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## ORIGINAL ARTICLE

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# Using the Nursing Interventions Classification to identify nursing interventions in free-text nursing documentation in adult psychiatric outpatient care setting

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## Abstract

**Aims and objectives:** To identify and describe nursing interventions in patient documentation in adult psychiatric outpatient setting and to explore the potential for using the Nursing Interventions Classification in documentation in this setting.

**Background:** Documentation is an important part of nurses' work, and in the psychiatric outpatient care setting, it can be time-consuming. Only very few research reports are available on nursing documentation in this care setting.

**Methods:** A qualitative analysis of secondary data consisting of nursing documentation for 79 patients in four outpatient units (years 2016–2017). The data consisted of 1,150 free-text entries describing a contact or an attempted contact with 79 patients, their family members or supporting networks and 17 nursing care summaries. Deductive and inductive content analysis was used. SRQR guideline was used for reporting.

**Results:** We identified 71 different nursing interventions, 64 of which are described in the Nursing Interventions Classification. Surveillance and Care Coordination were the most common interventions. The analysis revealed two perspectives which challenge the use of the classification: the problem of overlapping interventions and the difficulty of naming group-based interventions.

**Conclusion:** There is an urgent need to improve patient documentation in the adult psychiatric outpatient care setting, and standardised nursing terminologies such as the Nursing Interventions Classification could be a solution to this. However, the problems of overlapping interventions and naming group-based interventions suggest that the classification needs to be further developed before it can fully support the systematic documentation of nursing interventions in the psychiatric outpatient care setting.

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**Relevance to clinical practice:** This study describes possibilities of using a systematic nursing language to describe the interventions nurses use in the adult psychiatric outpatient setting. It also describes problems in the current free text-based documentation.

#### KEYWORDS

Nursing Interventions Classification, nursing records, outpatients, psychiatric nursing, standardised nursing terminology

## 1 | INTRODUCTION

Documentation is an important part of nurses' work. The most important purpose of nursing documentation is to improve patient care by ensuring its continuity (Saranto & Kinnunen, 2009). Electronic patient records (EPRs) have replaced paper-based documentation in many care settings. EPRs have several advantages including the secondary use of patient data for administrative purposes such as quality improvement, as well as the possibility to create linkages between nursing interventions and patient outcomes (Hardiker, Dowding, Dykes, & Sermeus, 2019). However, in order to gather large amounts of data from the EPRs, the documentation needs to be in a structured format (Hardiker et al., 2019). Research into EPRs is increasing, but there is a lack of studies on documentation of nursing interventions in the psychiatric outpatient care setting. The research is urgently needed, since in many countries the majority of patients suffering from mental disorders are outpatients, and nurses play an important role in their care delivery.

## 2 | BACKGROUND

Psychiatric and mental health problems are amongst the greatest health concerns, affecting the lives of tens of millions of people in the EU (OECD/EU, 2018). Globally, nurses are the largest professional group working within psychiatric and mental health services (WHO, 2018). Traditionally, psychiatric services have relied on inpatient treatment and rehabilitation, but over the past decades the focus has shifted towards community and outpatient services. The ratio between inpatient and outpatient treatment varies between countries, but globally mental health policies emphasise the importance of outpatient and community services (WHO, 2018). The use of and need for psychiatric outpatient services keeps growing globally (WHO, 2018), and for example, in Finland the number of psychiatric specialised healthcare visits increased by 80% between the years 2006 and 2017 (THL, 2018).

The increased need for outpatient services has led nurses to work as care coordinators or case managers for large groups of patients, in addition to providing care in the context of patient groups or during individual patient meetings (Ameel, Kontio, & Junttila, 2019; Happel, Hoyer, & Gaskin, 2012; Simpson, 2005). These roles consist of many indirect care activities or administrative tasks, including

### What does this paper contribute to the wider global clinical community?

- Current nursing documentation in the adult psychiatric outpatient setting does not describe nursing interventions to a sufficiently detailed level.
- The Nursing Interventions Classification could provide the language needed to describe nursing interventions in this care setting.
- The problems identified in the classification need to be solved before the classification can fully support systematic nursing documentation in adult psychiatric outpatient setting. The identified problems in the classification included overlapping interventions, group-based interventions and the lack of clear distinction between the concepts of "action" and "intervention."

documentation and coordination of services (Heslop, Wynaden, Tohotoa, & Heslop, 2016; Simpson, 2005).

Nurses are expected to document the nursing care process, including actual patient care activities into the patient's health record. EPRs make it possible to gather and to process large amounts of patient-related data. The data can be used for developing care, as well as for administrative purposes, describing care intensity and planning for staffing levels. This requires that nurses—at least partly—document their work in a standardised way (Sermeus, Delesie, Van den Heede, Diya, & Lesaffre, 2008). This is often done using standardised nursing terminologies (SNTs) that have been developed to describe the nursing process systematically. They consist of definitions of patients' nursing care needs, nursing interventions and patient outcomes. The NANDA-I (defining nursing diagnosis), Nursing Interventions Classification (NIC) and Nursing Outcomes Classification (NOC) are the most widely used and researched (Tastan et al., 2014).

The NIC (Butcher, Bulechek, Docherman, & Wagner, 2018) is a classification describing nursing interventions. The NIC defines a nursing intervention as: "any treatment based upon clinical judgment and knowledge that a nurse performs to enhance patient/client outcomes." (Butcher et al., 2018 p. xii). It consists of seven domains

(Physiological: Basic, Physiological: Complex, Behavioral, Safety, Family, Health System and Community), 30 classes and 565 interventions. The interventions are defined by their aims and consist of a list of actions, which can be modified on the basis of individual care needs.

There has been some research on the use and relevance of NNTs in documentation in the psychiatric care but most of this has taken place in inpatient settings (e.g. Frauenfelder, van Achterberg, & Muller-Staub, 2018; Gonçalves, Sequeira, & Silva, 2019). Frauenfelder et al. (2018) concluded that the NIC could be a suitable means to describe nursing care in the psychiatric inpatient setting but some interventions were found to be missing. According to our knowledge, only very limited research has been conducted in the psychiatric outpatient setting. Thomé, Centena, Behenck, Marini, and Heldt (2014) conducted an analysis of nursing records in an acute psychiatric outpatient setting in Brazil, finding the NIC and NANDA-I to be descriptive of the nursing process in the meetings which nurses had. Their study was conducted in one location, in which the NIC was already implemented in the patient documentation.

Taking into consideration the emphasis on providing care in psychiatric outpatient services, nurses' central role in care delivery and the time used for documentation, we believe that it is important to study nursing documentation in the adult psychiatric outpatient setting and the possibilities of using a standardised nursing terminology in this care setting. We use the NIC as a reference terminology in this study. The decision was made based on the recommendations presented in the earlier national study in Finland (Sainiola-Rodriguez & Ikonen, 2007) and recognising that it is the most widely studied and used classification describing nursing interventions (Tastan et al., 2014), which makes our results comparable to studies in other care settings.

The aim of this study was to describe nursing interventions identified in current nursing documentation that is based on free-text notes and to explore the potential for using the NIC in nursing documentation in the adult psychiatric outpatient care setting.

## 3 | METHODS

### 3.1 | Design

The study design was qualitative document analysis of secondary data. The Standards for Reporting Qualitative Research guideline (O'Brian, Harris, Beckman, Reed, & Cook, 2014) was used for reporting (See Supplementary File S1).

### 3.2 | Sample and setting

The sample consisted of nursing documentation as entered by nurses in the multidisciplinary EPR of 79 patients. The sample

included entries of 1,150 progress notes describing contact or attempted contact with the patients or persons in their networks, and 17 nursing care summaries written at the end of the care period. All combined, the texts comprised of 322 pages of text (Times New Roman font 12, single space).

The four units selected for this study were all part of specialised healthcare services. The hospital system, which the units belong to, serves a population base of approximately 1.8 million citizens. In the units chosen for this study, patient care was delivered by multidisciplinary teams, all providing treatment for adult patients (18 years or older). The units were selected with the help of nurse directors, in order to represent different types of patient groups and means of care delivery. They were located in three different major cities in Finland. The units consisted of acute care and assessment units and three units that were specialised in the treatment of a specific patient group. These included patients with mood disorders, patients with early psychosis symptoms and patients with a dual diagnosis (combined severe psychiatric disorder and substance abuse). In the units, nurses generally met the patients individually, with the exception of one unit which used an open dialogue approach usually including at least two staff members in the care meetings. Nurses would document their daily work with patients in progress notes.

In Finland, nursing documentation is recommended to be based on the Finnish Care Classification (FinCC) vocabulary, which has been modified from the Clinical Care Classification. This consists of classifications of care needs, nursing interventions and patient outcomes (Liljamo, Kinnunen, & Ensio, 2012). However, the results of an earlier national study have shown that the FinCC is insufficient to describe nursing interventions in the psychiatric setting and that it needs to be further developed using the NIC (Sainiola-Rodriguez & Ikonen, 2007). To our knowledge, this has not been done and the psychiatric outpatient care settings use mainly free text in the documentation. In the research site, the nursing notes were made in free-text form into the EPR by nurses.

### 3.3 | Data collection

The hospital's information technology (IT) department delivered relevant data based on computer-generated randomly selected patient numbers within the study period. For each unit, these included 10 patients whose care period started and 10 patients whose care ended during the study period (years 2016–2017). Altogether, patient journals of 79 different patients were analysed, since one patient was admitted to two different units. In order to avoid possible bias triggered by the research, the study period for the selection of records was chosen to be prior to the implementation of the research project. Entries from other professionals than nurses, such as psychiatrists, occupational therapists and psychologists, were removed from the data prior to the analysis by the primary researcher.

The data were completely anonymised before the analysis process. This was done by the primary researcher by removing all personal details (e.g. names and telephone numbers) of patients, family and staff members. Only the profession of the staff member (e.g. nurse, physician) and the relation to the patient (e.g. mother, friend) was included.

### 3.4 | Ethical considerations

The study was approved by the hospital's ethical committee, and research permission was granted by the hospital board. The data were analysed anonymously. The text extractions used in the reporting were chosen to secure anonymity of patients and staff members.

### 3.5 | Data analysis

The data were analysed in two ways, using first deductive and then inductive content analysis. Deductive qualitative content analysis is a way to study the use of a theory or model against collected data (Graneheim, Lundman, & Lindgren, 2017). In this study, our interest was to use the NIC to describe interventions against the data that consisted of free-text nursing documentation in adult psychiatric outpatient care setting. The analysis done was in three steps by two researchers (MA and HL), following the guidelines by Elo and Kyngäs (2008).

The analysis process included the following steps: first, the researchers read the text as a whole in order to get acquainted with the data. The text was unstandardised and included very little actual descriptions of nurses' activities or expected patient outcomes that could be directly mapped to the NIC interventions. Therefore, we created a data extraction matrix to help to keep track of thoughts and questions rising during the analysis process. An example is described in Appendix S1. Second, the first two authors mapped the first 180 progress notes and the 17 nursing care summaries blindly. We compared the extracted text parts of each progress note to the 565 intervention descriptions in the NIC (Butcher et al., 2018). After this, comparisons were made and differences discussed. Through this comparison, we formed the categories to group text extractions describing similar activities that were mapped to the same NIC intervention. These categories were used in the rest of the analysis process. Third, MA analysed the remaining ( $n = 970$ ) progress notes first and HL confirmed the analysis based on this, making suggestions to 202 entries. The level of agreement was 80% at first, and total agreement was achieved after discussing the differences.

The inductive phase of the content analysis was related to the extractions that were difficult to map to NIC. The text extractions and interventions were analysed by grouping them into categories. Then, the categories were abstracted further to describe two

main categories and two subcategories. The notes written by MA and HL during the analysis in the analysis table were used in the process. MA conducted this phase by actively consulting with the coauthors.

### 3.6 | Rigour

The data were delivered by the hospital system's IT department, based on a computer-created randomised number, in order to avoid bias in the selection process. Since the documentation consisted mainly of free-text notes, the rigour of the analysis process was enhanced by two persons analysing the data and by keeping a record of thoughts and problems during the analysis process. Both researchers involved in the data analysis process had been working as nurses in outpatient units and had used the same EPR, thus having an understanding of nursing processes and of the current documentation in this care setting. Similarly, during the inductive part of the analysis, categorisation and abstraction of the interventions were discussed between the same two researchers, who were both well acquainted with the data.

## 4 | FINDINGS

### 4.1 | Description of the nursing documentation and the mapping process

The data consisted of 17 nursing care summaries and 1,150 progress notes entries that described contacts with the patient, family members, other healthcare providers and social services, or an attempt at contacting the patient in case of a missed appointment. For the most part, the entries consisted of descriptions of what patients had said during the contact. The following extract of a progress note from a care meeting between a nurse and a patient illustrates the common style of writing:

Care meeting: Patient is calm and appropriate at the meeting. Says that his/her mood has been melancholic, and is tired. Tells about pain in the back and the left leg. Patient explains that sitting or standing for long periods of time is difficult. According to the patient, numbness and sensations of stabbing pain have been increasing [...] The medical certificate has been continued on form B [...] On the other hand expresses interest to visit physiotherapist at the unit [...] Undersigned promised to ask the physiotherapist.

Many progress notes described contacts with other professionals. They were often described in detail. An example of an entry describing contact with other care services is given below. In this extraction, the nurse refers to her-/himself as "the undersigned," which was common in the data:

Telephone call: Patient's occupational physician had contact with the undersigned. The Patient has given oral consent to exchange information. Physician asks the undersigned about the patient's mood. Information exchanged concerning patient's mood on the basis of visits. Patient's mood has been lethargic and melancholic and patient has had feelings of guilt, due to the ineffectiveness of provided treatments. Physician requests information regarding patient's coping in the future...

Nurses often used a passive voice in the documentation as described in the extract below. The language used made it difficult to identify the actor, that is whether the nurse had given the positive feedback during the meeting as mentioned in the extract or whether this had already occurred before the meeting, and was done by someone else:

[...]Tells among other things that he/she watches music videos online. Patient receives positive feedback from weight reduction and explains that he/she has been paying attention to life style [...]

Out of the 40 patients, whose treatment ended during the data collection, only 17 had nursing care summaries. These could be described as semistructured. They were written to a note template, which was built into the EPR based on nationally determined headings, describing the nursing process consisting of care needs, nursing interventions and outcomes. Only two of the four units actively used nursing care summaries. In one unit, the summary mainly consisted of an account of the patients' substance abuse history and recommendations concerning medical treatment. In the other unit, which used nursing care summaries, nurses described the nursing care process. As in the process notes, nurses mostly used a passive voice when describing their work. An example is given below:

### Care needs

In the beginning of the outpatient treatment patient mentioned thoughts of being followed, that were connected with emotions of fear and intimidation.

### Interventions

Psychoeducative and psychotherapeutic care meetings, in which the patient could reflect on and construct his/her thoughts. Health promotion in the care discussions.

### Care outcomes

Patients' suspicious thoughts have diminished and their mental state is more stable. Patient changed his/her diet by leaving out treats, resulting in a weight reduction of 10 kg.

The category describing the content of text extractions mapped to a NIC intervention on more abstract level was used in analysis process. Table 1 describes the categories, interventions and frequency of the intervention in the data for the five most frequently identified interventions. Appendix S2 provides the description for all identified NIC interventions.

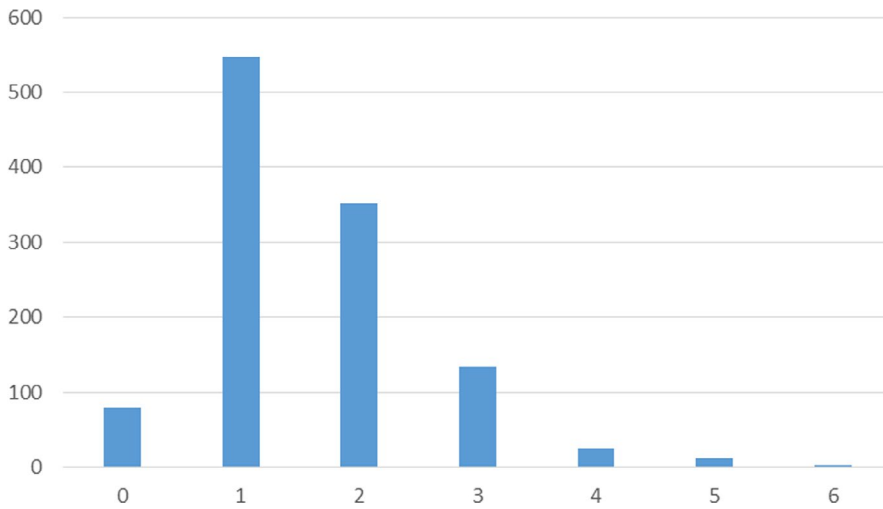
## 4.2 | Frequency of the identified interventions

We calculated the frequencies for interventions in order to better understand the number of interventions in the entire data set, as well as the number of interventions per entry in the nursing documentation (describing the number of interventions during one patient contact or, in the case of nursing care summaries, the number

**TABLE 1** Detailed description of the five most frequently identified interventions, including data extractions and frequency

Example of an extraction from the data that was mapped into the intervention	Description of the category	Name of the Intervention	Frequency of the intervention in the data
<i>Patient describes that the morning has started in a better way, anxiety and depression symptoms are slowly starting ease up.</i>	Reports/Descriptions of patient's narration and observations during the contact	Surveillance	537
<i>Time for the next appointment, which will take place [time] as a home visit sent to the patient as greed in a text message</i>	Coordinating care meetings/ contacts within the unit	Care Coordination <sup>a</sup>	241
<i>Multidisciplinary meeting: Present patient, physician and undersigned. Discussed patient's wellbeing and the following care plan.</i>	Progress notes from meetings, with different staff group members presented	Multidisciplinary Care Conference	172
<i>Completed the MINI interview, parts I-P, which shows that ...</i>	Use of structured interviews to support the medical diagnostic making	Diagnostic Data Collection <sup>a</sup>	89
<i>Reviewed medication instructions from the physician's text together with the patient</i>	Medication instructions and follow-up	Medication Management	56

<sup>a</sup>Not identified in the NIC.



**FIGURE 1** Number of interventions per entry in progress notes [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

of interventions during the whole care episode). In all, 71 different interventions were identified in the progress notes and nursing care summaries. Of these, 64 could be mapped into the NIC and seven could be not. The number of interventions per entry varied from no interventions up to six, both in the progress notes and in the nursing care summaries. In 79 of the entries in the nursing documentation, no activities were described at all, and thus, no interventions were recognised. The number of interventions per entry in progress notes is described in detail in Figure 1.

Of the different interventions, Surveillance was the most common, followed by Care Coordination. We mapped the descriptions in which nurses reported patients' mental status by either capturing patients' narration or by describing their observations of the patient during the contact in the NIC intervention Surveillance. Care Coordination was used to describe internal coordination of care inside the unit, such as booking an appointment to the physician.

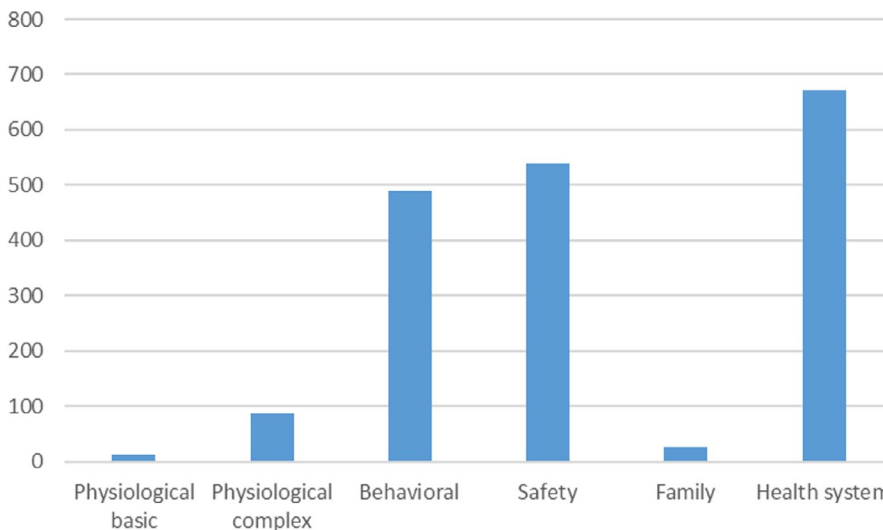
Comparing the interventions at the domain level, interventions in the domain Health System were most commonly identified, followed by the domains Safety and Behavioural. Figure 2 describes the frequencies for the identified interventions according to the

six NIC domains. Interventions in the seventh domain, Community, were lacking.

### 4.3 | Challenges in mapping interventions to the NIC

During the process of mapping the interventions to the NIC, we identified two types of "problematic" interventions (i.e. interventions that were difficult to map to the NIC): overlapping interventions and group-based interventions (i.e. interventions delivered to a group of patients and/or family members). The interventions were identified during the analysis process, and the categories were created after the NIC mapping process.

First, we discovered that some of the interventions in the NIC were often overlapping. During the analysis, we divided these into two subgroups: interventions that included several other interventions and interventions overlapping each other. The first group included NIC interventions such as Mood Management, Substance Abuse Treatment, Counselling or Case Management, that include



**FIGURE 2** Frequencies for the identified interventions according to the NIC domains [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

several other NIC interventions, such as Coping Enhancement, Medication Administration, Referral and Family Involvement Enhancement, in the list of actions. This made it difficult to decide whether an entry should be mapped to, for example, Substance Abuse Treatment or to Coping Enhancement and Mutual Goal Setting or to all three. After a discussion, we mainly used the more specific interventions, except in cases in which the entry referred exactly to Mood Management, for example. Similarly, we included Multidisciplinary Care Conference to describe care conferences in which several different professionals were present, as well as more specific interventions to describe the content of the meeting. In the case of nursing care summaries in the unit for patients with substance abuse problems, we used the intervention Substance Abuse Treatment to describe the entire treatment process.

The second type of overlapping NIC interventions was interventions that were included in the list of actions in several other interventions and were difficult to distinguish from each other, since the aims and definition were similar. One typically used activity described in the progress notes was the use of behaviour chain analysis. After a discussion, we decided to map it to the NIC intervention Cognitive Restructuring. However, it could also be Self Awareness Enhancement, Assertiveness Training, Coping Enhancement and Teaching Disease Process or all of these. Other examples are guilt and grief, which both are emotions, and could be mapped into Emotional Support. However, the two emotions have specific interventions in the NIC, namely Guilt Work Facilitation and Grief Work Facilitation.

The second group of interventions that were difficult to map was group-based interventions. Fifty-five entries described a group-based intervention delivered by nurses either together with another nurse, together with a psychologist, or with an occupational therapist, to a group of patients and/or family members. These were mostly structured groups to which care was delivered based on a treatment manual, such as Dialectical Behavioural Therapy skills training group, Family support group, Neuropsychological educational approach to cognitive remediation group, Symptom management group for bipolar disorder and Multifamily Group. One group was the less standardised Wellness group.

The NIC (Butcher et al., 2018) refers to group interventions, which include Therapy Group, Support Group and Teaching. The group interventions identified in the nursing documentation in this study were mostly skills training groups based on a specific manual and were documented using the specific name of the group, for example "*Patient and family took part in the multifamily group*". Mostly, the lists of actions nurses documented did not correspond any of the group interventions in the NIC. Therefore, we simply grouped under the label of "Group-based interventions," not to imply that this would be a suggestion for a new NIC intervention, but simply to make them visible in the findings. The exception was two entries describing a psychoeducation delivered in a group, which were mapped to Teaching Group.

## 5 | DISCUSSION

The findings of this study differ from those of other nursing documentation studies performed in the psychiatric and mental health-care settings that have used the NIC as a framework. The study by Thomé et al. (2014) analysed patient documentation in an *acute* psychiatric outpatient setting in Brazil and found Self-Care Assistance, Socialization Enhancement and Exercise Promotion to be the most prevalent nursing interventions. These interventions were identified only a few times in our data. The differences might be explained by the different settings and the different types of data. The data in the study by Thomé et al. (2014) were retrieved from a patient documentation system using NANDA—nursing diagnoses and NIC interventions. In our study, however, the nursing documentation was made using narrative text.

On a domain level, the results of our study come close to those of the study by Frauenfelder et al. (2018) analysing documented nursing interventions in *inpatient* care, which showed that interventions in the domains Safety and Behavioural were most prevalent. These were the second and third most common domains in our findings.

The fact, that our results emphasise the importance of interventions in the domain Health System, can be explained from the care coordination roles that nurses often have in the outpatient care setting (Ameel, Kontio, & Junttila, 2019; Simpson, 2005). One example of this type of activity was Care Coordination, which was identified 241 times in our data. Care Coordination is not a NIC intervention. We used it to capture the internal coordination of care, within the unit, such as making appointments or leaving contact requests on behalf of the patient. This comes close to Case Management, which in the NIC is described as "Coordinating care and advocating for specified individuals and patient populations across settings to reduce cost, reduce resource use, improve quality of health care, and achieve desired outcomes" (Butcher et al., 2018, p. 228). We used Case Management to describe care coordination and organisation of services outside the organisation and to differentiate this from the internal coordination of care. In our data, 20% of the contacts with the patients included Care Coordination.

Another challenge during the mapping process was mapping group-based interventions. Research has suggested that nurses occupy a central role in delivering manual-based group interventions in the psychiatric outpatient care setting (Ameel, Kontio, & Välimäki, 2019; Crowe et al., 2010). However, mapping these to the existing NIC interventions was difficult, since none of the existing definitions of interventions described them adequately. This is a challenge that needs to be solved in the future. One way to solve this could be to separate the means dimension from the intervention name (ISO, 18104:2014), for example concluding that interventions can be delivered in a group, individually or including the family, and having this dimension as an additional identifier. This would challenge the way in which NIC is constructed, which includes a list of actions that describe the delivery process in detail for each intervention. Another option would be to include more group interventions

in the NIC. However, this would then increase the number of interventions in the classification.

In an earlier ethnographically based study describing the work of nurses using observations and interviews in the same units, an emphasis on interventions in the domain Behavioural was identified. The study identified a total of 93 interventions, and only 71 were identified in the documentation (Ameel, Kontio, & Junttila, 2019). Of the 17 nurses involved in the 2019 study, the documentation of 12 nurses was included in this study, suggesting that the nursing documentation does not accurately describe actual nursing care. The difference between the documented care and the observed work of nurses is similar to that reported in studies conducted in other care settings (Fore, Islam, & Shever, 2019). Nurses in the 2019 study defined family interventions and exercise promotion as an important part of their work (Ameel, Kontio, & Junttila, 2019). These interventions were mainly lacking in the documentation. Based on the data of the current study, family members were often included in care meetings. However, in most cases, this was simply stated in the list of attendees. It was impossible to determine the importance of and reason for having family members attend the care meeting, and we were unable to map most of these cases into NIC interventions.

This reflects a problem in the current documentation procedure. The narrative free-text notes included very little direct information concerning what nurses had actually done to help the patient, besides observing and coordinating care. Similar findings have been described in studies describing nursing documentation in inpatient psychiatry (Instefjord, Aasekjær, Espehaug, & Graverholt, 2014; Myklebust & Bjørkly, 2019). In our study, 79 entries included no interventions at all and most entries included only one intervention. Both researchers, who conducted the analysis together, have worked as nurses in similar units, and found it difficult to identify how nurses had actually responded to patients' care needs. This was further complicated by the lack of structured reporting and the use of a passive voice.

One of the functions of EPRs is to transfer knowledge from one caregiver to another. However, our results suggest that the current documentation practice fails to do this on the part of nursing interventions.

One critique against the NIC is that nurses actually need to study the interventions and the terminology in order to use it. Instead, it has been suggested that nurses could use natural language that could be processed by computers into a more standardised form (Bowker & Leigh Star, 1999). The lack of descriptions of nurses' actions or interventions and the use of a passive voice imply that using a computer-based language processor would not be sufficient to identify interventions from nursing notes, since nurses leave a large part of their work undocumented. Myklebust, Bjørkly, and Råhiem (2018) described this in the context of inpatient psychiatry. They concluded that nurses positioned themselves as observers, and although they found a staff–patient relationship to be essential, nurses did not consider these interactions to be relevant to document. In the case of challenging interactions, the lack of reporting was due to the fear of being misjudged by other staff members (Myklebust et al., 2018). In the study by Ameel, Kontio, and Junttila (2019), nurses in psychiatric

outpatient units experienced the NIC as a way to give words to their work. It would be important to study whether the SNTs integrated into an EPR would help nurses describe their actions and interventions in a more systematic way. Before this can be done, the problem of overlapping interventions needs to be resolved.

Some of the interventions in the NIC, such as Presence or Active Listening, which could be seen as essential in the adult psychiatric outpatient care setting, might be undocumented, as they are not perceived as interventions because they are an evident part of nursing. In the study of the development of the NIC, Bowker and Leigh Star (1999) described how experienced nurses called this type of interventions “No shit Sherlock”—interventions, referring to the fact that they are too self-evident. This could also be seen as a lack of a clear understanding between an action and an intervention in the terminology that was part of the problem of overlapping interventions identified during the analysis process. The NIC developers acknowledge the overlap and state that: “the more abstract, more global interventions sometimes refer to other interventions”. The NIC chapter on choosing the right intervention further suggests that “sometimes one needs the more global intervention, sometimes the more specific one, and sometimes both[...]The selection of nursing interventions for use with an individual patient is part of the clinical decision-making process of the nurse. NIC reflects all possibilities” (Butcher et al., 2018, p. 44).

We believe this to be problematic for several reasons. First, overlapping elements in a taxonomy hinder easy and consistent use, thus reducing its relevance. Second, and perhaps of more concern, the secondary use of the information from EPRs is challenged, as the validity and reliability of data on selected nursing interventions could be compromised when nurses can choose from alternative NIC terms to label a single intervention. In addition, it makes the secondary use of data more difficult (Henry & Mead, 1997). The NIC can be used as a background terminology for nursing minimum data sets (Van den Heede, Michiels, Thonon, & Sermeus, 2009) that is used for administrative purposes on a hospital level. If a nurse chooses one “big” intervention rather than several smaller ones to describe the same situation, it might seem as if the first case needs more resources than the latter.

The third problem of leaving open the decision to use a more comprehensive or several more narrowly defined interventions relates to the transition of information between nurses and other caregivers. In order to support the continuity of care, nurses need to be able to describe their work in a unified and standardised way. A more standardised use would contribute to the understanding of what evidence-based treatment models such as Case Management or psychoeducation consist of in practice, which has been said to vary (Colom, 2011; Happel et al., 2012). In this way, the standardised documentation would also help to improve understanding of how evidence-based interventions are being transformed into practice.

Since the first edition of the NIC in 1992, the number of interventions has increased from 336 (McCloskey & Bulechek, 1992) to 565 in the 8th edition (Butcher et al., 2018). Our findings suggest that the classification has come to a stage where it needs further



development and reorganisation. The difference between an action and an intervention needs to be described more systematically. One option would be to add a dimension of treatments or treatment programmes, which would describe larger interventions such as Substance Abuse Treatment, Mood Management and Case Management in a more precise way. This would require a more profound update of the classification, including a clear definition of an intervention in contrast to an action.

## 5.1 | Limitations

The data came from 79 patient records from four units. The units were selected on the basis of being located in different cities and representing patients with different types of care needs, which may serve to increase the transferability of the results. A limitation is that the research took place in a university hospital context, with units located in urban settings. This might limit the transferability of the findings to other care settings. Nursing terminology was not used in the EPR, meaning that the findings are based on the analysis of free-text notes, which included little direct descriptions of nursing actions/interventions. There is also the possibility of using too much interpretation during the analysis process. The open coding process and the use of two persons analysing part of the data were used to enhance the transparency and to avoid misinterpretations. However, on the other hand, analysing the free-text notes revealed important challenges in the current documentation and in the NIC. The analysis describing the problems of the classification describes the problems identified during the analysis process by the two researchers. It does not describe the possible problems that nurses working in a psychiatric outpatient care setting might identify. We suggest that the active involvement of nurses is important in further studies on the possibilities of using the NIC and its further development to describe nursing interventions in a care setting.

## 6 | CONCLUSIONS

Our results show that current nursing documentation in the adult psychiatric outpatient care setting consists mainly of captions of patients' narration and nursing interventions were difficult to identify. In most cases, in the progress notes only one intervention was identified. These were most often Surveillance and Care Coordination. This reflects the traditional view of nurses as distant observers. SNTs, such as the NIC, could change this and play an important role in the development of nursing documentation. When integrated into an EPR, the NIC could create new knowledge and understanding of the impact of nursing interventions on patient outcomes, but in order to do this it would need reformulation and reorganisation. To make the terminology meaningful and consistent, the problem of overlapping interventions and the difficulty of naming group-based interventions should be solved. The development work should be

done together with nurses, the larger scientific community, patients and their family members as well as other members of the multidisciplinary staff.

## 7 | RELEVANCE TO CLINICAL PRACTICE

This study generated information about the possibilities of using a standardised nursing terminology to describe the interventions nurses use in adult psychiatric outpatient care. We conclude that the NIC might be suitable for describing nursing interventions in psychiatric outpatient care. However, the identified problems need to be solved before the NIC can fully support nursing documentation. Additionally, our findings created new knowledge on the problem of nursing care documentation using free text, indicating it does not describe nursing contribution to patient care sufficiently.

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### CONFLICT OF INTEREST

The authors have no conflicts to declare.

### AUTHOR CONTRIBUTIONS

Contribution, design, acquisition, analysis, drafting or revising, final approval, participation and agree to be accountable for all aspects of the work: All authors.

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## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

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