital.[13] CHs provide inpatient care for acute patients, enabling rural GPs to admit suitable individuals to the CH ward for observation and treatment. Additionally, CHs are used for continued treatment or rehabilitation following medical procedures conducted in general hospitals and offer end-of-life care when palliative care cannot be arranged at home.[13] CHs rarely admit children due to the need for specialised paediatric care during hospitalisation.

[11 12]Collaboration between CHs and municipalities is essential to identifying and planning for changes in nursing needs before mutual patients are discharged. Some CHs have short-term accommodation beds within the ward, which facilitate patient transfers.

Rural GPs in CHs have diverse responsibilities, including primary and emergency care, hospital in-patient care and population health management, following the Cairns Consensus Statement on Rural Generalist Medicine.[8] CHs offer GP-led hospital care for patient groups that would typically be treated by specialists in general hospitals elsewhere. In Sweden, both GPs and hospital specialists must undertake at least 5 years of specialist training. However, a special route exists for rural GPs, involving additional training in emergency medicine and hospital care.[14]

Design and sampling

This study used a qualitative exploratory design.[15] Consent was sought from the Managing Directors (MDs) of all existing CHs with four or more hospital beds to approach their doctors regarding participation. Subsequently, all available rural GPs (n=30; M=17, F=13) were invited using email lists provided by the MDs.

Data collection

Semistructured, face-to-face interviews were conducted by PhD student MH with the participating doctors at their workplaces between January and April 2018. Open-ended and probing questions were used, supported by an interview guide created by MH and MB to focus the discussion on areas of interest for the study (see online supplemental file). The interviews had an average duration of 1 hour.

Data analysis

The interviews were recorded, transcribed verbatim and analysed using qualitative content analysis with an inductive approach.[15–18] The participants were numbered 1–15. Anonymised transcripts were read multiple times for comprehension and to understand and gain a sense of the whole. To ensure trustworthiness and agreement within the research group, all authors read all interviews and collaborated on the coding of some of them. The transcripts were imported into MAXQDA, a qualitative data management software program, to systemically sort and code the data.[19] Meaning units were identified, condensed and labelled with descriptive codes, then organised into categories. Codes, categories, subthemes and themes were discussed within the research group and refined through consensus discussions (see table 1).[20] Representative quotes from interviewees that illustrate findings were selected (see tables 3 and 4). The study reporting followed the consolidated criteria for reporting qualitative research (COREQ) guidelines.[21]

Patient and public involvement

Neither patients nor the public participated in the design of this study.

Table 1 Examples of meaning units, condensed meaning units, codes, subthemes and themes

Meaning unit quotations	Condensed meaning unit	Code	Subtheme	Theme
"I experience it like this, it becomes a small hospice. Maybe not as fancy as a really good hospice, but perhaps even more personalised care. Still, I find it quite, you know, okay care because it becomes very familiar."	Slightly less fancy but familiar hospice with okay care	The CH as a hospice	Maintaining an intermediate level of hospital care	Being the hub in the patient's healthcare pathway
"So, when I admit a patient I'm familiar with, it takes, I think 5 minutes. I know immediately what the issue is, what I want from the stay, what blood tests I want, and I can admit them without a lengthy medical history. And that saves doctor time. If I were to refer the patient, it would take much longer, I couldn't manage it in half an hour."	Admitting takes five min when I know the patient, referring takes half an hour of doctor time	Continuity provides time efficiency	Striving to see and understand the patient in their context	Offering person-centred care far from the hospital

RESULTS

A total of 30 rural CH doctors were invited to participate; 15 accepted and were included in the study. The characteristics of the participating doctors are summarised in table 2. Their clinical practice in CHs ranged from 3 to 40 years. M/F ratio among participants was equal to that of non-responders, but we have no other demographic information on non-responders. The participants were employees at eight different rural CHs: five located in Norrbotten County and three in Västerbotten County. The CHs had 4 to 8 hospital beds and served populations ranging from 2797 to 6484. The road distance to nearest secondary/tertiary hospital ranged from 69 to 184 km. In tables 3 and 4, themes, subthemes and representative quotations are presented.

Table 2 Participant characteristics (n=15)

Sex	
Male	9
Female	6
Age (years)	
30–39	3
40–49	5
50–59	4
60+	3
Clinical experience (years)	
< 10	3
10–20	4
> 20	8
Postgraduate qualifications	
General practice	13
No specialist postgraduate qualification	2
County affiliation	
Västerbotten	6
Norrbotten	9

Theme 1: being the hub in the patient's healthcare pathway

The first theme reflects the doctors' perceptions of the role of CHs and encompasses three subthemes: 'Maintaining an intermediate level of hospital care', 'Providing a local service and feeling of safety in the community' and 'Being an interface between different providers of healthcare and nursing care'.

Maintaining an intermediate level of hospital care

The doctors felt that CHs are suitable for the care of patients who require an intermediate level of hospital care. In the absence of clear guidelines on patient admission criteria, and as CH doctors differ in clinical experience and skills, there is variation in which patients are admitted or referred. The basic principle was that patients who require competences and resources not available in CHs should be referred to a general hospital. The doctors stated that CH patients primarily consist of elderly people following three healthcare pathways: *acute* patients, *postoperative rehabilitation* patients and *end-of-life* patients. *Acute* CH patients are typically elderly individuals with multiple comorbidities. Common diagnoses among such patients include pneumonia, COPD and cardiac failure. Patients with unclear symptoms are admitted for medical investigation and to address any non-medical factors. Patients not adequate for CH care are those that initially need extensive hospital resources, for example, acute diagnostics with CT scanning, intensive care, surgery, acute cardiovascular interventions or constant surveillance. Doctors report that many patients are sent to CHs for early *postoperative rehabilitation* and while waiting for municipal care, with hip and pelvic fractures as common diagnoses. Many CH patients are admitted for *end-of-life care*. The doctors stated that although home is the preferred place to die in for most end-of-life patients, advanced palliative home care is not available 24/7 for those living far from CHs. In such cases, patients may be admitted to the CH for high-priority care. The hospital rooms intended for palliative patients allow relatives to stay overnight to offer familiarity and CHs were compared with small hospices.

Table 3 Representative quotations to theme 1 and subthemes

Theme	Subthemes	Quotations
Being the hub in the patient's healthcare pathway	Maintaining an intermediate level of hospital care	"…one should have planned the level of care right from the beginning, as it's kind of crucial, it's really the first thing you think about. Is this an appropriate level of care?" (Doctor 9)
		"…what one might lose by not constantly meeting subspecialists, one might gain through a holistic perspective." (Doctor 9)
		"…if I were in charge of healthcare in Sweden, I think they should have an equivalent in the cities as well. Especially for this "omnipotent" care, someone who can bridge the gap between specialized care and primary care, that is." (Doctor 8)
	Providing local service and feeling of safety in the community	"But being content is still an indicator of it being good, even if it doesn't have anything to do with how healthy the patient is, and then it becomes very much about general medicine. What do we ultimately want? Do we all want to live to 100, or do we want a, so to speak, as good a life as possible, so to speak?" (Doctor 12)
		"I'm proud of our palliative care; we have a family-friendly room. There's a very comfortable chair and the option to bring in a bed, and we're not too picky when it… once there was a request for the cat to be there when someone was dying, and we made it possible through the window, so it didn't go through the entire health centre." (Doctor 6)
		"This excellent service for the population, especially the aging population, it is… Our expertise in this matter is unparalleled because we have patient knowledge. We have proximity to the municipality and various stakeholders; it's absolutely unbeatable." (Doctor 13)
		"…then there's this, I understand the culture very well, and I understand the women very well… Because (local) women are special… They're supposed to handle everything, do everything, never seek help, and never complain. But then they crash when their husband is demented, and it simply doesn't work, or when they're younger, trying to take care of a husband and three or four children while having a full-time job themselves." (Doctor 5)
	Being an interface between different providers of healthcare and nursing care	"…most people probably think it's better that (…) you know people, you understand their needs compared to it being bureaucrats making decisions who don't know the individual." (Doctor 4)
		"Fundamentally it actually works quite well. Those of us working closely with patients don't have issues with each other and try to find the best solutions for the patients. However, there are setbacks constantly, either it's the county's expenses or it's the municipality's expenses. That it's taxpayer money being used, that's something nobody thinks about." (Doctor 6)
		"We can't have hospital beds here if we don't have a doctor on call who can step in if something happens." (Doctor 13)

When comparing patient safety between CHs and general hospitals, the doctors suggested factors that favour CH care, including smaller wards and the broader competence of experienced CH nurses, who better understand patient needs and preferences. They emphasised the importance of considering the whole patient when deciding on the optimal level of hospital care. One doctor stated that because CH doctors are involved in patient follow-up care, they are more proactive in discharge planning, which may reduce rehospitalisations compared with general hospital.

The doctors expressed frustration regarding the lack of basic medical technology services in CHs, which led to unnecessary hospital transfers. They desired more POC tests to reduce delays caused by waiting for laboratory results, particularly for vital tests like sodium, potassium and creatinine analyses, which were lacking in some CHs and could result in referrals to general hospitals. In addition, chest X-ray examinations for inpatients were infrequent, requiring radiology nurses to commute and so making them available only a few times per month. While some doctors had access to valuable ultrasound examinations for diagnostics, this resource was not available to all CHs and doctors.

The doctors perceived CH care to be cost-effective, offering high-quality care for patients with fewer resource needs than general hospitals and they stated that CH beds are half as costly as general hospital beds. However, budget constraints often lead to CH bed cuts, increasing costs for ambulances and undermining economic benefits.

The doctors discussed the future of CHs, expressing a fear of resource cuts leading to closures and staff loss in sparsely populated areas. They suggested that the CH model should be expanded to towns for better care and

Table 4 Representative quotations to theme 2 and subthemes

Themes	Subthemes	Quotations
Offering person-centred care far from a general hospital	Striving to see and understand the patient in their context	"…so, when I admit a patient I'm familiar with, it takes - I believe 5 minutes. I instantly know what the issue is, what I want to do for the stay, what blood tests I want, and I can do the admission right away without a lengthy medical history." (Doctor 6)
		"…you shouldn't ask the patient "what's the matter with you"; you should ask "what matters to you" And I feel that's the essence of what we're doing." (Doctor 5)
		"It's incredibly satisfying for me as a doctor to actually be able to cure a patient quite often… It's not just about diagnosing and sending them away, but actually treating them and seeing with my own eyes that the patient is getting better, more energetic, and can go home." (Doctor 5)
		"We shouldn't offload (the general hospital); we should take care of our patients." (Doctor 7)
		"…it's absolutely the worst thing that has happened in primary care during this time. In an operation where the cornerstone is continuity and quality, it has instead led to enormous costs, tremendous inefficiency… this is a completely insane system that has been allowed to flourish." (Doctor 13)
	Making medical decisions and taking action far from a general hospital	"…you can have a better picture here, where you know the patient, perhaps their own stance and preferences, and you also know the relatives, maybe a bit more about how they think about the patient, like "Should we really perform this examination on you" So, we might not need to do it; it might be the best option." (Doctor 14)
		"In such a remote healthcare centre, we must… refrain from sending patients too often, or else the day may come when a five year-old dies needlessly because we can't secure a medical transport." (Doctor 6)
		"You can't be too afraid of emergency care (…) if you're going to work here. Because at some point, something happens, and then it gets a bit intense." (Doctor 4)
		"I mean, of course, you can drown. But you don't really think about it when you're swimming across deep water, and yet you swim, and it's perfectly normal. It's the same with responsibility; it's something you have as part of the package, and it's not something you think about very much." (Doctor 12)
		"…this job is like walking on a damn minefield. You can step on a mine even if you go slowly, but the risk is higher if you're running…" (Doctor 5)
		"If I wasn't here, it would be even worse" and "I did not make the patient ill, it depends on their having a disease." (Doctor 5)

cost-effectiveness through generalist-provided intermediate hospitals. Many found it perplexing when complex home situations placed elderly patients in highly specialised hospital wards where staff lacked expertise on comprehensive care in multimorbid patients.

Providing local service and feeling of safety in the community

The doctors stated that CH patients and their families are generally satisfied with local care, feeling more secure and calm than in hectic hospital settings. Many patients prefer CH care to hospital transfers, with some documenting this preference in their medical records. The doctors argued that patients are often familiar with the CH staff and find it easier to visit the CH than a hospital. In addition, patients who require frequent administration of medical treatment appreciate it being possible for this to be done locally, rather than at a hospital. One doctor emphasised the significance of patient satisfaction, even in the absence of medical-outcome analysis. The doctors described taking pride in CH palliative care, emphasising the ability for relatives to visit, teamwork among hospital staff and familiarity with patients. They argued that referring patients with palliative needs to general hospitals is generally a less optimal approach than keeping them in CHs, where patients and relatives expressed gratitude for the quality of care received. The doctors acknowledged, however, that those who are dissatisfied with the care may not openly express their concerns to their doctor, and instead share their dissatisfaction elsewhere.

The community seems to value CHs greatly. When one CH ward was closed, there was a prolonged occupation of the CH to pressure politicians to reopen it. The interviewed doctors anticipate similar reactions if there are future attempts to close CH wards. The constant availability of medical expertise was believed to contribute to a sense of safety within the community.

The doctors stressed the importance of local cultural understanding, which reassures patients by acknowledging their situations and living conditions. Familiarity

with geography aids in planning follow-up care and reducing patient travel. Understanding the local population's mentality enhances comprehension of patients and their challenges.

Most CHs are situated in Sápmi, the historic Sámi settlement area. Understanding of Sámi culture and language in CHs was deemed to be an important aspect of caring for Sámi patients, particularly elderly people. CHs near the Finnish border also serve Finnish-speaking patients. In one CH, Finnish-speaking assistant nurses are used instead of telephone interpreters, unless the doctor speaks Finnish.

Being an interface between different providers of healthcare and nursing care

The doctors highlighted the central position of CHs in patients' healthcare journeys, offering primary and secondary care and collaborating with general hospitals and municipal healthcare. The doctors also described other staff finding the complexity of the tasks in a CH ward challenging, but it also allowed them to acquire broad competences over time. Many staff members had community insight, aiding patient care and discharge planning. The doctors described engaging in respectful counselling calls with hospital specialists who guided them in CH patient care to avoid unnecessary referrals. However, some staff in larger hospitals were unaware of CHs' inpatient care provision, and derogatory attitudes, mainly from subspecialists in tertiary hospitals, were described.

With regard to CH patients with changing nursing needs at discharge, the doctors emphasised the importance of coordinating with municipal needs assessors. The small CH context was seen as favourable as it brings assessors closer to the care process and involves shorter decision paths and improved workflow. The familiarity among team members was said to foster collaboration and prevent problems being passed onto others.

However, the doctors recognised the vulnerability of small communities with regard to staff shortages: if, for example, a needs assessor is absent due to illness, this can delay decisions for patients and prolong hospital stays.

Some of the rural GPs had served as doctors in local nursing homes and had regular interactions with municipal nurses about residents' health. Separate patient records between the municipality and region were described as the cause of challenges, such as reliance on verbal information causing the risk of data loss and patient harm.

The doctors questioned the division of municipal and regional responsibilities for older patients' care. Bureaucracy in interactions with municipal decision-makers was said to prolong hospital stays.

As the doctors were interviewed before the COVID-19 pandemic, they discussed using telephones, photographs and videos to bridge distances in healthcare. E-health solutions were seen as increasingly relevant in rural areas in order to reduce the costs and workload of having doctors on call every night and weekend in each CH. Systems of doctors remotely assessing patients via video were described, as was the possibility of admitting patients to CH care from distance. However, there were worries that distance assessments could increase ambulance transports and compromise patient safety in CH wards.

The doctors generally supported relevant use of telemedicine, but some cautioned against viewing it as a healthcare saviour, warning about false security affecting patient safety.

Theme 2: offering person-centred care far from a general hospital

The second theme reflects the doctors' perception of their own role and situation in rural CHs. The subthemes were 'Striving to see and understand the patient in their context', 'Making medical decisions and taking action far from a general hospital' and 'Facing advantages and disadvantages of rural working conditions'.

Striving to see and understand the patient in their context

The doctors compared CH doctors to general hospital specialists, arguing that the latter are highly specialised while the former have broader skills but lack organ-specific knowledge. It was suggested that CH patients with complex conditions benefit from comprehensive care by CH doctors, who can manage diverse medical issues. The doctors also reported collaboration with hospital specialists when they needed to overcome limitations in CH patient care. They emphasised the advantage of being able to observe changes in patients over time, enabling more informed and patient-centred decisions to be made based on comprehensive information. This was contrasted with hospital doctors, who often encounter patients primarily in acute conditions. For this to succeed, doctor's continuity was deemed essential. Increased use of medical locums in place of regular rural GPs may raise medical risks and result in unnecessary transfers to general hospitals. However, there was recognition that knowing a patient too well could also be a risk and that another doctor with fresh eyes may discover what you miss. The doctors stressed the importance of a holistic perspective, that is, prioritising patients' well-being and focusing on the psychosocial context, wishes and quality of life over mere medical conditions. This approach was perceived to be beneficial for multimorbid elderly patients in hospital care and enriched the doctors' understanding of diffuse symptoms.

With regard to older multimorbid patients, the doctors emphasised the need to evaluate the appropriate level of care. In palliative cases, discussions about medical limitations, including cardiopulmonary rescue, were considered to proceed more easily when patients knew the doctor and staff well.

Facing advantages and disadvantages of rural working conditions

The doctors described the diversity of their jobs and additional tools available to them, especially the ward,

as aspects that made their roles more satisfying than working as a GP in a town. One doctor doubted that they would work as a GP without the positive reinforcement of having a ward, which they felt helps to balance the challenges of outpatient care. The ward also allowed them to further develop their medical competences. The doctors described satisfaction in providing optimal hospital care at CHs. When discussing the potential of CHs to relieve overcrowded hospitals, one doctor expressed this patient-centred aspect: "We shouldn't offload; we should take care of our patients." (Doctor 7).

It was, however, acknowledged that not all GPs are suited to the diverse array of responsibilities found in a rural CH, which require the ability to handle uncertainty and stay up to date with a variety of treatment guidelines.

The doctors reflected on the universal problem of understaffing in rural areas. Some CHs appear fully staffed on paper, but factors such as holidays, education and on-call service are often not considered. Surprisingly, in some CHs, the doctor's work in the ward is not counted during medical staffing calculations. Many CHs cannot maintain their on-call rosters due to understaffing, impacting daytime work, and so the temporary solution of using medical locums and hired nurses becomes permanent. Although one doctor claimed that most medical locums were skilled, others were strongly against having locums in place of permanent colleagues.

A rural medicine addition to the GP specialist training programme in Sweden was developed in 2009. Some of the interviewed doctors were in the midst of their rural specialist training at this time, while others had already completed it. Some of the older doctors had been rural GPs before the programme and valued a specialised profile that addresses specifically rural medical issues.

Sweden lacks mandatory continuous medical education (CME) for specialists, leaving updating knowledge to individual choices. Some doctors deem this problematic, while others value hands-on clinical experience over organised CME due to the ease of online knowledge access. The doctors emphasised the importance of regular training for rare acute medical situations. CME courses were described as being beneficial on the basis that they facilitate experience sharing with colleagues and foster informal knowledge exchange and camaraderie. The doctors stated that they personally limited their CME applications, as their absence would place additional responsibilities on their colleagues or locum physicians. Distance from educational centres poses another challenge, demanding extra travel days.

Making medical decisions and taking action far from a general hospital

The doctors described the process of deciding whether to admit a sick patient to the CH or refer them to a general hospital. They described prioritising providing good and safe care, making the choice based on individual assessments rather than predefined criteria, and patients sometimes refusing to go to a general hospital despite recommendations.

Medical decisions about care limitations in multimorbid and end-of-life patients were crucial. Doctors described prioritising symptom control over unnecessary and painful investigations and treatments that might not benefit the patient.

Managing resources and logistics was felt to be essential. Some doctors stated that they are always aware of the location of the local ambulance as, when on a call, it does not return for several hours. One doctor reflected that this would not be a concern for town-based doctors. At times, the doctors described moments of uncertainty when grappling with ethical dilemmas such as deciding on alternative transportation for a patient despite the ambulance being recommended. Such a decision is made when the perceived risk to the patient is less than that posed to the community in terms of an emergency occurring and the ambulance being absent. This decision, made due to limited resources, entails personal and professional risk for the doctor, especially if the patient's outcome is unfavourable. The doctors value the CH ward, which they feel ensures patient safety and helps retain ambulance availability. By admitting some patients for observation, they avoid sending them home with potential deterioration and subsequent ambulance calls. Patients who require ambulance transport but not urgently can stay in the CH ward until the next day, saving the ambulance during the night.

Rural CH GPs must stabilise life-threatening situations before hospitalisation, exposing them to challenging scenarios. The exposure to emergency situations was seen as a barrier to doctor recruitment and was felt to lead to feelings of constant stress. However, the experienced doctors reported increases in confidence in handling different scenarios, and support from hospital specialists over the phone lessened the feeling of exposure.

Young doctors may feel hesitant to consult specialists, but an experienced rural doctor emphasised the importance of seeking advice when needed. The doctors also highlighted the competence of the ambulance team and nurses, who provide vital support in difficult situations. While rural GPs might not be competent in every situation, they know when to seek additional help.

Misjudging situations, for various reasons, can lead to patient harm, which can be traumatic. The doctors had various coping strategies for adverse outcomes: "If I wasn't here, it would be even worse" and "I did not make the patient ill, it depends on their having a disease" (Doctor 5).

Additionally, living and working in a rural area were felt to present social challenges. While knowing patients had medical benefits, it meant never being anonymous, and gossip was described as troublesome. Treating relatives and friends, especially with intimate examinations, was felt to be undesirable in such close-knit communities. One doctor described patients approaching them at home or in public with medical inquiries.

DISCUSSION

Principal findings

In this qualitative study, 15 rural GPs were interviewed; as a result of this, two themes were identified: 'The CH being the hub in the patient's healthcare pathway' and 'Offering person-centred care far from the hospital'.

The interviewed GPs deemed CH care to be suitable for elderly, multimorbid and end-of-life patients, prioritising home proximity and staff familiarity for quality care and discharge planning. CHs were reported to play a pivotal role in patient pathways, offering primary care and intermediate hospital care, and the GPs described collaborating closely with general hospitals and municipal caregivers.

They emphasised their advantage as trained GPs in maintaining holistic perspectives on patients in hospital care, where longitudinal patient knowledge can benefit medical decision-making. Based on the doctors' perceptions, CHs were suggested to be cost-effective and seen as outperforming general hospitals. These considerations led the doctors to advocate for extending the CH model to other regions, including towns, despite the absence of supporting data confirming this cost-effectiveness. The doctors described their rural GP work as stimulating due to its variety and teamwork, yet ethical dilemmas were heightened by small communities and resource constraints.

Comparison with existing literature

Similar models to Swedish CHs exist worldwide; these primarily exist in rural areas and vary in terms of size and services for meeting local needs. Funding and healthcare organisation also differ internationally, influencing our discussion of the findings in the context of global research.

Swedish CHs predominantly admit elderly patients with chronic diseases and multimorbidity for acute care or postoperative rehabilitation, aligning with global research.[1 2 4–6] Rural GPs handle such patient groups in CHs that would usually be managed by hospital specialists in well-equipped urban hospitals. Furthermore, in remote areas, long distances limit home-based end-of-life care, and thus, CHs serve as small hospices. In this study, the interviewed doctors suggested that CHs offer better end-of-life care than general hospitals due to their closer proximity and the familiarity of patients with staff. Our findings align with interviews that emphasise the proximity of hospital care as a key benefit for rural patients at the end of life.[7 22] One review found that rural deaths are preferred at home and that CHs substitute hospices if home care lacks symptom control; as compared with general hospitals, they are claimed to be better suited for end-of-life care.[23] Consistent with our findings, previous research on patient and carer experiences favours CHs over general hospitals, citing factors such as access, familiarity and a homely environment as being key.[1 7 24–26] Moffat and Mercer[27] conclude that managing multimorbidity necessitates a holistic approach by a generalist, corroborating our findings. 'Holistic' or 'whole-person' care is a defining feature of general practice, marked by a multidimensional approach that recognises the therapeutic relationship and patient's personhood, circumstances and health beyond disease absence.[28 29] Continuity of care correlates with patient satisfaction, use of medical procedures, hospital admission and healthcare costs, most notably in primary care.[30–32] Our study suggests that relationships, continuity and familiarity with rural GP and other health professionals also benefit medical decision-making and reduce overuse of medical procedures in CH inpatient care, as suggested in.[7] However, in the New Zealand context, the interviewed doctors were typically not their rural hospital patients' GPs but nevertheless they approached the patients with a generalist perspective. The interviewed doctors suggested that CH care is more cost-effective than general hospital care for relevant patients. No Swedish cost-effectiveness study exists, but unpublished data supports the idea that CHs have a lower cost per day than general hospitals. Robust cost-effectiveness analyses are scarce, but British[33 34] and Norwegian[35–38] research suggests that community hospitals excel or match general hospitals in health outcomes, readmissions, independence and cost-effectiveness. Norwegian research suggests that CHs reduce general hospital admission volumes.[36 39]

The interviewed doctors argued against budget cuts causing CH closures and loss of medical staff. Rural hospitals globally face the threat of centralisation and services being shifted to larger hospitals,[40 41] resulting in staff losses and subsequent closure. A literature review[42] shows that closure mergers lack evidence for cost, quality and workforce benefits, in line with the opinions declared during the interviews conducted for this study. The interviewed doctors suggested the importance of not only preserving CHs but also expanding the CH model into urban areas to meet the healthcare needs of an ageing population.

Rural GPs found their work to be stimulating due to the diverse tasks, CH ward access and team collaborations, as also reported in Hedman *et al*[7] and Hansen *et al*.[43] Research has shown that complex ethical healthcare dilemmas are particularly common in small communities and arise due to intertwined factors such as overlapping roles, confidentiality issues, cultural considerations, limited resources, access, clinical skills and caregiver strain.[44] In our study, the doctors reported ethical dilemmas with role conflicts due to overlapping relationships, having to make second-best choices for patient transportation, and difficulties with POC tests and radiology due to limited resources, resulting in increased insecurity. Skill concerns triggered coping strategies for adverse outcomes. Unfilled vacancies were permanently filled by locums and hired nurses worsened continuity and work strain for regular doctors, also hindering adequate CME.

Strengths and limitations of the study

The interviewer (MH), a male Swedish rural GP, although unexperienced in qualitative research, brought expertise

in rural medicine—both a strength and a potential bias. Balance came from experienced qualitative researchers (MB, MS, PW) who analysed the data from varied angles. Most of the Swedish CHs were studied, and participating doctors provided rich information, eager to narrate their experiences. Trustworthiness in a qualitative study is gained more by the richness of each interview than by the sample size.[17 45] To further enhance credibility, we aimed for transparency in presenting the analysis process, illustrated by table 1 and the citations. The study's focus was CH doctors; future research should explore the perspectives of other CH staff, as well as patients and relatives. A similar interview study was conducted with rural hospital doctors in South Island, New Zealand.[7] Despite variations in healthcare systems and geography, the similarity of the findings may suggest transferability. International comparisons should, however, be approached with caution due to variations in the organisation, size and roles of CHs.

Implications for clinical practice and health policy

The global healthcare landscape is shifting due to an ageing population and rising chronic illness, necessitating accessible, affordable and quality care.[46–48] Sweden, with its ageing population[49] and the EU's lowest hospital-bed-to-population ratio,[50] faces unique challenges. With approximately half of the population living with chronic conditions, Sweden's 'Nära vård' ('Close Care') initiative[51] aims for patient-centred, integrated healthcare, prioritising efficiency and individual needs with a focus on primary care.[51] However, there has been limited discussion of adapting hospital care for elderly multimorbid patients. Our data indicate that the CH model aligns with the Close Care initiative's goals in terms of the integrating of healthcare services, fostering of local collaboration and offering of relationship continuity within elderly inpatient care. This is crucial to preserve in rural areas and potentially beneficial if adapted to urban hospital care.

CONCLUSIONS

Rural GPs highly value the holistic generalist perspective of CH care and emphasise the high-quality care they provide. Although many rural-specific ethical dilemmas need to be navigated, rural GPs cherish the model and are concerned about CH closures. We recommend future research into patients', relatives', and other stakeholders' experiences of CH care. Additionally, health economic studies should be conducted on the CH model, especially in comparison to general hospital care for relevant patient groups.

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