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“It is both scary and exciting”

- Home care nurses’ experiences with medication-kits as tools
in a palliative context



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Forord

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Abstract

Purpose: The purpose of the study is to develop new knowledge on home care nurses' experiences with the medication-kit as a tool in symptom management for home-dwelling patients in the terminal phase.

Method: The study had a qualitative, descriptive and explorative design, anchored in hermeneutic methodology. Data were generated through two focus-group interviews with four subsequent in-depth interviews.

Results: The nurses reported that planning and clear instructions regarding the use of the medication-kit gave security and facilitated the use of the medication-kit. Good collaboration with the primary physician, accessibility and clarifying meetings in particular were necessary. Low continuity in the use of the medication-kit hindered its use. The nurses were often alone with the responsibility for assessing the patient and administering the medications. This frequently created professionally untenable situations, particularly on the night shift.

Conclusion: Clear structures, such as planning and clarifying meetings with the primary physician facilitate the use of the medication-kit. Low continuity in the use of the medication-kit, and great responsibility for the home care nurses running the service, are conditions that hinder the use of the medication-kit.

Key words: Home care services, nursing, palliative care, medication-kit, end-of-life care, symptom management

1. Introduction

Several international studies show that a majority of patients in a palliative phase wish to die in their own home (Gomes et al., 2012; Gomes et al., 2015). The palliative phase starts with the recognition of an incurable state and continues until the patient dies (EAPC, 2017). Grov (2014) suggest a division of the palliative phase; featured early, late and terminal. In this study we do not distinguish between the overall concept “palliative phase” and the particular condition close to death, “the terminal phase”, since they are both recognizing the patient’s end-of-life. Patients and their relatives claim that efficient symptom alleviation is an important factor in the implementation of ending life in the home (Sacramento et al., 2017; Rosenberg et al., 2015). In 2014, some 15% of Norwegian patients died in their own homes – a number that has remained stable over several years (Norwegian Institute of Public Health, 2015). The numbers vary significantly internationally: South Korea reports 12% home deaths, while the USA reports 39%. In the Netherlands, the nation with the highest proportion of home deaths in Europe, 46% of dying patients spent their last days at home (Cohen et al., 2015).

A central measure to quality assure symptom management for home-dwelling patients is the use of medication-kits containing medicines, recommended by the international consensus group National Institute for Health and Clinical Excellence (NICE) (NICE, 2015). The medication-kit is supposed to be a simple and effective tool for the municipal health services to facilitate proper symptom management for home-dwelling patients in the terminal phase. The medication-kit contains four medicines, morphine, midazolam, haloperidol and glycopyrrolate (robinul), in addition to equipment for administering the medicines subcutaneously (Sigurdadottir and Haugen, 2013). A Delphi-study performed in nine European countries recommends the use of the four medications that are used by the Norwegian home health services. The medication should be available in all contexts with patients in the terminal phase (Lindquist et al., 2013).

There are great variations related to the availability of the medication-kit and its use. In some areas the kit may be bought in a pharmacy prescribed by a physician. In other cases, the kit is kept in the nursing home or a base for the home care services and the medications are placed in the kit in accordance with prescriptions by a physician. Internationally the medication-kit is known as “Comfort-Care-Kit”, “Hospice-Emergency-Kit” and “Emergency-Medication-Kit”. Studies show that the kit is easy to use and the drugs give quick relief for distressing symptoms (Bishop et al., 2009). The medication-kit leads to fewer home visits by

physician, fewer hospital admittances at the end-of-life, more time at home, and increases the likelihood of dying in the home (Bailey et al., 2014; Yap et al., 2014). Great emphasis is put on efficiency in the health services and socio-economic advantages, as the medication-kit facilitates proper symptom management to home-dwelling patients at night and on weekends, and may be administered by relatives in certain situations (Leigh et al., 2013; Rosenberg et al., 2015; Walker and McPherson, 2010).

Fürst et al. (2012) refer to many of the above-mentioned studies and conclude that focus should be directed at increasing competence in relation to end-of-life symptom management. Available studies to a great extent describe the practical side of using the medication-kit. Little research is done on the nurses' experiences with the responsibility they accept in relation to symptom management for home-dwelling patients in a terminal phase (Wilson et al., 2015). The purpose of this study was to develop new knowledge on the home care nurses' perceptions of crucial aspects facilitating versus hindering the use of the medication-kit as a tool for symptom management for home-dwelling patients in a terminal phase.

The following research questions were formulated:

- What conditions facilitate the use of the medication-kit by home care nurses in charge of managing terminal phase patients' symptoms?
- What conditions hinder the use of the medication-kit by home care nurses in charge of managing terminal phase patients' symptoms?

2. Method

This study had a qualitative, descriptive and explorative design, anchored in hermeneutic methodology. To answer the research questions, focus-group interviews (Halkier 2010; Kreuger and Casey, 2009), in combination with subsequent individual in-depth interviews (Kvale and Brinkmann, 2015), were used for data collection. Both forms were used for empirical data production and were considered equal sources for the same research questions.

2.1 *Preunderstanding*

The researchers' preunderstanding were not neutral and distanced, but characterised by a commitment and a relation to the subject of the task at hand. The preunderstanding was anchored in the assumptions that the medication-kit was considered a good tool, but that several nurses did not feel confident in its use and felt the burden of great responsibility in relation to the administration and increasing of doses. Through the answers from the participants and through open questions, the authors' preconceptions and horizon of preunderstanding were put into play (Gadamer, 2010).

2.2 *Recruitment procedure and participants*

Contact was established with five municipalities that have used the medication-kit as a tool. Contact persons in the municipality, cancer-coordinators and resource-nurses, recruited the participants, who signed the consent form. A strategic sample was made to obtain heterogeneity in the participant group (Kvale and Brinkmann, 2015), as reflected in age, home care service zones, work experience and specialisation. The participants worked in home care service and had used the medication-kit more than five times.

The sample consisted of 18 nurses, divided into two focus groups with six and eight participants respectively, and four individual in-depth interviews. This combination was chosen to ensure that the data set reflected the breadth and depth of the participants' perspectives. The focus-group interviews yielded a rich data material in relation to various factors that affect the use of the medication-kit. In the individual in-depth interviews these perspectives were further explored.

The participants were between 30 and 62 years old (table 1). They had an average of 13 years experience as nurses (variation from 1 to 39 years), and seven had relevant specialisation in palliation and cancer care. Two participants worked as cancer-coordinators, while six had additional functions as palliative-care-resource nurses. One participant worked nights. The sample represented four counties and five different municipalities. There was variation in the sample with regard to rural and urban municipalities, from 5000 (rural municipality) to 265 000 (urban municipality) inhabitants.

Table 1. Overview of the study's participants

2.3 Data collection

The focus-group interviews were carried out in the participants' workplace. The first author (moderator) conducted the interviews with a co-moderator who observed group dynamics, wrote notes, controlled that the interview-guide's main questions were posed, and ultimately posed follow-up question to what the focus-group had discussed. A modifiable interview-guide was chosen as this, in contrast to a fixed interview-guide, facilitates including and exploring new themes appearing throughout the data collection process. Such an approach is in line with hermeneutic methodology, where new understanding of a phenomenon arises through continuous processes, where new understanding of parts of the issue influences the understanding of the issue as a whole, and where new knowledge of the issue as a whole influences the understanding of the parts that make up the whole (Gadamer, 2010). The interview-guide was based on literature gathered on the medication-kit, and contained an overview of subjects, in addition to concrete suggestions for questions. The changes subsequently made to the focus-group interviews were mainly related to reformulation of questions, in order to further explore the information. All interviews were recorded on an mp3 recorder, transferred to sound files and transcribed verbatim in standardised Norwegian. Any dialects were not transcribed as such. The interviews lasted from 54 to 61 minutes.

2.4 *Analysis*

In order to become familiar with the data material and gain an overview, the transcribed text was entered into a form and the text was decontextualized several times (table 2). This entailed breaking down the understanding of the text for then to open up to the construction of other understandings (Kvale and Brinkmann, 2015). Thus far in the analysis the texts from the focus-group interviews and the in-depth interviews were analysed separately, in order to explore to what extent the in-depth interviews built on the themes that emerged in the focus-group interviews. The text was read several times with an openness to the text's message as to what factors facilitate and hinder the use of the medication-kit. Preliminary notes were taken along the way, and premature conclusions avoided. Attention to the authors' own preunderstanding, and how this may affect the study's findings, was paid throughout the analysis process. All preliminary findings were thus critically assessed, with a view to find data that may weaken or falsify these. Through this back and forth process, anchored in hermeneutic methodology (Gadamer, 2010), the results of the study were identified and formulated.

Table 2. Exemplified link in the analysis process

2.5 *Ethical considerations*

The study was approved by the Norwegian Centre for Research Data (NSD), reference no. 50589. The study's participants received written and oral information on the study and gave written consent to participation. The participants were informed that they were free to withdraw at any time, without giving any reason. To ensure that what was said in the focus-group was not shared with others or that the participants in the focus-group should not become known to others, an agreement of mutual confidentiality was entered into by the group.

3. Results

3.1 Conditions that facilitate the use of the medication-kit

The results show that factors that facilitate the use of the medication-kit can be described in one main category with two sub categories (table 3).

3.1.1 Clear structures surrounding the medication-kit give increased confidence

The participants in the study were positive to the medication-kit as a tool as long as the structures around it worked optimally. A nurse from focus-group 2 described the medication-kit as a *useful starter kit with all the equipment we need*. The structures surrounding the kit were mainly a matter of routines, forms and “proper” instructions from the physician. The nurses were also concerned with planning to facilitate the use of the medication-kit as a tool.

3.1.1.1 Planning is essential to a good process

In both focus-groups there were agreements that the quality of the planning made things easier when initiating the use of the medication-kit. The nurses were concerned with giving each other confidence and achieving the best possible collaboration. *It is after all the end of a life and it is an important part of my job*, participant 3 from a rural municipality said. Planning entails several factors. First, functional routines are needed in the workplace, and instructions must be clarified with a physician. All nurses said that in general, good routines surrounded the medication-kit. This was the case for forms and manuals developed to systematise and quality assure the work. In addition to this, staffing was an important point that needed planning:

We may have to go in with more professional competence or redo the lists, or maybe we need more staff if it is close to the weekend. This usually works out quite well.

(In-depth interview 1, urban municipality)

The participants described the preliminary work as demanding, but here as well, the importance of increased staff was emphasised:

A lot of things have to be in place before using the medication-kit. This is demanding and takes time. And it is important that we are taken off the lists, and able to work with this. Getting all this set up takes time. (In-depth interview 2, urban municipality)

Several nurses pointed out the organisation of resources as an important factor in facilitating the use of the medication-kit. If staffing was planned in due time, the nurses felt more confident on their shifts.

3.1.1.2 Clarifying meetings and accessible primary physicians

All nurses were of the opinion that good and continuous collaboration with the primary physician was important. However, great variations appeared regarding such collaboration. Many nurses seemed to experience the primary physician as a key person in the collaboration on the medication-kit and wanted a physician who was easily accessible outside of work hours as well:

You can call some primary physicians on their time off – when you notice changes – especially at night ... when you are the only nurse and you do not have anyone to confer with and the emergency services may not know the patient. I have found it a great strength when the primary physician has visited the patient ... followed up with regular home visits, and been able to assess the dose. (Focus-group 1, rural municipality)

Having the primary physician available around the clock gave the nurses confidence. At the same time they said that proper instructions from the physician were absolutely essential to whether the medication-kit would be used in accordance with the intentions. This gave confidence in initiating and accelerating medications. Clarifying meetings with the primary physician were regarded as essential in facilitating the use of the medication-kit:

It's not only the medication-kit; it's the conversation in advance, too. First we have a meeting at the primary physician's office and go through the assessment of the initiation of the medication-kit. And to find out, how available can you be? That clarification I find to be very important, and when we have it, it gives confidence to the home care services. (In-depth interview 1, urban municipality)

Other resource persons, such as primary-nurse and cancer-coordinator, were also described as important collaborators in the use of the medication-kit. The rural municipalities in particular emphasised the security in having a resource person in the health services to handle the initiation of the medication-kit.

3.2 *Conditions that hinder the use of the medication-kit*

The results show that factors which hinder the use of the medication-kit may be described within one main category with two subcategories (table 3).

3.2.1 *Lack of quality assurance and professional tenability*

The study shows that the medication-kit was not used as frequently as needed for the nurses to feel confident in using it. On rare occasions a nurse felt confident in assessments that had to be made to alleviate symptoms; this, however, was the case only for nurses with long experience from palliative care in hospitals or nursing homes where the four drugs were in frequent use.

3.2.1.1 *Insufficient confidence in the assessment of medication needed*

The results show that nurses did not use the kit often enough and that they frequently were alone with the responsibility for assessing the patient and administering the drugs. This made many nurses feel insecure:

Quite some time may pass between each time we use that kit. So it becomes a bit rusty with time. I felt I was sort of thrown into it, this one time it was in use. (Focus-group 1, rural municipality)

When many assessments depend on experience, great variations in quality will arise. One nurse claimed that the lack of confidence noted was not necessarily related to the medications, but rather to the patient's condition. Is this pain? Or is it discomfort? The experienced nurses would try things out, often starting with morphine. Recently graduated nurses did not feel confident with assessing when to start the patient on medication other than morphine, the medication midazolam in particular. One of the younger nurses put this succinctly: *Starting*

up midazolam. It's just such an eternal problem. A more experienced nurse described that challenge like this:

.... we had this patient with lung cancer and anxiety. He had been feeling anxious a bit too long the way I see it. It was somewhat poorly handled. He did not get enough; I guess the nurses on that shift were a bit uncertain. When I started my shift, I could see that he was very stressed. I thought the dose was quite low. I contacted the doctor and I gave morphine and midazolam at once. And then the whole family calmed down. There and then I probably did a better job, probably because I am more confident with regard to this. (In-depth interview 3, rural municipality)

Several nurses pointed to a vulnerability related to dependence on a particular person. Nurses in the home care services work mainly alone and this may cause great variations in the use of the medication-kit. One nurse described her experience with a case when it was clear that the patient would suffer if the nurse's uncertainty led to insufficient alleviation of the patient's symptoms:

If it's a matter of as-needed medication, then the patient is dependent on who is at work, the nurse I mean. What assessments have been made? Some may be liberal and give a lot, and some are more restrictive. The amount of the various medications given to the patient may thus vary quite a bit, which is not necessarily a good thing. (Focus-group 1, rural municipality)

Several nurses expressed a lack of confidence regarding stepping up medications despite clear instructions from a physician. This was mainly the case with nurses with limited experience. The more experienced nurses felt more confident and increased the dose when the effect did not emerge, but they said that they would also like a colleague to confer with.

3.2.1.2 Vulnerable nights

Nurses seemed to have a common understanding of the night shift as a vulnerable time in relation to the use of the medication-kit. This emerged during the in-depth interviews in particular. Symptom management in the terminal phase is at times complicated and symptoms may arise that need to be treated immediately. One nurse, experienced with working nights,

claimed that much depends on whether the day shift nurses have planned the procedure around the medication-kit and whether one is one step ahead:

So that I can just continue what others have started. I feel that is the most important for things getting smoothly during the night shift. That I can just continue what has been initiated and not have to start things up. It is after all a procedure that may throw everything off, really. (In-depth interview 4, rural municipality)

The study shows, however, that nurses on the night shift also experience situations where they have to make assessments with regard to initiating and increasing the medication from the medication-kit. Their confidence and professional competence are crucial for the quality of the symptom alleviation and this is experienced as challenging:

It is both exciting and scary at the same time to be in charge of the medications at night. A bit scary as I feel I am alone at night. I just have myself in a way. (In-depth interview 4, rural municipality)

The night shift entails a lot of stress. This is due to a large proportion of patients in need of care, in addition to the feeling of being alone with a great responsibility. They are also frequently working their shift with paraprofessionals or unskilled health personnel. One night shift nurse described thoughts on being alone as follows:

We are supposed to be two nurses working nights, but there is only one nurse who's in charge of quite a lot. The time I worked with one more nurse was much easier. Having someone to talk to. Then I knew that she could deal with my other nursing tasks, while I could concentrate on what I was doing there. Time is just so important. It plays a greater part than one would think. (In-depth interview 4, rural municipality)

As a measure for reducing the feeling of loneliness on the night shift, one nurse said that a combination with day shifts made a great difference. She *took knowledge with her from day to night*. She actively participated on meetings and courses, also on the instructions regarding the medication-kit. This increased her confidence in using the medication-kit. Another measure introduced when a nurse was alone on the night shift was to, in some cases, to

contact the nursing home's nurse for a double check. In other cases admission to hospital was the alternative, also when the patient would rather remain at home.

Table 3. The results divided into categories

4. Discussion

The results of the study show that clear structures, such as planning and clarifying meetings with the primary physician help facilitate the use of the medication-kit as a tool. Lack of confidence in assessments, particularly during the night shift, as well as the lack of resources to ensure professional tenability, hinders the use of the medication-kit.

4.1 Quality depends on enthusiasts and resources

As this study shows, Norwegian municipalities vary, geographically as well as with respect to the way they organise the palliative programs available to patients who wish to spend the final days of their life in their home. The municipalities are at the outset free to organise the services as they see fit, but they have a duty to ensure that people living in their municipality are offered necessary health services (Health and Care Services Act, 2011). After the introduction of The Coordination Reform (Report No. 47 to the Storting, 2008-2009) in 2012, shorter time in hospital, with earlier discharge of patients, increased the need for complex nursing services in the municipalities. This requires access to qualified help at all times so that patients and their relatives feel safe around the clock (Ministry of Health and Care Services, 2013). As the results point out, there are great variations as to how confident the nurses are in their assessment of as-needed medication. The nurses also report frustration at not being able to deliver the quality of care they consider necessary. The nurses experienced this as missing the human aspect of care. Sæterstrand et al. (2015) describe this "cross-pressure" between the service's possibilities and limitations as an ethical challenge professionally for nurses. Time limits the nurse's possibility of observing the patient's condition, which is extremely important with regard to symptom management in the home.

Nurses carry "the limitations of the organisation in their own bodies". They assume responsibility for what the organisation has accepted an obligation to do. Paradoxically, the nurses' disloyalty oftentimes contributes to the "survival" of the organisation (Vike et al., 2002, pp 67). This study's results point in the same direction; nurses come up with strategies

to handle the cross-pressure they experience. Some describe ordinary challenges that are anchored in professional, organisational and resource-related conditions in the home care services. The nurses spent time and effort making the most of the situation. Working the night shift alone was sometimes reluctantly accepted, while frequently having to make professional assessments in situations they did not feel fully confident with. The study does show, however, that nurses also know how to draw the line. Some nurses demand solutions that quality assures the work, and through this create a culture for such solutions in their workplace. Other studies support such extremes with respect to ideals and realities in the municipal health services (Hallin and Danielson, 2007; Christiansen and Bjørk, 2016). This may indicate that some nurses may be characterised as conforming and loyal to the system they work for – which leads to a form of institutionalisation – despite the system’s challenges to their professional nursing ideals. This in spite of clear statements from nurses that they desire more certainty, resources and competence.

4.2 *Nurses take charge*

Nurses in the study claim that the instructions from the primary physician must be “generous” enough for them to initiate and administer medication in accordance with their own assessments. This does, however, entail challenges as the individual assessments vary, which again may create professionally untenable situations. The way they interpret a situation depends on their experience and knowledge. In end-of-life symptom management it is crucial to adapt the medication to the patient’s needs, which will vary from day to day, and maybe from hour to hour. When the physician prescribes medication “as needed”, responsibility for the medical assessment is passed on to the nurse, an assessment that does in fact belong to the physician’s role. Paradoxically, international studies show that the medication-kit is also frequently administered by relatives in the final phase of life (Bailey et al., 2014; Yap et al., 2014). This leaves them, as unskilled, to determine what medication a dying patient would need. Thus the application of the medication-kit is organised in a variety of ways, which again raises the question of the quality of such symptom management.

The participants emphasise the significance of collaboration with the primary physician and common planning around the medication-kit. Based on national regulations for the Norwegian Health and Care Services (Regulation relating to a Municipal Regular GP Scheme, 2012; Norwegian Directorate of Health, 2015) the intention is that the primary physician shall largely be involved in the palliative care for the patients in the municipality.

Such approach leaves the primary physician a duty to make home visits if the patient is unable to come to a consultation at the physician's office. Early dialogue and clarifying planning meetings with the primary physician are emphasised as central factors that contribute to further professionally sound application of the medication-kit. Studies show primary physicians' reluctance to make home visits at the end-of-life (WHO Regional Office for Europe, 2011). Such a practice will undermine factors which this study identifies as important to facilitate the proper application of the medication-kit. Gomes et al. (2015) found that patients that receive three or more home visits by their primary physician during the final three months of their lives, had six times the probability of dying at home compared to those who received one visit or less during the same period. These findings are supported by the participants in this study, who claim that the availability of a primary physician is essential to a good process. According to Pivodic et al. (2016), the availability of home visits by primary physicians should be significantly improved for patients who wish to die at home.

4.3 The day is more than just the day shift

The results of the study show that nurses feel alone and insecure on the night shift. They are frequently alone and responsible for many patients. Nurses need to be able to collaborate with other qualified professional personnel with regard to assessments and decisions related to the medication of patients. However, they are frequently working their shift with paraprofessionals or unskilled health personnel. Lack of experience and competence in the use of the medication-kit may result in admissions to hospital and thus the inability to fulfil the patient's wish of dying in her or his own home (Bailey et al., 2014; Yap et al., 2014). Groninger and Vijayan (2014) claim that the medication-kit may make nurses more confident with regard to titrating doses when the patient is affected by pain a.o., and that health personnel must become more confident with regard to the administration of opioids to home-dwelling patients in a terminal phase. They must dare give opioids in the case of insufficient effect despite not having reached half-life. This is a clear call for improved practice, and may be seen in conjunction with the results of this study which show that the participants frequently experience significant uncertainty in relation to the administration of the medication-kit. Working nights, having just oneself to rely on in these situations, can be a responsibility too great.

Several nurses in this study claimed that there are individual variations in the nurses' assessment of symptoms. In the rural municipalities in particular, resources were scarce. This

results in great variations in the quality of the palliative care received by the patient. Tønnesen and Nortvedt (2012) emphasise that nurses have an independent responsibility to determine the content of what constitutes tenable health services and considerate care in the home care services. The results of this study show, however, that nurses in the home care services may experience a high degree of uncertainty in their role and the responsibility they have been given when resources are scarce and the collaboration with the primary physician insufficient. Despite this, nurses often give in and accept the situation as it is. Nurses therefore need their leaders to listen to their message of the need for strengthening the professional work environment. In this way a potential acceptance of a professionally untenable practice may be prevented. This is a core condition for patient safety, for the development of a professionally tenable practice and the protection of the nurses' integrity. Gautun et al. (2016) are concerned with what happens to professional tenability when there is a great shortage of nurses, and find a significant relationship between a shortage of nurses and the quality experienced regarding basic nursing in the home care services.

5. Limitations

A strength of this study is that data represented four counties and five different municipalities, both urban and rural municipalities. This yielding a rich and varied material. Rich material is produced through the combination of focus-group interviews and in-depth interviews with nurses who have used the medication-kit more than five times.

The results show the importance of the primary physician's role in relation to the medication-kit. One weakness of the study is that physicians are not included as participants, and consequently, statements regarding the physician's role should be interpreted with care. Further research on this topic should include the primary physician's perspective, along with the perspectives of interdisciplinary teams on what factors facilitate versus hinder the proper use of the medication-kit.

6. Conclusion

The findings of the study cannot be generalised; they contribute, however, to increased knowledge on nurses' experiences regarding what factors facilitate versus hinder the use of the medication-kit for home-dwelling patients in the terminal phase. Nurses in the study report experiencing the medication-kit as a useful tool. Clear structures surrounding the use of

the kit, along with good routines in the workplace, create confidence and facilitate the use of the medication-kit.

The study explores factors that hinder the use of the medication-kit and thus contributes to illuminating conditions with implications for practice. One measure may be to increase competence in basic palliation, especially directed toward symptom alleviation in the terminal phase. This will contribute to increased confidence in using the medication-kit. Further, a system that ensures available professional resources around the clock will be important.

Conflicts of interest

No conflict of interest has been declared by the authors.

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Table 1. Overview of the study's participants

	Gender	Age	Title	Number of years worked as nurse	Specialisation
Focus-group 1: RURAL					
Informant 1	Woman	51 years	Nurse	6 years	Geriatrics and wounds
Informant 2	Woman	61 years	Nurse	39 years	No
Informant 3	Woman	47 years	Nurse	8 years	Palliation and counselling
Informant 4	Woman	62 years	Nurse	2 years	No
Informant 5	Woman	30 years	Nurse	7 years	No
Informant 6	Woman	36 years	Nurse	11 years	No
Focus-group 2: URBAN					
Informant 1	Woman	33 years	Nurse	10 years	Palliation
Informant 2	Woman	51 years	Nurse	4 years	No
Informant 3	Woman	55 years	Nurse	15 years	Palliation
Informant 4	Woman	31 years	Nurse	1 years	No
Informant 5	Woman	60 years	Cancer-coordinator	35 years	Oncology nursing
Informant 6	Woman	50 years	Nurse	6 years	No
Informant 7	Woman	36 years	Nurse	9 years	No
Informant 8	Man	49 years	Nurse	17 years	No
In-depth interviews:					
Informant 1 URBAN	Woman	52 years	Cancer-coordinator	20 years	Palliation and counselling
Informant 2 URBAN	Woman	60 years	Nurse	17 years	Palliation
Informant 3 RURAL	Woman	45 years	Nurse	6 years	No
Informant 4 RURAL	Woman	46 years	Nurse	21 years	No

Table 2: Exemplified link in the analysis process

Units of meaning	Code	Subcategory	Main category
"Here the patient was sent to the hospital, it was a matter of breathing, and there we did not have things quite in place. And then I think the nurse on the night shift felt uncertain and it was better to send him to the hospital. Obviously, nothing more happened at the hospital."	<ul style="list-style-type: none"> - Assessing symptoms - Uncertainty - Night - Readmission 	Vulnerability at night	Lack of quality assurance and professional tenability

Table 3. The results divided into categories

	Main categories:	Subcategories:
FACILITATE	CLEAR INSTRUCTIONS REGARDING THE MEDICATION KIT GIVES INCREASED CONFIDENCE IN ITS USE	Planning is essential for good processes
		Clarifying meetings and available primary physicians
HINDERS	INSUFFICIENT QUALITY ASSURANCE AND PROFESSIONAL TENABILITY	Insufficient confidence in assessing needed medications
		Vulnerability at night



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Mettam, G.R., Adams, L.B., 2009. How to prepare an electronic version of your article, in: Jones, B.S., Smith, R.Z. (Eds.), *Introduction to the Electronic Age*. E-Publishing Inc., New York, pp. 281–304.

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