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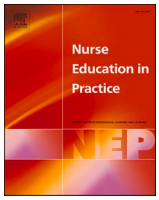

A learning community within nursing practice: The value created by the activities and interactions during the early stage of community development

W.M. Heemskerk [a,c,*], S.L.M. Dauphin [b], M.A. van Dorst [b], M. Bussemaker [c,d], C. Wallner [b,e]

[a] Haga Teaching Hospital, HagaAcademy & Innovation, Els Borst-Eilersplein 275, 2545 AA The Hague, The Netherlands
[b] University of Applied Sciences Leiden, Faculty of Health, Zernikedreef 11, 2333 CK Leiden, The Netherlands
[c] Leiden University Medical Center, Public Health and Primary Care, LUMC Campus The Hague, Turfmarkt 99, 2511 DP The Hague, The Netherlands
[d] Leiden University, Institute of Public Administration, Faculty of Governance and Global Affairs, Turfmarkt 99, 2511 DP The Hague, The Netherlands
[e] Marente, Nursing home and home care organization, Rijnsburgerweg 2, 2215 RA Voorhout, The Netherlands

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ABSTRACT

Aim/objective: This study examines the value that learning community activities and interactions produce (immediate value) during the early stage of community development, contributing to scientific insights on value creation.
Background: Due to the rapidly changing healthcare landscape, nurses and nursing students need to adjust their skills, knowledge and collaboration with colleagues and other disciplines. Learning communities are a promising approach to enhancing professional growth and collaboration, where members find value through participation in the community.
Design: For the study, a qualitative design was used.
Methods: A secondary analysis of case study data, collected during the first five sessions of a hospital learning community comprised of nurses, nursing students and a nurse lecturer, was conducted.
Results: The analysis revealed immediate value related to five themes: participation, activity, engagement, interaction, and confidence/trust. Members were encouraged to participate in and be involved during activities and interactions, such as asking questions, sharing their experiences and receiving feedback. Members became more familiar and confident in later community sessions, promoting immediate value creation. This was indicated by the different members who became active, took initiative or discussed problems.
Conclusions: It is concluded that the activities and interactions produce value during the early stage of community development but may also grow to include new activities and interactions associated with further community development.

1. Introduction

Nursing practice and nursing education face a mutual challenge, that of responding to a rapidly changing healthcare landscape. Nurses need to not only be equipped for complex and patient-centered care but also take responsibility for the ongoing improvement of the quality of that care. This requires an enhanced set of skills, the expansion of knowledge and intensive collaboration (Institute of Medicine, 2011; Salmond and Echevarria, 2017). One approach to enhancing professional growth and collaboration is the use of a learning community (LC).

An LC is considered to be a type of community learning. Vrieling et al. (2016) described community learning as one of the overarching configurations of social learning, which focuses on identity development. In particular, LCs promote the collective and individual learning of the participating members through their activities and interactions (Heemskerk et al., 2020; Stoll et al., 2006). Generally, communities go through different stages of development: starting (early stage), growing and sustaining (mature stages). The early stage of community development is characterized by finding common ground for members to feel connected and see the value of shared practice. During this stage, the activities and interactions focus on members getting to know each other, the identification of common knowledge needs and the recognition

* Corresponding author at: Haga Teaching Hospital, HagaAcademy & Innovation, Els Borst-Eilersplein 275, 2545 AA The Hague, The Netherlands.
E-mail address: w.heemskerk@hagaziekenhuis.nl (W.M. Heemskerk).

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potential members hold as a group (Dooner et al., 2008; Hunuk et al., 2019; Wenger et al., 2002). Several scholars have studied the impact of community learning on different facets within nursing education, such as the sense of connectedness (Ebert et al., 2019), professional identity (Donetto et al., 2017), engagement (Theobald et al., 2018) and peripheral positions within the community (Molesworth, 2017).

Wenger et al. (2011) developed the *value creation framework* for assessing the value that community participation creates, and the framework was further refined in 2017 (Wenger-Trayner et al., 2017). Value is described by Wenger et al. in 2011 as "… the value of the learning enabled by community involvement and networking" (p. 7). To date, research on the value creation framework within the nursing domain is limited, but such investigations have been conducted in other domains, such as agriculture (Triste et al., 2018), the nonprofit sector (Smith and Smith, 2017) and education (Booth and Kellogg, 2015; Dingyloudi and Strijbos, 2015). These studies have provided a deeper understanding of the created value or explored how this framework can be used to indicate different types of value.

Although some scholars have examined the first sessions of communities (e.g., Dingyloudi et al., 2019), little attention has been paid to the value created during the early stage of developing an LC, particularly within the working context of nursing. Specifically, this study seeks to obtain data on LCs within nursing practice that will help assess the value that activities and interactions produce during the early stage of community development.

1.1. The value creation framework and immediate value

The framework of Wenger et al. (2011) makes it possible to assess the value that communities create when they are used for social learning activities and provides guidance for members and other stakeholders regarding how to promote the creation of value. According to Wenger et al., there are various ways in which communities create value. To appreciate the richness of the created value, the researchers distinguished five cycles of value creation: immediate value, potential value, applied value, realized value and reframing value. Although it is helpful to think about value creation in terms of these cycles and their existing relationships (Wenger et al.), a full investigation of all value creation cycles lies beyond the scope of this study and will be presented in subsequent studies. This study specifically examines the activities and interactions that produce value in and of themselves, which is defined by Wenger et al. as *immediate value*. For example, these activities and interactions can be fun, useful, inspiring, helpful or relieving. Activities and interactions can be observed and measured by typical indicators with examples for potential date sources (Box 1) to express this immediate value.

This study will contribute to research on LCs and value creation by providing information about immediate value created in the process of starting an LC by answering the following research question: To what extent does immediate value emerge in the process of starting a learning community that includes staff nurses, nursing students and a nurse lecturer?

2. Method

2.1. Research context

The first LC within Haga Teaching Hospital in The Hague, The Netherlands, was established in the pulmonary ward. This LC was purposefully selected for the study based on the early development stage of the community and its availability. In November 2015, periodic group sessions were organized in which the stakeholders (the chief nurse officer, education manager, nurse lecturer and staff nurses) discussed the facilities, financial resources and cooperation needed for the LC. Subsequently, the staff nurses, nurse lecturer and nursing students met frequently to gain experience with this type of community learning. In September 2016, the LC was officially launched, and a group of 15 community members committed to participate in the LC.

The focus of this LC was to periodically bring staff nurses, nursing students and a nurse lecturer together so that they could critically interrogate their practice and share knowledge. During the academic year (September - July), a two-hour session was organized once every month. The community members were responsible for the preparation and content of the sessions. During the sessions, members discussed issues related to their daily practice, as well as topics related to (applied nursing) research and the quality of care. Support for learning was provided by the nurse lecturer, who stimulated interactions, suggested didactic methods and shared his expertise. One of the staff nurses (the nursing practice supervisor) monitored the time and kept the minutes. A total of nine community sessions took place during the academic year.

2.2. Design

The aim of this study was to examine the immediate value of an LC during the early stage of community development. A qualitative data set from a previous case study was used, which was initially collected with the objective of examining whether an LC is a stimulating environment for critical thinking in which members ask each other questions (Heemskerk and Wallner, 2018). During the primary study, the value creation framework of Wenger et al. (2011) was used to collect data. A secondary analysis of the processed observation data, including document data and focus group data, was conducted to indicate the immediate value during the process of starting an LC.

The original research context and data collection, in which typical indicators with potential sources of data regarding immediate value were applied, fits narrowly with the objective of the current study. The

Box 1
Typical indicators and examples for potential data sources related to immediate value as described by Wenger et al. (2011, p. 25–26).

Typical indicators	Potential data sources
Level of participation	e.g., attendance at meetings
Level of activity	e.g., number of queries
Level of engagement	e.g., length of threads
Quality of interactions	e.g., debates on important issues
Value of participation	e.g., evidence of fun
Networking	e.g., new connections made
Value of connections	e.g., frequency of interactions
Collaborations	e.g., co-authorship
Reflection	e.g., meta-conversations about community/network

use of an original data set offers the opportunity to examine the available data in depth and from various perspectives.

2.3. Participants

The population of this study consisted of 7 experienced staff nurses, 7 bachelor's nursing students and 1 nurse lecturer. The attending staff nurses were all working in the pulmonary ward, had obtained a bachelor's degree, supervised students during their internships and contributed to research or quality projects. The LC included third-year and fourth-year bachelor's students, whose curriculum contained specific practical tasks related to research or the improvement of quality of care. The lecturer from a university of applied sciences (CW) was physically present in the hospital and acted as a facilitator during the LC sessions.

2.4. Data collection

During the primary study, typical indicators for the immediate value cycle with examples of potential data sources (Wenger et al., 2011) were processed in four themes to register observations and excerpts from the documents and the focus group: *participation, activity, engagement* and *interaction*. Due to the early stage of this LC, some potential sources of typical indicators of this value cycle were not yet available or observable (e.g., digital tools of communication, new networks and collaboration outside the scope of the sessions, reflection) and were therefore not processed as topics. However, *confidence/trust*, which was framed by Wenger et al. in another cycle, was added as an additional topic, since this element is an important incentive in encouraging activities and interactions in a community (Brouwer and Jansen, 2018; West and Williams, 2017) that can produce value in and of themselves.

Observation data were collected during the first four LC sessions (September - December 2016), in which the principal researcher (WH) of the study was present to register observations without actively participating. Each session (approx. 120 min) was recorded by video and audio tape to assist with the field observations. After each session, a detailed observation report of the session was prepared according to the five themes. In addition to the observation data, session minutes and invitations to the next session were collected. During the fifth session, a focus group took place in which members ($n = 9$) talked about their experiences during the four sessions. This focus group meeting was also recorded and was used to prepare a focus group report.

All reports (observation and focus group) included no personal data and were sent to different members involved for member feedback to supplement, add nuance to or confirm the content. As an additional check, the focus group report was also sent to the lecturer who attended as an assistant moderator during the meeting. Very few changes resulted from this check.

2.5. Data analysis

Based on the observations, documents, focus group information and member feedback from the primary study, summaries were made related to the five themes (participation, activity, engagement, interaction and confidence/trust) for the four sessions. This resulted in 20 text summaries, which contained 52 different text fragments and were subjected to content analysis. To become familiar with the data, two researchers (WH, SD) independently read all text summaries with the research question in mind.

By using a code book that had been created during the original study (Box 2), both researchers marked paragraphs and sentences that raised questions, seemed incomplete or did not appear to be congruent with the five themes. In multiple sessions, each marked paragraph and sentence were discussed and refined by reinvestigating the raw data. Afterwards, the data were independently presented to two other researchers (MD, CW). First, the text summaries were clustered in relation to the five themes and all 52 separate text fragments were coded using the main codes from the code book (a total of 13). Second, repeated examination and comparison were performed to articulate the extent of the perceived immediate value. This was done by highlighting words or (parts of) sentences within the text fragments that implied immediate value. In six consecutive rounds, all text fragments were compared within identical themes multiple times between different sessions. Finally, relations and patterns were explored iteratively in multiple sessions involving the whole research team to gain deeper insights into the immediate value of an LC during its first four sessions.

2.6. Quality procedures and ethical considerations

To enhance the quality of the secondary analysis, several procedures were taken into account (Hinds et al., 1997; Long-Sutehall et al., 2010). An adequate distance was created to the benefit of the research purpose by introducing two researchers (SD, MD) who had not participated in the primary study. However, both researchers had experience with qualitative methods and LCs in other contexts, resulting in enough closeness and sensitivity towards the primary study context. Prior to the analysis, the level of access to the data set was negotiated within the research team. To determine the nature and quality of the primary data set, one of the introduced researchers worked together with the principal researcher of the primary study, who had access to the raw data. During the analysis process, all researchers kept notes to substantiate the choices they made and discussed their choices with each other. In addition, several rounds of independent clustering, coding and comparison took place, and interrater reliability was calculated by using the statistical software SPSS 24.

The research question for the current study was directly related to the intention and context of the primary study. Therefore, it was decided

Box 2
Two examples of code descriptions related to the theme Participation used during the data analysis, including the main codes and variation codes based on the typical indicators and potential data sources described by Wenger et al. (2011).

Theme: Participation

Main codes	Variation codes	Description of codes
Attendance	Members present	Members attending the sessions.
	Returning members	Members returning to attend another session.
Attendee activity	Participating actively	Members participate actively during the learning activities (asking questions, searching for an answer, giving feedback, responding verbally and nonverbally).
	Fulfilling roles	Members fulfill their own role or roles (number and characteristics) during the sessions.

that the consent gained in the primary study was sufficient to carry out this secondary analysis. To verify that this consent was sufficient, the science coordinator of the hospital's science bureau was approached for approval. An application was also submitted to the regional medical ethical committee for the use of the data set, and approval for the current study was obtained from the hospital board.

3. Results

All 20 summaries were identically clustered in relation to the five themes, and according to the guidelines of McHugh (2012), the 52 text fragments were coded in almost perfect agreement (κ 0.979). The results are described by theme, the sources of the typical value indicators (Box 3) and quotes from LC members obtained from member feedback and the focus group.

3.1. Participation

Immediate value was identified through the LC members' attendance and activity. Sessions 1, 3 and 4 attracted 12 members, and session 2 attracted 14 members. All members returned and attended 2 or more sessions. Across all 4 sessions, 4–7 staff nurses, 6–7 nursing students and 1 facilitator (the nurse lecturer) attended. Some invited members did not participate during all sessions (Table 1).

Both the students and the nurses participated actively in several ways, for example, by listening, discussing, asking questions and sharing knowledge. One nurse noted, *"Regarding students' and nurses' participation, both have a good input. … I enjoy seeing that both give their input based on their own knowledge and skills. They really learn from each other"*. Although the lecturer acted as a facilitator, members were encouraged to take the lead during activities and fulfill other roles regarding specific learning questions or themes in which they were competent. As one student said, *"When we spoke about research methodology, we* [the students] *felt knowledgeable based on what we had learned. But regarding 'How do you apply it within your ward?' … the nurses have more insight on that"*. After two sessions, the students seemed to be less reserved, and during session 4, the members also shared more personal matters.

Immediate value was also recognized through evidence of fun and feedback. Members stated that they enjoyed the sessions and described feelings of fun, satisfaction, support and relief. Laughter was frequently observed (18–35 times), and, specifically during the last 2 sessions, it was noticed that laughter was also encouraged by different members who took turns sharing funny input. Overall, members both asked for and received feedback. This feedback was defined as affirmative, positive, constructive and respectful, which encouraged reflection and improvement in their own research. Feedback was also indicated by the students to be confusing and contradictory. Nevertheless, the students seemed to deal better with the feedback during the last two sessions:

Table 1
Overview of the LC members attending each session.

		Session 1	Session 2	Session 3	Session 4
Attendees	Staff nurses	4	7	4	4
	Nursing students	7	6	7	7
	Facilitator	1	1	1	1
Total		12	14	12	12

Number of LC members = 15 (7 staff nurses/7 nursing students/1 facilitator)

> "In my opinion, we think constructively along, and students respond less defensively to the feedback received than they did before. I think this is related to the more solid research plans and because people feel more confident." [student]

Even though this confusing and contradictory feedback initially led to feelings of uncertainty and stress, the feedback also contributed to the intended results. One nurse summarized this as follows: *"It is funny to hear that basically everyone is saying: 'We experience the confusion but this confusion also leads to a better product'. So, the confusion is worth it and ultimately contributes to a good product"*.

3.2. Activity

All 4 scheduled sessions took place once every 2–4 weeks. The immediate value produced was related to different activities, such as discussing research questions, giving presentations, questioning each other on various topics, and having conversations with other members with different expertise. Although the nurse supervisor explicated the expectations regarding preparation and activities by sending invitations about and introducing each session, the goals and expectations were not clear during the first session and led to uncertainty among students as well as nurses. As one nurse stated, *"We* [the nurses] *thought so too: 'Yes, we do know a little bit what the expectations are, but you don't know for sure,' and that gives feelings of uncertainty. It is all a bit unknown"*. Nevertheless, members learned about the LC's intentions during the first session, and therefore, the expectations were clearer in subsequent sessions. As one student stated, "*But indeed, after a while you know what to expect and because of that, you can give it your own twist"*.

During the LC sessions, immediate value was identified through the number of questions (a total of 510), which received various responses such as asking counter questions or giving answers, tips or feedback. At first, some students felt bombarded by the number of questions: *"As a student, I occasionally felt cornered by the many questions asked by such a large group"*. Members let each other speak and created thinking time by using controlled silences. In addition, observed interruptions (8–42 times) went unacknowledged by members or were interpreted in a positive way:

Box 3
Overview of the five themes along with the available data sources suggested by Wenger et al. (2011) to indicate immediate value.

Theme	Sources belonging to typical value indicators
Participation	Attendance at meetings - Number and characteristics of active participants - Feedback form - People coming back to community - Evidence of fun, such as laughter
Activity	Frequency of meetings - Number of queries - Quantity and timeliness of responses
Engagement	Intensity of discussions - Challenges of assumptions - Length of threads
Interaction	Bringing experience of practice into the learning space - Debates on important issues - Feedback on quality of responses to queries
Confidence/ trust	Initiatives started and/or risks taken by members - Bringing up difficult problems and failures from practice

"When a question was asked, there was enough space to voice your opinion and to let each other speak. And yes, then you can also actively participate." [student]

"It [the interruption] may have happened. Nonetheless, that may also be because people got excited to give their opinion. So, that was not in a negative way." [student]

3.3. Engagement

The immediate value created was also related to members' engagement, which was observed through their actions, such as preparing for activities, proposing conversation topics, making time to attend the sessions, participating in conversations, and challenging others to express their assumptions by asking questions. One nurse noted, *"Conversations are easily entered into. It takes little effort to get the members to start. A single question is enough to get an in-depth conversation going"*. During the focus group meeting, expressed engagement was reflected in *"good cooperation, open communication and equality"* [student]. Occasionally, members were less involved in the interactions due to disruptive factors such as ringing phones or people entering the room or because the topic being discussed was difficult or unfamiliar. One nurse noted, *"I think so too, especially because it is a new topic. I think they* [the students] *considered it to be to remote from their own topics, which led them to pay attention less"*.

Although the intensity of interactions (i.e., firm discussions and debates) as a source of engagement also indicate immediate value, such interactions between members were limited. In this case, dialogues were observed more often than discussions (approx. 7–8 dialogues and 1–2 discussions per session), and members generally experienced their conversations as neutral:

"I think it [a conversation] was quite neutral. Not too intense but not too relaxed either." [student]

"Some conversations were firm and then we went on and the tone got lighter again." [student]

3.4. Interaction

Members brought experiences from their own practice into the LC to gain knowledge, help each other, receive feedback or obtain answers to a question. For example, one student stated, *"I introduced an issue for discussion which came from my own experience"*. Debates on important issues (a potential data source) did not take place. Additionally, the members themselves could not recall this type of interaction occurring. Nevertheless, one debate characteristic was observed and experienced by the members: trying to convince others about a point. Sometimes, members even helped other members during their conversation. As one student stated, *"Yes at one point, I just did not know how to convince others. Fortunately, nurse-Y was there, and he was able to help me because he knew what I was working on"*.

Immediate value was identified through feedback on the quality of responses to questions, which was mainly described in terms of 'constructive', 'positive' and 'guiding'. Asking for clarification was also a way to provide feedback on someone else's response. As one student stated, *"And sometimes when feedback was not clear yet, you asked for clarification or summarized briefly for clarification"*.

3.5. Confidence/trust

Finally, immediate value was recognized through members' initiative on and input regarding difficult problems. Members took initiative either following stimulation by the facilitator or on their own. During the first 2 sessions, members experienced feelings of uncertainty and insecurity due their status as newcomers, the group size and the presence of the video camera. Some members found that taking initiative felt risky, for example, when fulfilling a different role or when deviating from the agreed-upon procedure. Regarding one group activity, a student noted the following: "*Yes, I felt that with literature. While I was bringing up a book, I asked you* [the nurse supervisor] *for a moment: 'Was that really the idea?' But yeah, eventually, nobody thought, 'Well, you cannot do that'"*. After sessions 1 and 2, the students also started to take initiative by themselves, which seems to have been promoted by their increased familiarization, safety and confidence within the LC:

"I think, initiatives were taken more often during later sessions. You asked questions yourself and did not need a structure due to the natural flow. In my opinion, this shows that initiatives are taken more often because you know what to expect and how it works." [nurse]

"Yes, due to the frequency of the sessions and coming together. Yes, I had a sense of confidence." [student]

Members barely discussed their failures from practice with each other. According to the members, failures were not brought up because this had not happen yet or because students preferred to discuss their failures with their supervisor outside the community to receive the needed feedback:

"People had briefly mentioned what could possibly go wrong and what we should pay attention to. But so far, these [mistakes] have not been made yet." [student]

"I agree with student-X. Instead of waiting and discussing it with the group to receive all kinds of opinions and feedback, you prefer to process the feedback at school first." [student]

Difficult problems, such as those related to difficult research subjects, were recurrently brought up by the students. After session 2, the nurses also discussed difficult problems or doubts. One student mentioned the following example: *"Yes, for example, when nurse-Y brought up the supervision conversation and asked whether he had used an overly directive approach. In this clear manner, he showed that he was vulnerable by saying, 'I may not have done that right' and wanted to check that with you* [another student]*"*.

4. Discussion

The findings of this study suggest that immediate value emerges during the process of starting an LC. Based on this study, the value creation framework of Wenger et al. (2011) was shown to be a useful tool for observing different indicators to identify the immediate value created during an early stage of community development.

The results in this case indicate that the members were encouraged to be present and actively contribute in different ways. Overall, they enjoyed engaging in activities and interactions with others during the LC sessions. The members shared experiences from practice by bringing up questions or problems in the learning space to receive support, advice or feedback from others. These findings confirm earlier research conducted in other contexts by showing that the community activities and interactions were enjoyable and that members felt encouraged as a result of their participation (Bertram et al., 2017; Booth and Kellogg, 2015; Triste et al., 2018). Unlike the current study, however, these previous studies discussed only a few indicators of the immediate value cycle. An explanation for this might be that previous studies explored the process of value creation in a more overall fashion across all cycles or that they used predominantly non-observable data sources.

During this study, two details were brought up often: the perceived effect of receiving feedback and the ability to ask questions. Students felt insecure and stressed due to confusing and contradictory feedback. These results are in line with those of Paterson et al. (2020), which showed that feedback can have an emotional impact on students. A

possible explanation for this finding might be that the students were used to receiving only straightforward feedback from a single lecturer in a traditional classroom setting instead of receiving feedback from several members in the LC. In addition, the students did not know exactly what to expect during the first session, and they felt bombarded by the number of questions. According to the literature, it is important to minimize such discomfort by setting the expectation with students that questions are welcome and a natural part of the learning culture (Long et al., 2015; Merisier et al., 2018). Facilitators should explore and try to stimulate the community to discuss what is meaningful for them to promote and inform the support of activities that are considered valuable by community members (Akkerman et al., 2008; Dingyloudi et al., 2019). It might thus be suggested that by drawing more substantial attention to such explorative activities, the aforementioned feelings of the students can be overcome quicker and more space can be created for other activities that have not yet been undertaken. For example, discussing failures in practice can also produce immediate value in and of itself.

The findings show that immediate value can grow with regard to certain aspects even within the first sessions of an LC. For example, student initiative grew during the last two sessions, which seemed to be promoted through increased familiarization, safety and confidence within the LC. This may be related to the process of legitimate peripheral participation. According to Lave and Wenger (1991), legitimate peripheral participation is the process through which newcomers become part of a community. As newcomers become more familiar, the involvement grows and their activities are recognized, they gradually move toward full participation. In this study, support and knowledge were provided by 'full members' (i.e., experienced nurses). The findings also show that the students became more settled and their activities and roles in the community increased over time. One factor affecting this may have been the involvement of the lecturer who was accessible to both the students and the nurses. According to Molesworth (2017), this role can stimulate reciprocal relations and be apparent in supporting students' peripheral position. However, the current study also confirmed the finding of Sayer (2014) that learning does not take place solely through the legitimate peripheral participation of students but is instead a two-way process involving both nurses and students. In this case, learning took a prominent position during the sessions because students took more responsibility and payed attention to their questions and problems, which may have encouraged nurses to adapt a learning attitude by discussing their own learning issues.

Although some activities were occasionally difficult to deal with (i.e., receiving feedback and responding to questions), members also valued these activities due to the immediate feelings they aroused, such as confirmation and respect. In addition, members also experienced benefits that were more related to other value cycles: *potential value*, which is defined by in its potential to be realized later, *applied value*, which refers to the adaption and application in the members' own practice, and *realized value*, which refers to the effects for the members and stakeholders (Wenger-Trayner et al., 2017; Wenger et al., 2011). In this case, being a member of the LC allowed them to share information and gain ideas from others that were useful for personal projects in subsequent periods (potential value). Other members shared that they applied tips or tools into their project (applied value) or even stated that the final product of a project was improved (realized value).

These findings suggest that both immediate value and other types of value can be created during the early stage of community development. It is conceivable that when LCs reach the next stage of community development, immediate value can grow even further. Subsequent stages may provide access to new data sources (e.g., digital tools for communication) or assume additional activities and interactions (e.g., debating important issues) that can produce value in and of themselves. For example, during coalescing and mature stages in which members negotiate their community to deal with tensions or they reflect on and collaborate to achieve common goals and adapt to the changing environment (Hunuk et al., 2019; Wenger et al., 2002). However, further research is needed to investigate this.

5. Limitations

This study has different strengths, such as the multiple data availability, the extent to which the results could be objectified (interrater reliability) and the use of investigator triangulation. Despite its strengths, the study also has limitations.

First, the analyzed data included only data collected during five face-to-face sessions spaced across four months. The durability of these findings remains unclear because communities may change over time, as may the individual members of such communities. Second, half of the members participated voluntarily (e.g., experienced nurses); therefore, these members might have been more willing to attend and to learn collaboratively with the students. Additionally, their voluntary participation could potentially mean that the members were more likely to voice positive opinions than negative ones during the member feedback or focus group meeting. Third, readers should also bear in mind that the analysis was only focused on the immediate value during the early stage of community development within one LC case. Therefore, the results must be read in this specific context.

Nevertheless, this study offers an opportunity for healthcare organizations to gain knowledge about LCs to integrate nursing practice and education and about the immediate value that may be created during the early stage of community development. In addition, this study offers scholars within other research fields suggestions for how to observe community activities and interactions by using the value creation framework of Wenger et al. (2011) to assess immediate value.

6. Conclusion

This study shows that activities and interactions during the early stage of community development produce value in and of themselves. Immediate value emerges in different ways during the process of starting an LC within nursing practice. Observing and describing these activities and interactions through the scope of the value creation framework (Wenger et al., 2011) illuminates how the qualitative extent of immediate value can be assessed through different indicators. Because the LC in this study was in an early stage of community development, it is likely that the immediate value there will continue to flourish as new activities and interactions associated with further community development are generated.

Further exploration of each value cycle within nursing practice would be useful for recognizing and interpreting the typical indicators of each cycle in a more in-depth manner. To establish a comprehensive picture of value created by LCs comprised of nurses, nursing students and lecturers, similar communities during other stages of community development and in different working contexts need to be studied. Furthermore, longitudinal research is recommended to study LCs that move through different stages of development and so as to create sufficient time to thoroughly investigate value creation across all cycles.

Author statement

W. Heemskerk conceived the presented design of the work and C. Wallner verified the design. W. Heemskerk prepared, planned and conducted the secondary data analysis and S. Dauphin, M. van Dorst and C. Wallner contributed to the analysis. In brief, W. Heemskerk and S. Dauphin independently read all text summaries, discussed and refined the data in multiple sessions. M. van Dorst and C. Wallner clustered, coded and compared the data. All four authors explored in multiple sessions the relations and patterns and contributed to the interpretation of the results. W. Heemskerk wrote the manuscript with input from S. Dauphin, M. van Dorst, M. Bussemaker and C. Wallner. M. Bussemaker and C. Wallner helped supervise the project and finalizing the

manuscript.

Conflict of interest

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