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Introducing Nurse Practitioners into Norwegian Primary health Care - experiences and learning

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Research and Theory for Nursing Practice

Introducing Nurse Practitioners Into Norwegian Primary Health Care- Experiences and Learning --Manuscript Draft--

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Abstract:	<p>Background and Purpose Nurse practitioners (NPs) are well established internationally, and Norway is now in the first phase of implementing their role. The aim of this study was to describe the reflections of nurse leaders and general practitioners (GPs) on the establishment of the new NP role in primary health care.</p> <p>Methods This study was qualitative and longitudinal. Written reports and audio recordings from 11 meetings with nurse leaders and GPs during 3 years in three municipalities were analyzed by a thematic analysis.</p> <p>Results Four themes were identified: the need for enhanced clinical competence among registered nurses, the need for reorganization of advanced practice, the need for negotiating professional barriers, and demanding economic situations. Nurse leaders and GPs were generally positive toward NPs, but they had difficulty in clarifying their roles and how to organize them in the existing work models. This was</p>

	<p>due to economic pressures, different needs in departments, and shift work. Nurse leaders and GPs agreed that NPs should not replace physicians but perform the tasks of advanced practice nursing in a more expert way. Nurse leaders also wanted NPs to be a resource for registered nurses. It was important to gain trust in the new role not only of GPs but also of registered nurses.</p> <p>Implications for Practice It is extremely important that an implementation group is proactive in finding a suitable model for the implementation process. Clarification of the roles, tasks, and responsibilities of NPs at an early implementation stage could make the process easier.</p>
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Title page

Introducing Nurse Practitioners Into Norwegian Primary Health Care- Experiences and Learning

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Authorship contributions

Study design: EHH, EB, PBJ, LF

Data collection: LF, EB, PBJ

Data analysis: EHH,EB, PBJ, LF

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Manuscript writing: EHH, EB, PBJ, LF

Critical revisions for important intellectual content: EHH, EB, PBJ, LF

Reviewers comments

Research and Theory for Nursing Practice

Reviewers' comments:

Reviewer #1: This is much better and the comments have been addressed adequately. I made many grammatical and format revisions. I suggest that perhaps you may consider a professional editor to help in noun/verb agreement, grammar and format issues. This is an important paper related to the implementation of the NP role and needs to be as clear as possible. I have made some suggestions but think there are more. I am excited that this work has been done and know that dissemination of your findings is important to the international community.

Thank you for your suggestions and useful help. We have addressed all your suggestion throughout the manuscript. In addition, we had a professional to proofread the whole manuscript.

I hope it now will be ready for publication.

Kind regards

Elisabeth Holm Hansen

Introducing NPs Into Norwegian Primary Health Care

Introducing Nurse Practitioners Into Norwegian Primary Health Care—Experiences and Learning

Abstract

Background and Purpose

Nurse practitioners (NPs) are well established internationally, and Norway is now in the first phase of implementing their role. The aim of this study was to describe the reflections of nurse leaders and general practitioners (GPs) on the establishment of the new NP role in primary health care.

Methods

This study was qualitative and longitudinal. Written reports and audio recordings from 11 meetings with nurse leaders and GPs during 3 years in three municipalities were analyzed by a thematic analysis.

Results

Four themes were identified: the need for enhanced clinical competence among registered nurses, the need for reorganization of advanced practice, the need for negotiating professional barriers, and demanding economic situations.

Nurse leaders and GPs were generally positive toward NPs, but they had difficulty in clarifying their roles and how to organize them in the existing work models. This was due to economic pressures, different needs in departments, and shift work. Nurse leaders and GPs agreed that NPs should not replace physicians but perform the tasks of advanced practice nursing in a more expert way. Nurse leaders also wanted NPs to be a resource for registered nurses. It was important to gain trust in the new role not only of GPs but also of registered nurses.

Implications for Practice

It is extremely important that an implementation group is proactive in finding a suitable model for the implementation process. Clarification of the roles, tasks, and responsibilities of NPs at an early implementation stage could make the process easier.

Keywords: international nurse practitioner practice, advanced practice, nursing roles, nursing competence, qualitative research

Background

Nurse practitioners (NPs) are a rapidly growing workforce in primary health care (PHC) in many countries in Europe (Maier, Barnes, Aiken, & Busse, 2016). The numbers of patients with chronic diseases and multiple morbidities in PHC are increasing, simply because there are more elderly people. As the demand for PHC services rises accordingly, access to such services becomes an international problem. In addition, many countries have gone through health reforms that require advanced practice nursing in both hospital and PHC settings (Maier, Aiken, & Busse, 2017). Other important factors related to implementing the NP role include patient safety and more effective health care services (Finnbakk, Skovdahl, Blix, & Fagerström, 2012; Tsiachristas et al., 2015). Employing NPs with advanced clinical skills appears to be essential to meet these demands. Therefore, NPs have been trained and employed in both primary and specialist care across the world (Fougère et al., 2016). Barriers to employing advanced practice nurses vary little from country to country and include financing, scope of practice, laws, and modes of leadership (Maier et al., 2017). When implementing advanced practice nursing, it is important to be aware of the attitudes and opinions of stakeholders to ensure NPs are acknowledged and supported in their new role (Fagerström & Glasberg, 2011; Jakimowicz et al., 2017). Cultural and attitudinal changes and enhanced knowledge among colleagues, leaders, and politicians are factors that may influence the introduction of NPs (Traczynski & Udalova, 2018).

Nursing education in Norway includes a 3-year bachelor's degree, with an authorization as a registered nurse (RN). An RN can pursue further specializations in 1 or 1.5 years (e.g., surgery, intensive care, acute care) or obtain a master's degree and work in both primary and specialist care (e.g., an NP or a midwife). There are national regulations for curricula for both bachelor's and master's degree programs.

NPs are internationally well established, and Norway is in the first phase of introducing them into both primary and specialist care (Henni, Kirkevold, Antypas, & Foss, 2018). There is a two-level public health care system, and the private sector is marginal. The 422 municipalities (Statistics Norway, 2018) are, by law, in charge of PHC, including general practice, home care, nursing homes, preventive medicine for children, and local emergency medical services. One of the main aims of the Norwegian Coordination Reform of 2012 was that the majority of health and care services should be carried out in the municipalities. A consequence of this reform has been that there was a large number of elderly people with serious and complex conditions in home care and nursing homes (Norwegian Directorate of Health, 2012). The Norwegian government has endorsed an initiative to reinforce clinical competence at higher education level among nurses in the municipalities (Norwegian Directorate of Health, 2017).

The International Council of Nurses (2010) defines advanced practice nurses as the following: “A Nurse Practitioner/Advanced Practice Nurse is a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice.” In Norway, the master’s degree programs in advanced practice nursing started in 2011, with the goal of providing students with advanced knowledge, competence and skills for a systematic assessment, care and treatment of patients with minor health problems, and follow-up of patients with chronic diseases. However, at present, Norwegian NPs do not have independent prescription privileges but rather have delegated prescription privileges in some conditions, that is, lower urinary tract infection in women.

This study is part of the action research project “Providing person-centred healthcare by means of new models of advanced nursing practice in cooperation with patients and

clinicians and education,” which is a component of the Research Council of Norway’s (2014) new large-scale program on health, care, and welfare services research. The overall aim of the main project is to contribute to new models of organizing, managing, and delivering high-quality, person-centered, and effective services to people in need of health care. This article presents the first substudy concerning the establishment of NPs in PHC in three municipalities.

Aim of the Study

The aim was to describe the reflections of nurse leaders and GPs on the establishment of the new NP role in PHC.

Methods

Design and Setting

This study was carried out in three Norwegian municipalities during 2015–2017. The design of the study was longitudinal and qualitative, which was based on a thematic analysis of meeting records. Thematic analysis is a method that offers theoretical freedom; it is essentially independent of theory and epistemology. It provides a flexible and useful research tool when handling complex data (Clarke & Braun, 2013) and is appropriate for this research study to analyze the data set consisting of transcribed records from 11 meetings.

Participants and Data Collection

Data collection was carried out during 11 meetings with nurse leaders and GPs. The purpose of these meetings was to prepare the nurse leaders functioning at different administrative levels and GPs for the introduction of the new NP role into PHC. Between six and nine nurse leaders participated in each meeting, with two representing nursing home and primary home care, together with GPs from three different municipalities.

During the 3 years of preparation for the introduction of NPs, leaders at different levels of management in the municipality were replaced. Therefore, the participants in each meeting were not always the same individuals.

In each meeting, two to three researchers from the research group participated and led the discussions according to the agenda. The meeting topics and participants are described in Figure 1. Every meeting started with a brief introduction to the definition of advanced practice nursing. During the meetings, research on advanced practice nursing and several international models—describing different areas and duties for NPs—were presented and discussed with nurse leaders and GPs. As an example, one model described how an NP in home care could conduct advanced clinical examinations of patients and propose care and treatment in order to prevent their hospital admission. The meetings took place in suitable meeting rooms, either in one municipality or at the University of South-Eastern Norway. From the 11 meetings, which lasted for 2–3 hours, there were 10 written reports and 4 audio recordings (totaling 395 minutes) generated. The audio recordings were transcribed verbatim and anonymized before the data analysis process.

Insert Figure 1 here.

Data Analysis

According to Clarke and Braun (2013), thematic analysis was used to analyze the data from written reports and audio recordings. According to them, thematic analysis consists of six phases and involves a process of reading and rereading the data to identify meaningful patterns and code themes. Before the first phase, the audio recordings were transcribed into written reports. In the first phase, the data from all the meetings during the 3 years was read and reread and systematized in a timeline (Figure 1). After manually coding the data, which is an analytical process of condensing data (phase 2), the researchers searched for themes that

formed patterns of the reflections of nurse leaders and GPs on the establishment of the new NP role in PHC (phase 3), which could be found in all meetings during the study period. Central themes could be identified at the end of the data analysis process. After identifying the themes, the researchers checked that they were in accordance with both the coded extract and the full data set (phase 4). A detailed analysis of each theme was discussed with the research group to name the themes (phase 5). The researchers found that four central themes were common during all meetings. The last of the six phases involved writing the analysis of the narrative, extracting the data, and contextualizing it to existing literature (Clarke & Braun, 2013). To validate the content of the meeting reports, four audio recordings were compared with the written reports from the same meetings in order to make sure that the written reports accurately reflected what was said.

Ethical Considerations

This study was approved by the Norwegian Centre for Research Data. Each meeting started with asking the participants for permission to gather data as either audio recordings or written reports or as both. Then, the participants were informed that their identity was protected and all data were anonymized. Their age and gender were not described in order to protect their identity. The meeting reports, excluding the audio recordings, were sent to them after each meeting. The transcribed data did not contain any personal names or the name of the municipality; hence, their anonymity was respected.

Trustworthiness and Rigor

Clarity of the process and practice of the method are vital to achieve trustworthiness (Clarke & Braun, 2013). In general, *credibility* can be assured by pretesting the interview questions (Graneheim, Lindgren, & Lundman, 2017). In this study, the researchers agreed on the questions before each meeting. Each meeting had specific topics, such as the status of the

implementation process, but the participants had a great impact on the creation of the content. The participants presented valid information about the implementation process as they were in close cooperation with the clinics. In addition, the research group contained different administrative levels from several municipalities, which might have reinforced the *transferability* of the findings. *Dependability* means establishing trustworthiness in the process of analyzing data (Graneheim et al., 2017). The analysis was performed, as explained by Clarke & Braun (2013), and was followed as described in the data analysis section. The analysis was primarily performed by one of the researchers. However, the results were discussed during the data analysis process in repeated research group meetings. Two of the members of the research group had taken part in the meetings, and they could, thus, validate the analysis in relation to their interpretation of what was said during the meetings. One researcher had not participated in the data collection process and was, therefore, able to contribute an “outsider perspective,” which enhanced dependability. To further increase dependability, the researchers presented the themes to the participants at the end of the process. The participants confirmed the content and agreed with the four themes.

Findings

Four different themes summarized the reflections of nurse leaders and GPs on the establishment of the new NP role in PHC. These were as follows: (1) the need for enhanced clinical competence among RNs, (2) the need for reorganization of advanced practice, (3) the need for negotiating professional barriers, and (4) demanding economic situations. The four themes are described in details in the following sections.

The Need for Enhanced Clinical Competence Among RNs

The nurse leaders from home care and nursing homes in the three municipalities agreed from the start of the project that it was necessary to ensure patient safety by increasing

staff competence to meet the needs of frail elderly people and improve communication with GPs. The number of elderly people with serious conditions and chronic diseases who live in their own homes or nursing homes has increased in the last years. Some nurse leaders reported that there were no negative attitudes toward NPs in the workplace or among other nurse colleagues, which was a good basis for cooperation.

“I think it is very good to build up the clinical competence that delivers increased quality to the patient, not least in the follow-up of patients with chronic disorders.”

The nurse leaders expected that the NPs would be able to identify deterioration in the condition of patients with chronic disorders and initiate actions to prevent their hospital readmission. In addition to the need for competence to achieve better assessment, the nurse leaders wanted the NPs to be a resource for other nurse colleagues by teaching and supervision. The GPs highlighted the need to improve the clinical competence of RNs in the following way:

“It’s not a doctor available all around the clock, and when a nurse calls me, I hear who is calling and I think of what kind of professional background and experience she has before we ... I figure out what to do.”

The GPs expressed the need for better and safer communication to ensure faster clarification and that the correct action was taken for each patient. They noted that the RNs often performed an inadequate assessment before contacting them. Thus, they found it necessary to assess the competence of RNs before they decided how to solve the patient’s problem. This statement came at an early stage of the process, but it was repeated throughout. Some of the nurse leaders in home care and nursing homes supported the statement. The GPs also said that they needed to feel secure about the patient’s symptoms when an RN called them. This reflected the fact that they had to rely on RNs and the degree to which they trusted

them. The reality that the GPs and nurse leaders at different levels all saw the need for competence among NPs was a positive basis for implementing the new NP role.

The Need for Reorganization of Advanced Practice

The discussion about the reorganization of work was a topic during all meetings; for example, how to use NPs in the organization and what they should do and not do. There were discussions regarding the redistribution of duties between specialized nurses and NPs. For example, when specialized nurses worked with elderly people in home care, they discussed who was most qualified to perform the assessments and decide on the right action in subacute situations. As the nurse leaders saw it, competence would overlap in some areas of patient care. The nurse leaders from the municipalities were given different advanced practice nursing models by the project leaders on the basis of experience from other countries. Nevertheless, departments in home care and nursing homes had difficulty in choosing a suitable model because of local organizational challenges, such as if NPs should participate in the existing work team or be an independent resource for one or more departments.

“How can we get to understand what an NP can do in practice? Each municipality must define the role, duties and organization of the NP.”

It was often stated that NPs should keep doing the tasks of nurses, but in a better and more expert way. Their role was to provide care but exactly in what way was not clarified or defined. This implied that there was no standardization of the NP role and that they had to find the most suitable working model both in nursing homes, between the departments, and in PHC outside the institution. This was due to different needs, patient loads, and resources.

“... the medical things should be taken care of by the doctor. NPs should not do too much medical stuff. The nurses' role is to provide care and care only”

It was toward the end of the process that the nurse leaders suggested that NPs could manage specific patient groups, such as those with worsening chronic obstructive pulmonary

disease. Patients with subacute problems, for example, infections or worsening of wounds, would also fall within the remit of NPs.

“The NP should deal with sub-acute situations, not with acute ones. It’s important to define what NPs should not do as well as what they should do.”

The nurse leaders suggested that NPs should be a professional resource in nursing homes in everyday work and in the supervision, assessment, and prevention of hospital readmissions. Although they pointed out early on that it was important to define the role and tasks of NPs, it was not until later in the process that these ideas became clearer and more concrete. Another concern was ongoing reorganization in the municipalities, which made it difficult for them to choose the best model for future care. For example, it was discussed whether NPs should work in multidisciplinary teams and do the usual work of RNs, but with more expertise, or be experts “on call” for other nurse colleagues who needed help with assessment or advice. Some nurse leaders were concerned whether NPs would get opportunities to use their expertise after graduation or not and expressed the importance of clarifying their roles.

The Need for Negotiating Professional Barriers

Both GPs and nurse leaders in the municipalities stated in several meetings that NPs should not perform medical work or replace GPs. It was often pointed out that it was important for NPs to gain the trust of GPs and nurse colleagues in the new role. However, because the role of NPs was new and the reorganization of work unclear, it would also be difficult for them to gain trust or clinical credibility.

“It is important to gain trust. It is important in terms of assessment expertise, so that the physician feels he or she is in safe hands.”

NPs could prove their competence only by demonstrating their skills in patient situations. GPs stated that NPs should learn what kinds of clinical tests to perform and what

symptoms must be assessed in any situation before calling them. When NPs had good assessment competence, they could serve as gatekeepers to prevent hospital readmissions.

Some nurse leaders also mentioned that the roles and responsibilities of NPs would develop more or less by themselves during the course of the project. At the same time, some pointed out that it was of utmost importance that physicians be clear about the roles and responsibilities of NPs so that they can establish good cooperation with them. A challenge was that the practice law prohibits NPs from writing prescriptions and, in some situations, performing what they regard as the tasks of NPs but which are defined as the responsibility of GPs.

“NP should have more responsibility for ordering tests and medical prescriptions.”

GPs stated that they depended on one another and needed to have good cooperation in order to help patients in the best way. At the same time, they stated that nurses and physicians should not perform one another's tasks.

“GPs and NPs are mutually dependent on each other, but should not take on the tasks of the other.”

The most sensitive topic was this notion of shifting duties between professionals. The question which professional was most qualified, that is, specialized nurses or NPs, was also a concern. GPs were adamant that NPs should not do the work of physicians, but nurses were willing to discuss their overlapping tasks and responsibilities more actively. It was in the last two meetings, when it was closer to the final examination of NPs, that some departments decided on the model and how to organize the nurses.

Demanding Economic Situations

The nurse leaders from home care and nursing homes explained that the tight monetary policy in the municipalities, along with the unclear roles of NPs, made it difficult to decide on the most suitable model for NPs.

“We have ideas, but no specific plans for NPs because of finance, politics and money.”

Some nurse leaders mentioned that NPs may spend longer time in ordinary patient situations than that of RNs and that they had no money for additional nurse resources. It was difficult enough to pay them higher salaries. GPs stated that there was a need for NPs at GP clinics in different patient situations, giving the option of home visits. The heavy workload at GP clinics and the growing number of elderly people with chronic diseases presented a new set of circumstances, where they saw future tasks for NPs. The problem was that it was too expensive to base them at GP clinics.

“Having NPs working in GP surgeries is too expensive, but if the NPs could go on home visits and cooperate with the GPs that would be beneficial.”

Finance was a barrier to making full use of NPs because of the tariff system and present lack of reimbursement claims for NPs in home care and nursing homes. This was an important issue that requires future resolution. The economic challenges were prominent in discussions in the first years of the process, whereas they were no longer mentioned in the last three meetings.

Discussion

The aim of this study was to describe the reflections of nurse leaders and GPs on the establishment of the NP role in three Norwegian municipalities. The main findings were that nurse leaders and GPs were generally favorably disposed to encouraging greater clinical competence among RNs in order to meet the future needs of elderly people in PHC, but some challenges remained regarding the reorganization of nursing practice, professional boundaries, and economic challenges.

Although the organization of the health care system differs from country to country, the need for NPs has grown worldwide for largely the same reasons. In many countries, NPs

have been introduced because of the increasing health care needs particularly of elderly people with complex and acute illnesses (Ljungbeck & Sjögren Forss, 2017; Neal-Boyland, Mager, & Kazer, 2012). A study from Norway showed that RNs working with elderly people in nine different municipalities had various levels of competence and confirmed the need for improved clinical competence (Bing-Jonsson, Hofoss, Kirkevold, Bjørk, & Foss, 2016). These data indicate that introducing NPs could be the answer to the need of higher competence in the municipalities.

Our findings are in accordance with other studies that have pointed out the need for NPs, but they also describe the challenges involved in defining the role and utilization of NPs (Maier et al., 2016; Sullivan-Bentz et al., 2010). This study showed that it is challenging for nurse leaders to define the new NP role because of lack of knowledge and earlier experiences of advanced practice nursing. Home care and nursing homes also differed in their organization and health care needs, which made it difficult to choose a particular model for the utilization of NPs. It was easier to consider the roles and responsibilities of NPs in areas where they had a specific clinical service. Their responsibility in nursing homes and home care was defined as a systematic assessment of patients with worsening chronic diseases, care and treatment of minor health problems, and better communication with physicians. As NPs have no prescription privileges, it means that they have to consult a physician before medical treatment, or for some conditions, they work on delegation from a physician.

Circumstances caused by the reorganization and mobility of nurse leaders during the research period made the preparations before the implementation of the new NP role quite uncertain. However, it might have been thought that the reorganization in other parts of the municipalities could have been an opportunity to devise a suitable model for NPs. If the knowledge is scarce and the vision about the scope of practice of NPs unclear, it would be difficult to use the opportunities. The process of preparing for the implementation of the new

NP role stopped for a while until the new nurse leaders understood the role and circumstances regarding the contribution of NPs toward health care improvement.

Different organizational models were presented during the meetings. Despite this, it proved to be difficult to determine the most suitable model that satisfied both economic considerations and the use of the nursing staff. It was not until the last year of the process that nurse leaders got a clearer picture of possible new NP models, for example, for nursing homes and home care. In one study, Sullivan-Bentz (2010) stated some recommendations to support the transition of NP graduates into practice. Among others, organizational charts, job descriptions, and support from nurse leaders and colleagues were essential. During the actual longitudinal study, nurse leaders received a clearer picture about how NPs could be used in PHC, but they did not present a clear job description for the new NP models. They discussed whether NPs should be on call, work in a team, or work ordinary shifts as before. However, they agreed that NPs would have improved clinical skills for the assessment of the needs of patients. Advanced interprofessional teamwork was already organized in PHC, but introducing NPs into existing teams required some negotiation among professionals. Overlapping tasks and responsibilities had to be clarified both with GPs and specialized nurses working in the same areas and with the same patients as NPs.

Negotiating professional barriers emerged as a central issue in this study. Even if GPs were positively disposed toward NPs in general, they were skeptical about NPs taking over the tasks and duties of physicians. Several studies show that NPs working in new roles, when adequately trained, provide an equivalent quality of care compared with GPs and would be overlapping with the way of working of GPs to some extent (Laurant et al., 2018; Maier et al., 2016; Van Der Biezen, Adang, Van Der Burgt, Wensing, & Laurant, 2016). Nevertheless, both GPs and nurse leaders expressed concerns about swapping duties with other practitioners or taking over their duties. They strongly stressed that NPs should not replace GPs, but act as

nurses with expert skills, and improve their collaboration and communication with GPs.

These findings are in accordance with other international studies (DiCenso et al., 2007; Lindblad et al. 2010; Schadewaldt, McInnes, Hiller, & Gardner, 2013). As Norwegian NPs do not yet have prescription privileges, the discussion did not include challenges about specific tasks or responsibilities in medical treatment.

Economic challenges was another theme discussed among nurse leaders. They did not really regard the use of NPs as providing economic benefit. One issue was that the salary of NPs was higher than that of RNs, and another issue was whether NPs should work in usual shifts or be “on the top” of the nursing team. GPs were generally positive toward NPs working in their clinics, but, as reported in other studies, this arrangement had its limitations because of the lack of NPs’ legal right to reimbursement claims (Schadewaldt et al., 2013). It was difficult for nurse leaders to see the effect in the long run, as described in studies from other countries (Maier et al., 2017; Martínez-González et al., 2014). Some of them did not focus on the added value of NPs or the outcomes they might achieve and thereby lacked strategic thinking about employing them. Therefore, cost dominated the discussion at certain times, rather than the delivery of what likely brought positive economic effects. This changed at the end of the last year, as nurse leaders attained a clearer understanding of the role of NPs and they could decide how to organize them.

The process of introducing NPs was characterized from the beginning by a positive attitude in spite of the challenges described. There was a genuine desire to use NPs for better care of patients. Discussions over time about the challenges of finding the right model for NPs was perhaps necessary for the implementation of the scheme to employ NPs. It may be that there are other ways to implement the NP role using better time efficiency. Eleven meetings were held over 3 years with a range of stakeholders in order to introduce the new concept of NPs and clarify opportunities and boundaries to make way for the new roles in PHC. To

change an organization and introduce new models in an already-evolving organization requires sound strategic thinking and good communication at all levels. The 3 years were a process that eventually matured the concept of NPs in PHC.

Study Limitations

This is the first study in Norway that focused on central stakeholder expressions of their opinions about implementing the NP role. One limitation of this study is that the three municipalities may not be representative of the rest of the Norwegian municipalities. Further, first-hand information about the attitudes of other nurse colleagues was not obtained. Patient representatives of the patients were not included in the discussions. In-depth interviews with all nurse leaders, other nurse colleagues, and GPs could provide further and more specific insights. The changes of nurse leaders during the process period might have influenced the results, but it presented a real situation that is present in several Norwegian municipalities.

Conclusion

The results of this study provided preliminary information regarding the introduction of the NP role into Norwegian PHC. According to the findings of this study, nurse leaders and GPs were generally positive toward the idea of engaging NPs. The opportunities presented by employing NPs, as all nurse leaders and GPs agreed, highlighted the need to enhance the clinical competence of RNs in PHC. During the implementation process, there were changes of nurse leaders and organizational changes in some departments, which made it challenging to decide the new NP role. At the same time, when departments reorganized, it could present an opportunity to negotiate professional barriers and roles, but the changes were perceived more as a hindrance in terms of delays and prolonged discussions. The stakeholders expressed different challenges in defining the new role and utilization of NPs. Switching duties between GPs, NPs, and RNs was a continuing topic throughout the implementation process, but it was

not stated as a limitation. Several of our results in this study were in accordance with the findings in other countries.

International Implications for Practice

The results from this study provided information regarding the possibilities and challenges involved in introducing NPs into PHC. Nurse leaders at all levels of the municipalities must be involved in implementing this initiative, along with GPs. Clarification of the roles, tasks, and responsibilities of NPs at an early stage of the implementation process could make the process easier. When the administrative leadership of an organization changes, the new leaders need to be informed and involved in the process as soon as possible to prevent delays. NPs must gain the trust of nurse colleagues and GPs by demonstrating their advanced clinical skills in practice. The stakeholders should have more knowledge about the economic advantages of implementing the NP role in the long term. To deal with different challenges, it is of utmost importance that an implementation group is proactive in the process of finding a suitable model.

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Meeting 2015-2017										
Topics, participants and materials										
Topics discussed	2015 August	November	December	2016 February	March	September	October	2017 September	November	December
Information about education, Implementing NP nrole, plan for measure person centered care, patient satisfaction		Background for NPs, status for education, roles and function, how to gain trust	Responsibility NP role <u>Expectation</u> NP role, responsibility and authority, supervision, task shifting, economy and agreement on cooperation and expectations	NP role and work models, workplace and scope	Competence, function and tasks. Proffnurse SAS- an instument for self-evaluation in clinical competence	Future roles and responsibility, the need of concretization , how to keep the NPs in the workplace	Different work models, organisation of the NPs, supervision	Clarification of roles and scope of practice, NPs time consume, shift work	NP in new role and organizing in municipality, expectation and how to gain trust	NP in new role, work models, status, economi
Participants	Nurse leaders Project group	Nurse leaders supervisers and Project group	Nurse leaders General Practitioners <u>Project group</u> General Practitioners Project group	Nurse leaders General Practitioners Project group	Nurse leaders Project group	Nurse leaders Project group	Nurse leaders Project group	Nurse leaders Project group	Nurse leaders Project group	Nurse leaders Project group
Materials	written reports	written reports	written reports x2	Sound records and written reports	Sound records and written reports	written reports	Sound records	written reports	written reports	Sound records and written reports

Figure 1. The participants, topics, and material for each meeting.