

Patient-centered nursing documentation

A study on hip fracture patients at Kyllö Hospital

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Abstract <p>Hip fractures are acute injuries that affect patients on several dimensions of life. They are also subject to economic interest due to high treatment costs. Patient-centered care is a widely acknowledged nursing ideology to provide efficient, individually planned care. Patients are active participants of care whose feelings, opinions and resources are taken into account. A good tool to secure, verify, and study patient-centered care is the electronic nursing documentation as nurses are obliged to document all interventions.</p> <p>The aim of the study was to identify how nursing documentation reflects patient-centered care. The material studied was the documentation of 10 hip fracture patients during their inpatient time. The purpose of the study was to raise awareness on the importance of patient-centered documentation in the client organization, ward 1 at Kyllö hospital in Jyväskylä. The topic emerged from the development goals of the client.</p> <p>Inductive content analysis was used as a research method. Nine different categories indicating patient-centered care were formed and further grouped into themes called patient's feelings, patient's opinions and patient's resources. The analysis indicated that some features of patient-centered care are more prevalent in the documentation than others. Patient's physical feelings and opinions were among the more prevalent whereas family involvement, resources and larger life context were more rarely documented.</p> <p>Based on the analysis, documentation style opening up more of the reasons and causes for patient's behavior was suggested. Attention was also drawn on how the patient's pain had been evaluated. The nursing process showed inconsistency on how the patient-centered care was visible at its different stages. Developing documentation practices was seen as one tool to enhance patient-centered care and provide economic efficiency.</p>		
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1 Introduction

Population in Finland as well as in majority of European and various other countries is aging. This sets pressure to the health care system due to decreasing number of taxpayers and increasing number of elderly in need of medical and nursing services. One of the severe injuries the elderly people may have to face is hip fracture. The prevalence of hip fractures is growing worldwide. Overall, hip fracture patients are said to occupy 20 - 25 % of orthopedic beds and the number could rise. (Marks, Allegrante, MacKenzie & Lane 2003, 61; Official Statistics of Finland 2015; OECD 2013, 172–175.)

Economically, hip fractures are a topic of major interest. It is a demanding task to find a cost-efficient way to treat and rehabilitate the growing number of hip fracture patients without the quality of care being affected (Panteli, Habeeb, McRoberts & Porteous 2014, 354–355). Simultaneously, there is a constant need to save money and resources due to the challenging economic situation. Health care sector, its publicly funded functions in particular, need to be renewed and become more efficient in order to meet the requirements with limited economical resources.

Patient-centered care is growing in popularity as a health care ideology and nursing policy across the world. Patient-centered care is based on an ideal to treat patients as active participants rather than passive receivers of care and to place the needs of an individual patient to the center. Patient involvement, communication, and interaction to share knowledge and make decisions together with the patient and his/her family are widely acknowledged as aspects of patient-centered care. (Kitson, Marshall, Basset & Zeitz 2013, 5.)

In the world of aging population and economic scarcity, patient-centered care is a way to rethink the organization of care. Patient-centered approach provides better care outcomes, whereas lack of patient participation has implication for poorer motivation and longer inpatient times (Lenze, Munin, Quear, Dew, Rodger, Begley & Reynolds 2004a, 380; Lenze, Munin, Quear, Dew, Rodger, Begley & Reynolds 2004b, 1599; OECD 2013, 175–177). By focusing on patient-centered care, nursing models that enhance quality and effectiveness of care can be constructed (Kitson et al. 2013,

5). As the aspects of patient-centered care have become clearer and adopted as guiding principles of health care and nursing, a need to study the practical implementation of the ideology has emerged.

Documentation is a feature that crosses all levels of nursing care, affecting its quality and efficiency. Health care professionals are obliged to document all interventions, as what is not documented can be considered not done. Documentation should be used as a nursing tool that secures patient-centered care by displaying the patient's needs and own perspectives. When documenting, the nurse should think that a substitute or a student should be able to find goals, practical means of the care, and information on how to best proceed with a patient. (Mäkisalo-Ropponen 2013d.)

The aim of the study is to conduct a research on nursing documentation from the perspective of patient-centered care, with purpose of raising awareness on the importance of patient-centered documentation. The scope of the study is relatively small consisting of nursing documentation of ten hip fracture patients during their inpatient time at a hospital ward. Inductive content analysis is applied as a method to draw out the patient-centered content from the nursing records.

The theory chapters of the study consist of previous studies on patient-centered care, documentation and hip fracture rehabilitation. By focusing on hip fracture patients, the study gives insight to a specific field where patient participation and motivation play an essential role in order to reach good care outcomes. Individuality and personal motivation of the patient are core aspects in the successful recovery of a hip fracture patient (Nurmela 2014).

2 Client of the study

The client of the study is the ward 1 at Kyllö hospital in Jyväskylä. Ward nurse Seija Nurmela has been the client's contact person throughout the course of the study. Kyllö hospital is a unit of public health care that provides short-term care and rehabilitation to different patient groups. In total, there are 172 patient beds on six separate bed wards. Ward 1 has 30 patient beds with a focus on rehabilitating

orthopedic surgery, amputation and wound-care patients (Jyväskylän yhteistoiminta-alueen terveystakeskus 2014). There is an average of 70-80 hip fracture patients rehabilitated yearly at ward 1 (Nurmela 2014).

Patient-centered care is enhanced in Kyllö hospital and patients are encouraged to find their personal resources. (Terveystakeskussairaala - Moderni tapa hoitaa.) During the recent years, the client has paid special attention to the rehabilitation process during the inpatient time. In 2012, the client started NOKO (Nopeasti Kotiin) program, which has an aim to reduce the inpatient time with one day. NOKO comes from a Finnish phrase meaning "quickly home". It motivates the patient with the idea of going home and involves them to take responsibility of their own rehabilitation. In 2012, the average inpatient time due to hip fracture at the ward was 27 days. After the implementation of NOKO, the average inpatient time had been reduced to 20 days. (NOKO information leaflet 2013; Nurmela 2014).

Experiences from the NOKO program have lead the client to acknowledge the importance of patient's individual resources. Major share of the nurses' time is spent on rebuilding patients' functional capacity, which cannot be reached without considering aspects such as personal motivation and preferences, co-morbidities, or social networks. (Nurmela 2014; Pohjolainen & Tilvis 2009.) This creates a need to develop documentation practices to support patient-centered care. The ward sees documentation as a tool to provide quality of care and efficiency in nursing work. (Nurmela 2014.)

3 Patient-centered care

A new (2015) global strategy of the World Health Organization (WHO) states goals such as patient empowerment and fighting against the fragmentation of health services. The strategy calls forth people-centered health services. It is declared to be a new approach to health care which adopts views from the patients and their families and sees them as participants of the health systems. The strategy promotes newly organized health system, which is constructed around peoples' health needs

and expectations, and provides them with support and proper education to be able to make decisions and participate to their own care. (WHO 2015.)

Although, the ideal of patient-centered care is agreed on widely, there is less uniformity on how the patient-centered care is made reality in different clinical settings. Different health care groups focus on different aspects of the patient-centered care depending, for instance, on the length of the patient stay or types of the problems the patients have. (Kitson et al. 2013, 5.)

A synthesizing literature study by Kitson et al. (2013) identified three core themes for patient-centered care that exist across fields of health care policy, medicine and nursing. First theme is the patient participation and involvement. Patient should be actively involved in their care and have control over the care given. Patient's values, preferences and expressed needs should be respected. Care plan should be customized to patient's individual needs and values and transition and continuity of care should be well organized. Care should address patient's physical and emotional needs: provide physical comfort and alleviate anxiety. (Kitson et al. 2013, 10–11.)

Second theme is the relationship between the patient and the health professional. This relationship should be genuine with open communication that allows knowledge, information, and clinical expertise to be shared. Feedback mechanisms should be established to measure patient experience. Skills and knowledge of the health care professionals should also include personal attributes, such as being polite, sensitive and respectful. Relationships between team of professionals should be cohesive and co-operational. (Kitson et al. 2013, 10–11.)

Third theme of patient-centered care is the context where care is given. These are systemic, organizational and environmental issues that allow or prohibit the practical implications of patient-centered care. It is not easy to put the policy into practice alongside issues of evidence-based care, patient safety, and patient's rights and responsibilities. Some barriers to the adoption of the patient-centered care are lack of time, staff, equipment, and a more reductionist nursing philosophy. (Kitson et al. 2013, 10–11.)

The patient-centered care has also been studied from the perspective of the patients and their family members. A study by Gill, Dunning, McKinnon, Cook and Bourke (2014) demonstrates practical issues that patients and family members expect from the care and care staff. In addition to having medical interventions done timely, patients give value to how the care is given. For instance, the attitudes, information and explanations from staff, and the quality of interactions matter. Including the family members in care decisions, shows that they are seen not only as consumers of the health care but also as contributors to it. (Gill, Dunning, McKinnon, Cook & Bourke 2014, 264.)

4 Hip fracture

4.1 Characteristics of hip fracture

Hip fracture is an acute injury that can lead to serious health problems and loss of functional ability, especially amongst elderly population (Kannus, Parkkari, Sievänen, Vuori & Järvinen 1996, 57; Chudyk, Jutai, Petrella & Speechley 2009, 246). The average age for hip fractures is 83 and only 4% of the affected are under the age of 60. Women are represented with 75 % of the incidents, mostly due to higher osteoporosis rates. (Marks et al. 2003, 57; Frihagen, Figved, Madsen, Lofthus, Nordsletten & Støen 2010, 1614.)

Anatomically, 37% of fractures are intracapsular, 49% intertrochanteric and 14 % subtrochanteric (Marks et al. 2003, 58 - 62). The fracture locations are illustrated in figure 1. Area 1 shows the femoral neck region, area 2 the interchanteric region, and area 3 the subtrochanteric region.

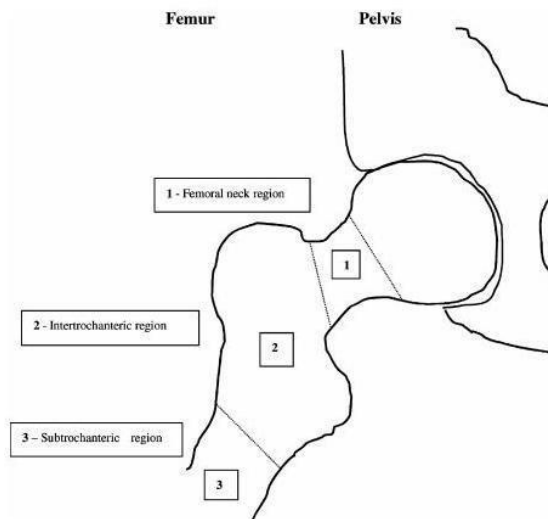


Figure 1. Hip fractures classified on basis of location Cummings & al. 1990 according to Marks et al. 2003,59)

Trochanteric fractures might cause a significant vascular damage to the femoral head and lead to avascular necrosis and osteoarthritis. The intertrochanteric and intracapsular fractures have higher implications related to morbidity and disability. One of the reasons might be that the intertrochanteric fracture patients are usually older and in poorer overall health. Hemiarthroplasty, a partial hip replacement, is the preferred operation for most of the patients, while a total hip replacement can be the best option for the oldest patients. (Frihagen et al. 2010, 1614.)

4.2 Hip fracture rehabilitation

Hip fracture is an injury accompanied with severe pain, which makes pain management a core element of rehabilitation. Nurses should regularly assess the level of pain and document the indications (Duodecim 2011b). Tools, such as VAS scale or PAINAD scale for demented patients, are recommended aids for the evaluation of pain (Rantala, Kankkunen, Kvist & Hartikainen 2012). Suffering of pain slows down recovery through its adverse psychological and physical effects. Patients with poor general condition may even be exposed to atelectasis, thromboembolism, nosocomial pneumonia or functional decline. In good pain management, patient's pain is assessed verbally and by observation and patient's opinion regarding means of pain management is heard. (Herr & Titler 2009, 312–314.)

Mobilization is essential in hip fracture rehabilitation. During the first week after injury, hip fracture patients lose more than 50 % of their strength to extend their knee (Kronborg, Bandholm, Palm, Kehlet & Kristensen 2014, 1–2). Patients need exercises that enhance strength, mobility and balance in order to regain functional ability in daily activities. Fast recovery of walking ability is connected to shorter inpatient time. (Kronborg et al. 2014, 1–2.) A great deal of personal motivation is required for optimal rehabilitation. For instance depression may negatively affect the motivation to follow daily rehabilitation routines if left untreated. (Beaupre, Binder, Cameron, Jones, Orwig, Sherrington & Magaziner 2013, 772–773.)

Patient's medical history, lifestyle and functional ability affect recovery. Muscle strength impairment, loss of bone mass, unsatisfactory nutritional status and sleep deprivation are examples of issues influencing rehabilitation outcomes of the elderly. (Coleman, Cunningham, Walsh, Coakley, Harbison, Casey, Murphy & Horgan 2012, 1333; Tyrrell, Levack, Ritchie & Keeling 2012.) Patients with limited functional ability or co-morbidities are more likely to experience a substantial functional loss within one year after the hip fracture. Whereas patients with good social support networks and family members participating in rehabilitation are more likely to regain previous functional ability. (Beaupre et. al 2013, 772–773.) In addition, cognitive status and possible memory disorders of the patient must be taken into account (Huusko, Karppi, Avikainen, Kautiainen & Sulkava 2000, 1107; McGilton, Davis, Mahomed, Flannery, Jaglal, Cott & Rochon 2012, 2–4).

From a nurses' point of view, providing patient-centered care and adjusting to patient's changing support needs are essential elements of rehabilitation in hip fracture care (Tyrrell et al. 2012). Crucial interventions include assistance in washing and hygiene, wound care, mobilization, monitoring fluid balance and urination, catheterization, administration of drugs such as anticoagulants, pain medication and antibiotics, guidance, observation and prevention of depression and confusion. (Marks et al. 2003, 82; Loviseberg Diakonale Sykehus 2014.)

5 Patient-centered nursing documentation

5.1 Documentation system

Documentation in the Finnish health care system is computerized. Electronic patient records are in comprehensive usage in both specialized care and primary health care (Winblad, Hämäläinen & Kangas 2008, 5). In primary health care, the most used systems are Effica (48%) and Pegasos (39%). (Winblad, Hyppönen, Vänskä, Reponen, Viitanen & Elovainio 2010, 4186.) Effica is the documentation system of patient records in the central Finland's health care district (Särkijärvi 2011) and thus, at Kyllö hospital.

Structured documentation entries are the key factor for producing easily accessible and understandable data for multi-professional health care providers in different health care settings, as well as for the patients' themselves (KANTA – Patient Data Repository 2014). Patient record is a repository where all details of patient's disease prevention, health monitoring, treatment implementation, and evaluation are documented. In order to create consistent manageable data for different user groups these details are recorded using a predetermined data structure. The data is entered under different headings, views, and treatment process stages using classifications and codes, which can be further, addressed and clarified with free text. (Lehtovirta & Vuokko 2014, 6.)

There is a national nursing documentation model in Finland, which uses the Finnish Care Classification system (FinCC). The FinCC system consists of three parts: the Finnish classification of nursing diagnoses (SHTaL, Suomalaisen hoitotyön tarveluokitus), the Finnish classification of nursing interventions (SHToL, Suomalaisen hoitotyön toimintoluokitus), and the Finnish classification of nursing outcomes (SHTuL, Suomalaisen hoitotyön tuloluokitus). Nursing diagnoses and interventions are organized by the following structure: 1) a component that is an abstract main heading under which lie 2) the main categories and 3) sub categories that are used in nursing documentation. Nursing outcomes part is used to evaluate whether the outcome of the care meets the care need. Possible outcomes are: improved, stabilized or deteriorated. (Liljamo, Kinnunen & Ensio 2012, 3, 5.)

5.2 Documentation in practice

Documenting on patient records is a prerequisite for making all the care of the patient verifiable. Based on the evidence they provide, patient records are also clinical tools. They enable the continuity of the care and validate decision making of future care and treatment. If the quality or safety of the care is thought to be jeopardized, the health records are an important evidence and point of comparison when assessing if the care meets the quality and safety standards. (Beach & Oates 2014, 45.)

In practice, the nursing process guides nurses' documentation. Since introduced in the 1950s, the nursing process has developed to become a dynamic system of assessment, problem identification, planning, implementation and evaluation. Although its features seem like steps, they are interrelated forming a continuous circle. (Castledine 1998, 96.) Features of a modern documentation structure for nursing process are admission data, nursing diagnoses, interventions and progress, and outcome evaluations (Paans, Sermeus, Nieweg & van der Schans 2010, 2482). The FinCC classification system follows this structure.

Admission data refers to the information documented from the admission interview of the patient, such as the social, psychological and physical functional abilities before hip fracture. Nursing diagnosis refers to labelling the problem: cause, related factors, and signs or symptoms. This is called the PES structure where P means problem label, E is etiology, and S refers to signs and symptoms. (Paans et al. 2010, 2483, 2486.) Nursing diagnoses should be a directing tool and a preliminary cause for interventions (Johnson et al. 2007 according to Paans et al. 2010, 2486).

Different forms of documentation depend on the type and place of care. Documentation is different in an acute ward from a long-term care. In acute care, documentation is short and densely informative. In rehabilitative and long-term care, the documentation should be more inclusive, turn away from problem focused orientation, and take into account patients' resources. What are they able to do and what do they enjoy doing? This can be achieved by getting to know about their life and history. (Mäkisalo-Ropponen 2013a.)

5.3 Patient-centered approach to documentation

As patient-centered care is implemented into practice, it should be visible also in documentation. Development in documentation aiding technology has been so major that documentation practices are still being constructed and evaluated. Nevertheless, the same principles that guide nursing care should guide the documentation as well. Some important principles are self-determination, individuality, safety, continuity, independence, holistic orientation and cultural sensitivity. (Turunen, Lehtinen, Väänänen & Juusela 2013.) There has been some concern that the hierarchical classifications created for the documentation of nursing process will lead to task-centered way of acting and documenting. A way of documentation that demonstrates the individual focus of the patient care should be embraced. (Kärkkäinen, Bondas & Eriksson 2005, 123-124, 129.)

According to Kärkkäinen & Eriksson (2005, 203), “the way in which care is recorded reveals the values of the recorder and his/her view of human beings.” Ethical guidelines for nurses in Finland state that the nurse improves patients’ individual well-being, takes into consideration their values, convictions and traditions, respects their autonomy and self-determination, and gives opportunity to participate in decision making concerning their care (Finnish Nurses Association 1996).

Consequently, this should mean that nurses document issues that are important according to patients’ opinion (Kärkkäinen, Bondas & Eriksson 2005, 124).

Documentation can make patients’ wishes and needs visible, and patient participation can reveal important information for improving the quality of care (Laitinen, Kaunonen & Åstedt-Kurki 2010, 490).

A study by Laitinen et al. (2010) identified patient-centered content from electronic nursing documentation. In the study, three categories of patient-centered nursing documentation were generated: patient’s voice, nurse’s view, and mutual view in patient-nurse relationship. Patient’s voice -category included expressions of patients’ moods and emotions, patients’ experiences of their current physical state such as pain, preferences to daily activities such as showering or food, and patient’s decision making and involvement. The study concluded that decision-making was rarely documented with the exception of situations where it contradicted the view of the

staff. However, also records that expressed nurses teaching the patient about different treatment options to help the patient make a decision were identified. (Laitinen et al. 2010, 492–493.)

The category of nurse's view included documentation from the perspective of the nurse. These were records on patient's behavior such as patient's affect or emotional outbursts as observed by the nurse. This category included the recordings on patient's experiences when it was not shown clearly whether the documentation was based on patient's comments or nurse's interpretation. The study indicated that nurses tend to characterize the patient in the documentation. It became apparent that sometimes there was a risk of labeling the patient with some positive or negative characteristic. Patient contacts with family members were recorded as well as family members participating in care. (Laitinen et al. 2010, 493–494.)

Mutual view in patient-nurse relationship -category reflected dialogue between the patient and the nurse in order to deepen common understanding and to reach an agreement. The agreements typically recorded were related to daily activities showing patient's commitment to his/her care. Records on information exchange revealed, for instance, collaboration in solving patient's problems and helped both parties to proceed with the patient's care. (Laitinen et al. 2010, 494.)

6 Aim and purpose of the study

In this study, nursing documentation is studied through patient-centered approach. The aim is to identify and classify documentation entries that indicate patient-centered care. These indications can be for example patient's opinions, feelings, decisions, preferences or other remarks recorded in nursing documentation.

The purpose of the study is to raise awareness on the importance of patient-centered documentation in the client organization. The need for the study was raised from client's own development work. Influencing documentation culture is a way to provide patient-centered care and make it visible. Patient-centered approach

enhances patient's motivation and commitment to rehabilitation, thus affecting quality and efficiency of care.

The study may retrieve new information the organization was unaware of and help in structuring resources in the future. The research is justified since research in the specific setting for this client has not been performed previously. At the same time, it connects with the challenges that society is facing such as aging population, economical scarcity and current patient-centered care ideology.

7 Methods and implementation of the study

7.1 Research material

Research material consists of nurses' documentation on 10 individual hip fracture patients during their inpatient time. The material studied includes entries from nurses and practical nurses. Other health care professionals' entries were excluded, as the focus of the study is on nursing documentation. Patient documentation was provided in print format presenting daily nursing documentation in chronological order. The data was organized by phase of the nursing process (plan, intervention or evaluation) and by FinnCC codes.

Ward nurse has been responsible for randomly selecting the 10 patient cases. The material comprised of patient stays during the year 2014, which were not anymore ongoing when the research was done. Out of the patient cases, eight were female and two male patients. The inpatient time varied substantially, between 4–68 days, median being 19 days. Thus, the amount of documentation entries per patient also varied remarkably.

The ward staff censored all personal data in the research material. Neither has other medical information of the patients, such as doctor's diagnoses, been available. Therefore, the research material is not assessed against the background information of the patients but focuses solemnly on the nursing documentation during each patient stay.

7.2 Content analysis as a research method

Inductive content analysis was chosen as a method to analyze the research material. Content analysis is one of the analysis methods in qualitative research that aims to find meanings in texts (Tuomi & Sarajärvi 2009; Fain 2013, 91). Inductive content analysis is a subtype of content analysis where the meanings are derived from the research material and not based on any previous theoretical model (Elo & Kyngäs 2007, 109). Collected observations may lead to conclusions or hypotheses which can be tested through research and have an orientation towards discovery (Fain 2013, 90 -91).

In inductive content analysis the research material, such as written documentation, is processed by reduction, clustering, and formation of theoretical concepts. First task, reduction, means deciding what is interesting in the data and mark these parts. Rest of the data is left aside. (Tuomi & Sarajärvi 2009, 92, 101.) The marking of relevant data is called coding. Codings are notes that mark the researcher's interpretations of that part of the text, for example, color codings. They help to describe the text by showing what themes appear and help in finding the specific parts of the text that the researcher wants to analyze next. (Sulkunen & Kekäläinen 1992, 15–17 according to Eskola & Suoranta 2008, 155.)

After the coding, the data is clustered according to thematic categories. They are formed by identifying relevant content and grouping the data according to the subject matter. This allows comparing the occurrence of different topics in the data. (Tuomi & Sarajärvi 2009, 93.) Categorized citations can be presented as descriptive examples, and for justification of the interpretations made by the researcher (Eskola & Suoranta 2008, 175).

Conceptualization is the final stage of inductive content analysis. At this stage the formed categories are further combined into more abstract, thematic concepts. By inductive reasoning specific observations are creating a general picture. As a process the original data is compared to the formed concepts and conclusions in order to produce a description of the phenomenon under research. (Tuomi & Sarajärvi 2009, 112-113; Fain 2013, 104.) To structure the research results, also quantitative or

numerical results of the analyzed material may be produced (Catanzaro 1988; Burns & Grove 1997; Sarajärvi 2002 according to Tuomi & Sarajärvi 2009, 107).

7.3 Content coding process

In the content coding process categories were formed based on topics often appearing in the data. The goal for the content coding process was to mark all entries referring to patient-centered care, to reach fullest possible saturation and not to leave out anything that may prove valuable in the analysis. Patient cases were numbered 1–10. The first patient case was chosen as a pilot case. The idea of the pilot case was to test the method and strengthen mutual understanding of what is relevant to code. However, the co-analyzing turned out to work so well that it was continued throughout the cases. It proved to be helpful to discuss about the categories and the defining features of entries to decide in which category to include it. In addition, discussions helped to clarify and set limits to categories.

During the coding process, all entries were given a color code and classified according to nursing process (plan, implementation or evaluation). All the findings were marked on a Microsoft Excel document, and the amount of entries within each category was calculated. Direct citation of each documentation entry was also saved into the Excel document.

8 Research findings

8.1 Categories and themes

Nine different categories were formed during the coding process and given a colour code. Table 1 represents the nine categories and their corresponding colour codes.

Table 1. Categories and their colour codes

Colour	Category
Green	patient's opinion
Orange	disagreement
Blue	co-decision
Red	patient's own physical feeling
Grey	patient's own psychological feeling
Pink	feeling observed by nurse
Purple	motivation
Brown	family involvement
Yellow	life outside ward

Material from each patient case was saved on a separate Excel sheet and marked with the colour codes. An excerpt of the processed material is presented in table 2. The table represents all entries reflecting disagreement that were identified in the patient case 2. The sum of entries and direct citations are classified according to nursing process.

Table 2. Documentation entries reflecting disagreement for patient 2

Patient 2	Sum of entries	Examples
<i>Plan</i>	0	
<i>Implement</i>	1	Kertoo käyneensä toissapäivänä suihkussa, ei ollut nyt halukas; [Said she showered yesterday, did not want to shower now]
<i>Evaluate</i>	1	Olis halunnut että hoitajat olisivat siirtäneet vuoteeseen, ei halunnut ottaa jaloille; [Wanted the nurses to move her to bed, did not want to stand on her feet]
		Orange colour = disagreement

Larger excerpt of the processed material is attached to appendix 1. The appendix gives an example on two patient cases: case of patient 10 with a great amount of entries related to patient-centered care and case of patient 4 with just a few entries.

The nine categories reflecting patient-centered care were further grouped into three themes. As presented in table 3, the themes are called **patient's feelings**, **patient's opinions** and **patient's resources**.

Table 3. Themes and their subcategories

Themes				
1	patient's feelings	patient's own physical feeling	patient's own psychological feeling	feeling observed by nurse
2	patient's opinions	disagreement	co-decision	patient's opinion
3	patient's resources	motivation, resources	family involvement	life outside ward

The findings on each theme are further opened up in the following chapter.

8.2 Indications of patient-centered care

As the research material was analyzed, it became obvious that the prevalence of the formed categories varies greatly. Figure two illustrates the prevalence of the created categories among the research material. The number at the end of each bar of the chart reflects the number of patients that had one or more documentation entries related to that specific category.

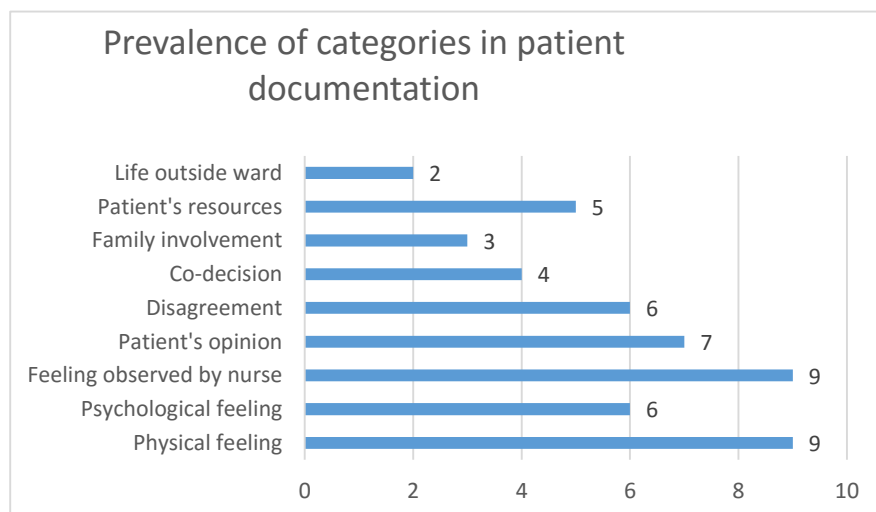


Figure 2. Prevalence of categories in patient documentation

For example, only three patients had one or more documentation entries about family involvement. For seven patients, there was no indication on family involvement in the documentation. Whereas, nine patients had at least one entry about feelings observed by a nurse. Only one patient was lacking entries belonging to this category.

8.2.1 Patient's feelings

Entries reflecting patient's feelings were grouped into categories called **patient's own physical feeling**, **patient's own psychological feeling** and **feeling observed by nurse**. As to amount of documentation entries, physical feelings were predominant. Entries related to patient's physical feeling were related to either feeling of pain or some other unpleasant symptom. Typical examples include "*Kysyttäessä ei kipuja juurikaan* [*Didn't report pain when asked*] (pt.4)"; "*Kertoj, että oikea jalka on kipeä* [*Told that the right leg is painful*] (pt. 2)"; "*Kokee virtsan tulevan housuun tietämättään* [*Experiences unintentional urination*] (pt. 1)". Only one patient did not have documentation entries about physical feelings. This patient was unable to communicate verbally, and physical feelings have thus been based on nurses' observations.

Overall, patients' pain status was documented often. Through the documentation, it became obvious that hip fractures are pain-intensive injuries and patients experience various kind of related unpleasant side effects. However, it was not always clear how the pain had been assessed. Phrases such as "*Ei ole kivulias ollut* [*Has not been in pain*]" or "*Listakipurulääkitys riittänyt* [*No need for additional pain medication*]" do not clearly indicate whether the assessment has been based on observed or verbally inquired information.

The number of documentation entries about physical feelings ruled out the entries about psychological feelings. Expressed psychological feelings were documented for six patients. Both positive and negative feelings were documented and the topics

were variable, e.g. "Tyytyväinen lounaalla käyntiin ["Satisfied about having lunch"] (pt. 2)"; "Sanoo että tippuu alas ja pelkää tätä kovasti ["Tells that she is falling down and this makes her scared"] (pt. 7)"; "Hoitajan halunnut henkiseksi tueksi ["Wanted the nurse to join him for mental support"] (pt. 10)".

Feelings observed by a nurse were documented for nine patients, the focus being on physical feelings. However, sometimes the line between physical and psychological feeling cannot be clearly defined, e.g. "kohtalaisen virkeä ollut aamun aikana ["has been relatively animated this morning"] (pt. 5)", the entry can either refer to mental or physical status, or both.

Entries about the observed feelings vary greatly. Some refer to overall status, e.g. "Pelokas ja hätäinen ["fearful and hasty"] (pt. 2)"; "Mielialat heilahtelevat nopeasti ["Moods swing quickly"] (pt. 7)". Some refer to more specific matters, such as nursing interventions or patient's preferences: "Rauhoittui, kun asentoa vaihdettiin ja kuiviteltiin ["Calmed down after a change in position and a dry diaper"] (pt. 8)"; "Pinaattivelli maistui ja silliä sai, mistä oli kovasti tyytyväinen ["Enjoyed spinach soup and was very satisfied to get also some herring"] (pt. 2)".

The reason for the observed feelings is not routinely indicated. For instance, "Pelkää alussa kävelyä ["At first scared of walking"] (pt. 5)", the reason for being scared of walking is not clarified. In some cases, the reasons are explained or assumed, e.g. "Kovin valittelevainen ajoittain, sanoo sen olevan vain tapa ["Whining a lot from time to time, says it is only a habit"] (pt. 7)". Naturally, the reason behind the feeling may also be unknown.

The overall impression on the observed feelings is that mostly negative feelings are documented. Positive feelings are mostly documented as evaluation of prior negative feelings when the patient's mood has improved. For example "Rauhallisemman oloinen, vastailee kysymyksiin hymyillen ["Appears to be more calm, answers questions with a smile"] (pt. 7)" is an evaluation of prior restlessness and negative feelings. Positive observations are also documented, but more rarely as such.

8.2.2 Patient's opinions

Categories named **patient's opinions**, **disagreements** and **co-decisions** all indicate patient's point of view in the documentation. These three categories are closely interlinked as they all indicate patient's personal opinion and preferences. However, identifying disagreements allows separate processing of documentation entries where the viewpoints of the patient and the nurse do not meet. Co-decisions on the other hand are considered outcomes formed in interaction between the patient and the ward staff. They indicate communication and conversation between patients and nursing staff, an important feature of patient-centered care.

Entries classified as patient's opinion were documented for seven patients. Majority of the entries were related to implementation of care. Compared to co-decisions and disagreements, the overall amount of entries related to patient's opinion was remarkably bigger. This is greatly due to entries about pharmaceutical care, as majority of patient's opinions were related to medicines.

Patients requested for medicine outside of their normal daily regime, e.g. a sleeping pill or additional pain medication, or had opinions about their medication: "*Oxynorm kovaan kipuun pyynnöstä ["Asked for Oxynorm for rough pain"] (pt. 9)*"; "*Tenox pyynnöstä unta turvaamaan ["Asked for Tenox to secure sleep"] (pt. 8)*"; "*Muuta lisäkipulääkettä ei halunnut ["Didn't want additional pain medication"](pt. 2)*", "*Potilas ihmetteli miksi Lyrica annettu ["Patient was wondering why Lyrica was given to him"] (pt. 9)*.

Other topics for opinions included mobility, hygiene, rest and eating preferences. The patient had for example not been satisfied with the rehabilitation plan and aiding devices "*Koki, että jumpassa rasittui liikaa [Felt that the exercises were too tiring for her](pt. 10)*"; "*Nostovyön kokee hankalaksi ja kivuliaaksi ["Feels the belt is difficult and painful to use"] (pt. 2)*". Eating preferences: "*Sanoi aamulla ettei syö puuroa ["Says does not eat porridge in the morning"] (pt. 8)*"; Hygiene preferences: "*Ei halunnut suihkuun ["Did not want to take a shower"](pt. 3)*" and issues related to rest "*Omasta mielestään valvonut koko yön ["Thinks that he has been awake all*

night"] (pt. 1)", "Ei ole halunnut mennä vuoteeseen ["Did not want to go to bed"] (pt. 9)."

Disagreements between patient and ward staff were documented for six patients, most of them related to implementation of care. Disagreements were about mobility, usage of walking aids, medicines, eating, drinking and hygiene. E.g. the patient had disagreed to attempt walking: *"Olisi halunnut että hoitajat olisivat siirtäneet vuoteeseen ["Had rather wanted the nurses to help him to bed"] (pt. 2)";* or refused to use aids, eat, drink or take medicines: *"Aamupalalla kieltäytyi syömisestä ja juomisesta, myös lääkkeet sylki pois ["At breakfast refused to eat and drink, spat the medicines out, too"] (pt. 7)".*

Sometimes the reason for the disagreement was clarified, e.g. *"Kertoo käyneensä toissapäivänä suihkussa, ei ollut nyt halukas [Tells that she has been to shower the day before yesterday, did not want to go now"] (pt. 2)"; "Ei ole suostunut ottamaan rollaattoria käyttöön kipeytyneen ranteen vuoksi ["Has refused to use the walker because of pain in the wrist"] (pt. 1)".* However, the measures taken after disagreements or their solutions have rarely been clarified in the documentation.

Co-decisions were documented for four patients, all related to implementation of care. Examples of co-decisions include mobility, usage of diapers and communication with ward staff: *"Keskusteltu, että kävisi yöllä portatiivilla ["Discussion about using the portative during night"] (pt. 2)"; "Sovittu, että otetaan lounaalle ylös ["Agreed to get up from bed at lunchtime"] (pt. 1)"; "Neuvottelimme ja jätimme pois flex-vaipan ["Negotiated with the patient and agreed to stop using the flex-diaper"] (pt. 2)"; "Sanoi soittavansa jos kipulääkettä tarvitsee ["Told that she would ring the bell if in need of pain medication"] (pt. 10)".*

Overall, the entries in related to patient's opinions, disagreements and co-decision represent issues relevant in hip fracture care, such as mobility, rehabilitative exercises, pain management and need for help in daily activities. It is worth noticing that there were no entries in the planning phase of the nursing process. Most of the entries were related to the implementation of care.

Within the theme, there was also variation in the amount of entries between patients. For patients 4 (stayed 5 days at the ward), 5 and 6 (both stayed 14 days at the ward), no entries related to patient's opinion, co-decision or disagreement, were to be found in the documentation. One reason for this can be the state of the patient or an underlying illness. For example in the case of patient 5, the documentation shows the patient has difficulties with speech and is unable to communicate in an understandable manner.

8.2.3 Patient's resources

Indications on patient's resources were identified in the documentation and further classified under categories **motivation**, **family involvement** and **life outside ward**. Overall, these three categories related to patient's resources had the least entries compared to other categories.

Some indications about the motivational work the nurses do at the ward could be seen in the documentation. For five patients, there was an indication in the care plan about what kind of motivating they need in rehabilitation. E.g. "*Kannusta liikkeelle jokaisessa työvuorossa ["Encourage to be mobile during every shift"] (pt. 4)*" or "*Kannusta ja ohjaa omatoimisuuteen ["Encourage and guide to be self-acting"] (pt. 8)*". On the other hand, for the other five patients, the care plan did not indicate anything about the patient's motivation or how to encourage the patient.

The implementation and evaluation entries on motivation included both practical descriptions and mental encouragement, examples including "*Tarvitsee ohjausta ja muistutusta jalkojen ristiin astumisesta ["Needs guidance and reminding about cross stepping of feet"] (pt. 8)*"; "*Tarvitsee paljon napakkaa ohjausta ["Needs a lot of clear guidance"] (pt. 2)*" and "*Kannustettu omatoimisuuteen ["Encouraged to act by himself"] (pt. 9)*".

Some of the entries regarding patient's feelings are also clearly related to motivation: "*Alkaa luottamaan kävelytaitoonsa ["Starts to trust his walking ability"]*"

(pt. 5)" and "*Kelailee pyörätuolilla mielellään* [*Likes to move around with wheelchair*]" (pt. 8)".

Entries about patient's life outside the ward were scarce. Two entries related to everyday life practicalities were mentioned: "*Veteraanien virkistysloma, lääkäri sitä mieltä, että kannattaa perua* [*Recreation holiday for veterans booked, doctor thinks this should be cancelled*]" (pt. 1)" and "*Neuvonnassa käynyt maksamassa laskun* [*Went to reception to pay a bill*]" (pt. 1)".

Family members and other social networks were mostly mentioned as contact persons, for example "*Haluaisi yhteyden avovaimoonsa* [*Would like to contact his wife*]" (pt. 8)" or related to practical issues at the discharge from the ward. Some visits from the family members are also documented, as well as two entries related to family member participating in care, e.g. "*Tytär käynyt iltapalan aikaan ja syöttänyt mummoa* [*Daughter visited at evening snack time and fed her grandmother*]" (pt. 6)".

Two entries on opinions of the family members were found: "*Tytär kertoi, että toivoo, että potilas kotiutuu* [*Daughter told that she wishes the patient to be discharged*]"(pt. 1)"; "*Soitettu tyttärelle lantion kuvauksesta - tytär tyytyväinen* [*Called daughter about the hip area examination - she was pleased*]" (pt. 1)". Some indications about family meetings, where patient's issues have been discussed, were found in the documentation. Documentation from these meetings, which could potentially more open up the family connection, has not been among the research material.

9 Discussion

9.1 Main results

Features of patient-centered care, such as patient involvement and interaction can be seen in the documentation. However, there is variation among the prevalence of these features. Entries about patient's physical feelings, pain and needs for physical

assistance or medication are widely prevalent in the documentation. Whereas, patient's psychological feelings, personal resources, motivation and references to family or life outside ward receive less entries.

Thus, focus of the documentation is clearly on physical recovery. This reflects the core aspects of hip fracture rehabilitation, such as pain management and importance of mobility. Overall, medical and physical issues are documented comprehensively. Patient's feelings of pain and pain management in particular are documented thoroughly, which is essential for rehabilitation. A pain-related issue worth noticing is that sometimes it was not possible to understand how the pain has been assessed - by asking the patient, by observation or both. Usage of VAS scale or equivalent to follow up on the patient's pain levels was not to be found in the documentation. The degree of pain rather reflected itself in the documented medication dosages received.

The documentation manner is mostly brief, which is justifiable at a short-term ward. A slightly more inclusive documentation manner would potentially open up the documentation for more patient-centered approach. For example, when patient's feelings are described in the documentation, the reason for the feelings is often lacking. A practical example from the material - a patient was documented to be unwilling to take a shower. In a previous documentation entry, it is documented that the patient is unwilling to move because she is afraid of falling. Maybe this is the reason for refusing to shower as well.

Documenting the reasons would offer the nurses more tools to understand the patient and act in a patient-centered way, which in this case could be to make the patient feel safer to walk by offering assistance, walking aids etc. To be aware and document, whenever possible, psychological factors, reasons for behavior and solutions for problems is important in order to be able to support patient's motivation. As it could be seen from the material, especially psychological feelings are closely linked with motivation, and thus should not be undermined.

Another example is related to patient's opinions and disagreements. Patient's opinions are not systematically documented with their context or reason.

Documenting only "unwilling to go to bed" does not give indication on the reason or how the situation proceeded. Whereas documenting "unwilling to use walking aid because of aching wrist" gives the next nurse in shift more tools to approach the patient. Actually, more entries on patient's opinions would maybe be interpreted as co-decisions if the progression of the negotiation was opened up in documentation.

Patient's with difficulties in verbal expression or with cognitive challenges such as major memory impairment form a special group within the material. The documentation for this kind of patients was briefer and less patient-centered. It focuses more on medication, wound care and other clinical interventions. It is challenging to apply all features of patient-centered care, such as listening to patient's opinion or negotiating about care given, to this kind of patients. This issue is reflected through the documentation.

Approaching the results from the nursing process (plan, implementation, evaluation) viewpoint offers another fruitful angle to study the documentation. Firstly, the material indicated that the care plans could be more effectively adjusted to suit the patient's resources. When the patient was experiencing difficulties, usually pain that restricted the rehabilitation, the documentation focus in some cases seemed to shift from a rehabilitative approach to pain management approach. Documentation gave the impression that rehabilitation was left aside, rather than adjusting the care plan to suit the patient's current condition. An up-to-date care plan supports the rehabilitation with suitable means for the stage of the recovery process, proper pain management being the enabling factor for rehabilitation.

Secondly, there are differences in how often the patient-centered care is visible at the different stages of the nursing process. Majority of inputs related to patient-centered care, no matter to which above-mentioned category they belong, are documented under implementation of care. Thus, the care plan and evaluation of care seem to be lacking from the perspective of patient-centered care. The care plans indicate the stage of the physical recovery, what each of the patients are able to do and how they take care of activities of daily living. More rarely the plan opens up psychological resources, motivation or patient's preferences and neither are these issues systematically taken into account in the evaluation. Physical recovery is

evaluated regularly and nurses "give credit" for the patient's improved recovery by documenting in a positive manner about patient's achievements. Psychological status or motivation of the patient are more rarely evaluated, usually only in case of prior problems.

9.2 Validity and reliability

Evaluation of the reliability of a qualitative study is different from quantitative. In quantitative research, reliability refers only to accuracy of measuring whereas in qualitative research it refers to the whole research process, the actions and directions taken by the researcher. Foundation for the evaluation of reliability is the description of the research process from data collection on. If the research text is regarded to be a reflection of the reality, the concepts of validity and reliability can be applied. (Eskola & Suoranta 2008, 210–213.)

Internal validity refers to the logical relationship of the theoretical approach, concepts, and methods chosen by the researcher. External validity means that interpretations and conclusions must be in accord with the data. A research finding is valid when it describes the object of the research as it is. Reliability refers to possible other interpretations. If the interpretations of the research data do not contain contradictions, it is reliable. Reliability can be strengthened for example by observing the phenomenon multiple or different times, having more observers, or applying different indicators to demonstrate the uniformity of the phenomenon. (Eskola & Suoranta 2008, 213.) During the study process it is important to ponder whether it is the data leading to the results or are there interfering extraneous variables (Fain 2013, 225).

The research process has been described in detail for the evaluation of reliability and validity aspects, and for replicating the study. Findings and interpretations are backed up with original citations from the data. All three students going through the research material together also improved validity. In addition, the scale of the study is relatively small and it is designed to serve the client's development needs. It does

not aim to make more general assumptions on the state of patient-centered documentation.

Gender has not been considered when selecting the research group. This has not affected the outcome of the research as personal differences as such are not the target of this study and the core of hip fracture rehabilitation is not dependent on the gender of the patient. The research was conducted over the whole inpatient time of each patient to provide sufficient longitudinal research material on each individual rehabilitation process and a representative sample of the variables in documentation.

9.3 Ethical considerations

When undertaking this research the principles of confidentiality formed by WMA declaration of Helsinki – Ethical Principles of Medical Research Involving Human Subjects (World Medical Association 2014) were used. The study took place in an inpatient rehabilitation ward where respect for human subject is ensured. The focus was on the documentation of interventions performed by the health care workers. It was not the patient-group nor the nurses that were investigated. The data did not include any information that may identify the patients or nurses. Neither did the study affect the treatment the patients were given since the interventions had already occurred and the care relationships ended.

Permission to conduct the study was applied and received from the city of Jyväskylä. Instructions from the city of Jyväskylä regarding privacy and ethics of health care related studies were followed. Ward nurse was supervising the research and all handling of the primary data material was conducted on the compound of the hospital. Primary data was never taken out of the ward premises. The research material was safely disposed by the ward after the research was conducted. Ward nurse wished to use her own name in the research and gave permission to identify the ward.

10 Conclusion and recommendations

The study opened up windows to different aspects of patient-centered documentation. When the patient is put to the center of the study, the interlinked nature of nursing care and rehabilitation becomes obvious. Through the documentation we can find connections: for instance listening to patient's opinion can result as better motivation and regularly updated care plan results as the patient reaching the rehabilitative goals. We hope that this thesis will serve the client in starting conversation about patient-centered documentation and creating documentation practices that suit the goals of the ward. In a hospital ward environment, where the information about each patient is mostly passed on to next shift through documentation, the importance of the documentation contents cannot be overrated.

The documentation studied included features of patient-centered care. Although the amount of material studied was limited, some recommendations can be suggested to be taken into account in ward's development projects. First, based on the main results the study wishes to draw attention to the importance on clarifying how the pain of the patients has been evaluated. Secondly, the study identified that the patient-centered approach at different stages of the documented nursing process is uneven, it is less consistent at the planning and evaluation phase. The ward could pay attention to this and consider a more inclusive style to document more of the reasons, negotiations, consequences etc. that are affecting the course of individual rehabilitation. Patients with inability to communicate are a group that requires special attention in order to fulfill the goals of the patient-oriented documentation. Education to enhance communication with demented could help with the communication barriers. Thirdly, documentation could be a way the goals of the ward can become apparent. It can make the "silent" work of the nurses (such as motivating, encouraging and negotiating) visible.

However, there is a demand for effectivity, which raises questions on the type of the ward in relation to the scope of documentation. How broad documentation is relevant for this type of short-term care? How much is it needed to make references to larger life context, such as family participation, in this kind of care? This is a

decision the ward will have to discuss and create a common documentation culture together with the nursing staff.

Since observation was not used as a method, it is difficult to know what interventions in accordance with patient-centered care have really occurred and if they are underrepresented in the documentation. This creates a bias between the reality of the care work and the representation it gets via documentation. This has been reported in several former studies (eg. Kärkkäinen, Bondas & Eriksson 2005; Karlsson, Lidell & Johansson 2013). The ward itself has paid attention to the great amount of motivational work the nurses do to rehabilitate the hip fracture patients. As the research findings indicate, development is needed to bring this work visible through documentation, as the emphasis was now clearly on physical recovery.

The focus of the study was on documentation contents, but the effect of the documentation system must also be mentioned as a contributing factor. Studying the material it is possible to notice that the Effica computer system is utilized slightly in different ways, depending on the nurse doing the documentation. In addition, studying only the FinnCC component titles would not offer a whole picture of the care given, as many kind of information is recorded under single component. FinnCC codes also make the documentation rather task-oriented, shifting the focus away from the patient. Thus developing the documentation system is an important part in the overall development of the documentation culture.

Successful implementations of patient-centered care may also require further in-depth studies about specific interrelated factors. For instance, the northern location of Scandinavian countries with less sunlight creates conditions that may increase the risk for hip fractures. Connection between the lack of vitamin D and osteoporosis is a topic of scientific interest. Clinical screenings and preventive measures such as safe home environment are issues under research and to be considered in patient-centered care. Most falls leading to hip fracture occur at home and persons who have suffered the fracture are 10 % more likely to suffer a new one within few years. (OECD 2013, 173–174; Duodecim 2011a; Basso, Frihagen, Gjertsen, Solberg & Støen 2015.) Challenging question for health care organizers is, how to connect scientific information with patient-centered care in practice.

Developing patient-centered documentation is a future tendency that all organizations providing nursing care are facing. It enhances the quality of the nursing work and situates the patient to the center of the care (Healee, MacCallin & Jones 2011, 19–22). It is recommended that the voice and opinions of the patient are visible in all nursing documentation, starting from the care plan, which should be made together with the patient. It has been suggested that in the future it shall rather be called a care contract. (Mäkisalo-Ropponen 2013c.) Development of care work is an ongoing project. On the societal level, patient-centered care ideology has potential that can also help in coping with the economical scarcities. As long as the quality of care remains at the core of developmental work, we believe that patient-centered care and economic efficiency can promote each other.

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Appendices

Appendice 1. Excerpt from the research material

Colour	Category
	patient's opinion
	disagreement
	co-decision
	patient's own physical feeling
	patient's own psychological feeling
	feeling observed by nurse
	motivation
	family involvement
	life outside ward

Patient 4		Patient 10	
sex	Female	sex	Female
days at hospital	5	days at hospital	46
plan	1 Kokee, ettei tarvitse ylimääräistä kipulääkettä	plan	
implement	3 Kysyttäessä ei kipuja juurikaan; ei kysyttäessä kipuja; aamusta kipuja valitellut	4	kertoo olevan vähän tykyttävää tunnetta, ei rintakipua/hengenahdistusta; nyt aamuyöstä jalka tuntunut kipeämmältä; koki että hajuistia ei ollut; kertonut, että vatsantoiminnan kanssa ongelmia; huonosti kertoo nukkuneensa;
evaluate		16	kipua kertoo jonkin verran olevan, mutta pärjää sen kanssa; valitti kovaa kipua leikatun jalan lonkassa; kertoi jalan hieman kipeytyneen jumbassa ja istuessa; ei kipuja kertomansa mukaan; kertoo kipua tuntuvan leikatussa jalassa vuoteesta ylösnoustaessa, levossa ei kipua; liikkussa kipua vas. reidessä ja polvessa valitellut edelleen; vas. jalkakipua myös valitellut eilisen rasittavan fys. terapian aiheuttamana; pientä kipua kertoo olevan lähinnä liikkumisen yhteydessä, levossa ei kipua; kysyttäessä ei kerro kipua olevan; kertoo, että vatsa alkanut toimimaan; kipua ei kerro nyt olevan; potilas kertoi ettei ole nukkunut hyvin; kertoo terveen jalan polvi tuntuvan kipeältä; kipua sanoo olevan terveessä raajassa kun kävelee; kipua kertoo olevan vasemmassa raajassa;
plan		plan	
implement		1	Hoitaja vielä henkisenä tukena;
evaluate		5	selviytynyt omatoimisesti, mutta pyytänyt silti aina hoitajan turvaksi; kävely onnistuu hyvin, vaikka varmistajan liikkumiseen vielä haluaakin; haluaa lähinnä varmistajaa; hoitaja ollut turvana vieressä liikkumista tarkistamassa; hoitajan halunnut henkiseksi tueksi;
plan		plan	
implement		32	pyynnöstä kipuun; zolpidem pyynnöstä yötä vasten varalle; zolpidem yöksi pyynnöstä; zolpidem pyysi unta antamaan; oxynorm kovaan jalkakipuun pyynnöstä; zolpidem pyynnöstä unettomuuteen; halunnut että hoitaja laittaa peiton hänen päälle, koska hänellä on kylmä; sanoo, että pärjää ilman ylimääräistä kipulääkitystä; zolpidem viety yöksi pyynnöstä; zolpidem pyynnöstä auttamaan unen saantia; zolpidem yöksi pyynnöstä; pyynnöstä zolpidem; pyynnöstä unta tuomaan, pyynnöstä jalanpohjien kipuun; pegorion pyynnöstä; zolpidem pyynnöstä unta tuomaan; oxynorm kipuun pyynnöstä; zolpidem unettomuuteen, pyynnöstä; zolpidem unettomuuden, pyynnöstä; zolpidem yöksi pyynnöstä; zolpidem yöksi pyynnöstä; zolpidem pyynnöstä; zolpidem pyynnöstä; zolpidem potilaan pyynnöstä unen saantia helpottamaan; zolpidem potilaan pyynnöstä unta helpottamaan; zolpidem pyynnöstä yöksi; zolpidem pyynnöstä yöksi; zolpidem potilaan pyynnöstä unen tuloa helpottamaan; tramadin pyynnöstä jalkakipuun; zolpidem pyynnöstä viety pöydälle; zolpidem pyynnöstä unta tukemaan; zolpidem pyynnöstä yöksi;
evaluate		8	ei haluaisi syödä kipulääkkeitä; kokee hyvin hankalaksi pieninkin liikkumisen; koki että jumbassa rasittui liikaa; koki lääkkeestä apua olevan; kertoo syöksi päivän jumbapauksen ja sen jälkeen liian pitkän säängyssä makaamisen; pyynnöstä unettomuuteen; epäilee tämän johtuvan lääkkeestä; kysyttäessä annettu kipulääke oli auttanut; kertoo kivun kanssa pärjäävän;
plan		1	virkeänä ja hyvillä mielen lähti kotiin.
implement		2	potilas ei jaksanut tehdä mitään itse; ei kovasti innoissaan (liikkeelle lähtemään);
evaluate		3	Hyvin ottaa ohjeita vastaan; tarvitsee edelleen apua ja osaa kertoa missä; selviää hyvin, jos haluaa, ilman apuja;
plan		plan	
implement		1	kovasti haluaa olla vuodelevossa, liikkeelle passitettu;
evaluate		evaluate	
plan		plan	
implement		2	sanoi soittavansa jos kipulääkettä tarvitsee; neuvottu soittamaan kääntöapua jos selkä puuttuu;
evaluate		evaluate	
plan	1 Ohjaa / kannusta liikkeelle jokaisessa työvuorossa, Seuraa onnistuminen	1	kierrolla 2.9 puhuttu, että wc-matkat pitäisi kävellä eva-telineen avulla;
implement		4	kylmäpakkausta lonkalla pidetty, asentoa korjailtu ja tyynyä pöyhitty; potilasta kehoitettu kovasti liikkeelle; tarvitsee kannustusta kovasti;
evaluate		5	tarvitsee kannustusta kovasti; omatoimisuus lisääntynyt kannustuksen myötä; ohjaa ja kannusta omatoimisuuteen; tarvitsee kannustusta ja rohkaisua;
plan		1	oiva-palaveri osastolla ... potilaan poika ja miniä haluavat myös osallistua.
implement		implement	
evaluate		evaluate	