The experiences of home care nurses with acute health events leading to emergency department admission of frail community-dwelling older people: a qualitative study

Name:	R. Onneweer
Student number:	4123476
Status:	Final
Course:	Research Internship: Master's thesis
Date:	06-25-2021
Education Institute:	Utrecht University Master Clinical Health Sciences, program Nursing Science, University Medical Centre (UMC) Utrecht, The Netherlands
Course instructor:	Dr. J.M. de Man
Research Institute:	Hogeschool Utrecht
Supervisor:	Dr. W. Blom-Ham
Reference style:	Vancouver
Reporting guideline criteria:	COREQ
Intended journal for publication:	Health and social care in the community

Word count:	3797
Word count abstract:	299
Word count Dutch abstract:	300

English Abstract

Title: The experiences of home care nurses with acute health events leading to emergency department admission of frail community-dwelling older people.

Background: Community-dwelling older people experience more acute health events due to their increasing frailty and to living independently as long as possible. Home care nurses provide daily care and support and play an essential part in recognising, anticipating, and managing acute health events in frail older people. However, home care nurses are generally qualified, and the quantity and complexity of acute health events require more specialised expertise and skills.

Aim: To explore home care nurses' challenges and experiences in recognising, anticipating, and managing acute health events leading to emergency department admission of frail community-dwelling older people to provide optimal care.

Method: A generic qualitative descriptive study was conducted. Using a purposive sampling strategy, data were collected through semi-structured interviews with 12 home care nurses and thematically analysed.

Results: Three main themes emerged: complexity of acute health events, the role of home care nurses, and prevention of acute health events. The complexity of acute health events was expressed in lack of expertise, an increase in care avoiders, and decrease in frail older people's social network. Respondents struggled to assume an appropriate role in regard to collaboration, communication, and coordination during acute health events. To prevent and recognise acute health events early, respondents emphasised the importance of continuity of care and monitoring of frail older people.

Conclusion and recommendations: To ensure optimal care an unambiguous definition of an acute health event, a clear delineation of the role of home care nurses, and more efficient collaboration and communication between healthcare professionals are needed. Consequently, more screening and measuring tools should be used in practice.

Keywords: Frail community-dwelling older people, Home care nurses, Acute health event, Emergency department, Qualitative research

Samenvatting

Titel: De ervaringen van verpleegkundigen in de wijk omtrent acute zorgvragen die leiden tot een spoedeisende hulp opname bij kwetsbare thuiswonende ouderen.

Achtergrond: Thuiswonende ouderen ervaren meer acute zorgvragen door hun toenemende kwetsbaarheid en het zolang mogelijk zelfstandig wonen. Verpleegkundigen in de wijk bieden dagelijkse zorg en hebben daardoor een essentiële rol bij het herkennen, anticiperen en managen van acute zorgvragen bij kwetsbare ouderen. Verpleegkundigen in de wijk zijn echter generiek opgeleid en de aantallen en complexiteit van acute zorgvragen vereisen meer gespecialiseerde expertise en vaardigheden.

Doel: Het exploreren van de uitdagingen en ervaringen van verpleegkundigen in de wijk omtrent het herkennen, anticiperen en managen van acute zorgvragen die leiden tot een Spoedeisende Hulp opname bij kwetsbare thuiswonende ouderen om optimale zorg te bieden.

Methode: Het onderzoek is generiek kwalitatief beschrijvend van aard. Respondenten zijn doelbewust geselecteerd. Data werden verzameld door semigestructureerde interviews met 12 verpleegkundigen in de wijk en vervolgens thematisch geanalyseerd.

Resultaten: Drie hoofdthema's werden ontwikkeld: complexiteit van acute zorgvragen, de rol van verpleegkundigen in de wijk, en preventie van acute zorgvragen. De complexiteit van acute zorgvragen uitte zich in een gebrek aan expertise, een toename van zorgmijders en een afname van het netwerk van ouderen. Respondenten worstelden met het aannemen van een geschikte rol omtrent samenwerking, communicatie en coördinatie tijdens acute zorgvragen. Om acute zorgvragen te voorkomen en vroegtijdig te herkennen, benadrukten respondenten het belang van continuïteit van zorg en monitoring van kwetsbare ouderen.

Conclusies en aanbevelingen: Om optimale zorg te bewerkstellingen is behoefte aan een eenduidige definitie van een acute zorgvraag, een afbakening van de rol van verpleegkundigen in de wijk en een efficiëntere samenwerking en communicatie tussen zorgprofessionals. Daarbij zouden in de praktijk meer screenings- en meetinstrumenten moeten worden ingezet.

Sleutelwoorden: Kwetsbare thuiswonende ouderen, verpleegkundigen in de wijk, acute zorgvragen, spoedeisende hulp, kwalitatief onderzoek

1. Introduction

Worldwide, the population is ageing, and in 2030, the Netherlands will have 4 million people who are over 65 years old (1,2). Moreover, in 2030, 1 million of these older people will be considered frail (2). Frailty refers to a precarious balance between health, psychological well-being, and one's social network, where a minor trigger could cause this balance to collapse (3). Frail older people often have to deal with multimorbidity, which is defined by the existence of two or more long-term incurable illnesses that can be managed by medication and treatment (4,5). Moreover, these frail older people are more vulnerable to the adverse effects of collateral diseases and medical treatment and are more likely to decline in functionality and increase mortality (4). Furthermore, the Dutch government emphasises improving self-sufficiency and independent living in the community as long as possible to realise a transition from long-term care to home care (6). Due to the consequences of frailty and the influence of the Dutch government, frail community-dwelling older people are more dependent on home care (6).

As a result of older people's increasing frailty and living independently for as long as possible, they often experience acute health events in the home situation (7,8). An acute health event is a circumstance in which care must be promptly provided to an individual to avoid death or permanent harm to health caused by an acute life-threatening ailment or injury, which can lead to emergency department (ED) admission (9). Home care nurses provide daily care and support in line with the changing health conditions of older people and are thus specialists in determining the care required for the growing group of frail older people (10,11). Home care nurses thus play an essential role in recognising, anticipating, and managing acute health events in frail older people (6,12). However, multiple studies have shown that there has been an increase in the number of older people admitted to the ED and that these older people placing increasing pressure on EDs (13–17). The Dutch organisation ActiZ notes that almost half of the older people admitted to the ED in 2017 needed acute care. The other half had a welfare complaint, a somatic complaint with an observational question or an admission that could have been prevented if home care nurses had been monitoring their chronic illness (18).

Home care nurses are generally qualified to care for a broad range of patients including those with multiple health conditions and of varying age groups and backgrounds (19). On the other hand, the number and complexity of acute health events in frail older people are growing, which requires more specialised expertise and skills of home care nurses. Timely recognition, anticipation, and management of acute health events in frail older people is

becoming increasingly important for home care nurses (6). Moreover, a recent Dutch agenda that prioritises research subjects in home care reveals that home care nurses struggle to provide optimal care to frail older people with acute health events and that there is a need for more acute care expertise (20). To provide optimal care, it is important to outline the challenges and experiences of home care nurses who provide care for frail older people with acute health events. Insight into these experiences enables further recommendations for the development of training curricula and programs, emphasises the value of early screening, and may result in the avoidance of excessive ED admissions. Therefore, this study aims to explore home care nurses' challenges and experiences in recognising, anticipating, and managing acute health events leading to ED admission of frail community-dwelling older people to provide optimal care.

2. Method

2.1 Study design

This study was conducted with a generic qualitative design using semi-structured interviews (21). The qualitative approach allowed the researchers to obtain in-depth and high-quality information by exploring the respondents' feelings and experiences (22,23). Semi-structured interviews enable access to respondents' thoughts, feelings, and beliefs and inquire deeply into personal and sometimes sensitive issues (24). This study followed the COnsolidated criteria for REporting Qualitative studies (COREQ) guidelines (25) and was conducted by two researchers (R.O. and W.H.).

2.2 Population and setting

This study was conducted within one home care organisation in the Netherlands, where one researcher (R.O.) worked as a home care nurse. The study population consisted of home care nurses who provide care to frail older people and were direct or indirect colleagues of the researcher (R.O.). To be eligible to participate in this study, a respondent had to meet all of the following inclusion criteria: (a) have a Bachelor's nursing degree from a university of applied sciences or secondary vocational-level nursing qualification; (b) currently provide home care; (c) understand and speak Dutch; and (d) have at least one year of work experience. It is known from clinical practice that, after one year, home care nurses have sufficient experience with acute health events in frail older people.

2.3 Recruitment

The study adopted purposeful sampling to recruit a diverse group of respondents (26). No more than three respondents from a single home care team were included to widen variation.

To increase the representativeness of the data, maximum variation sampling was used to obtain diversity concerning education level, ages, and years of work experience as a home care nurse (21). The recruitment process started in January 2021 with a brief presentation about the clinical relevance and study procedures by the researcher (R.O.) at a meeting with home care nurses of the home care organisation. All 60 potential respondents received an informational letter by email and were asked to contact the researcher (R.O.) within two weeks if they wanted to participate. Upon receiving a response to the invitation, the researcher (R.O.) scheduled an interview by email. A reminder email was sent if there was no response after two weeks.
The literature suggests that a sample size of 12 to 20 respondents is required to achieve data saturation (27). Data saturation was achieved when no new concepts or dimensions were identified in the analysis of the last interview (23).

2.4 Data collection

Data were collected in February and March 2021. Respondents were offered the choice of conducting the interview online via Microsoft Teams or face-to-face according to the Dutch COVID-19 measures in effect at the time (28). All interviews were audio recorded, and field notes were taken.

The researcher (R.O.) developed an interview guide based on the literature and their work experience (19,20,29). The questions related to recognising, anticipating, and managing acute health events in frail older people based on an acute health event the respondent had experienced. Before the data collection commenced, a pilot interview with a respondent meeting the inclusion criteria was conducted to assess whether the interview guide was appropriate and to test the interview skills of the researcher (R.O.) (21). This pilot interview was included in the data analysis, as the data was deemed appropriate. The interview guide was modified after the first interview; at the start of the interview, it was clarified what the respondent's definition of an acute health event was. The interview guide is shown in Appendix 1. During all steps of data collection, consultation took place between the researchers (R.O. and W.H.).

2.5 Data analysis

The interviews were transcribed verbatim, coded, and analysed by one researcher (R.O.). Member checking allowed the respondents to review a summary of the transcript to ensure accuracy prior to the analysis (30). The analysis was an iterative process in which data collection and analysis took place simultaneously (26,31). The data analysis was undertaken

using the thematic analysis approach by Braun and Clarke, a method used to recognise and categorise patterns and themes in a body of data (31). Data analysis was supported by the qualitative data analysis software NVivo, version 12.6 (32).

First, all transcripts were screened and read repeatedly to ensure immersion and connection with the data (31). Furthermore, notes were taken to support the research process and the formulation of ideas and hypotheses. Second, codes were developed by continuously comparing and contrasting the data across the transcripts (31). The first three transcripts were coded independently by the researchers (R.O. and W.H.); inconsistencies were discussed and reflected upon to increase rigor and trustworthiness (33). This triangulation improved the validity and reliability of the study (21). Third, to generate and construct themes, the coded data were examined to identify areas of similarity and overlap between codes (31). Fourth, the researchers (R.O. and W.H.) examined the candidate themes with the coded data and the entire data set (31). This triangulation and peer debriefing enhanced the study's credibility and validity (23,33). Fifth, the analysis of data extracts was shifting beyond the data by understanding and conceptualising them in a broader framework to define and name themes (31). Sixth, the researcher (R.O.) generated a report which presented quotations that best make sense of the themes in order to bolster the study's reliability and transparency (21,31).

2.6 Ethics

This study was conducted according to the principles of the Declaration of Helsinki (2013 version) (34). It was submitted to the Medical Ethical Committee (METC) of Utrecht University and did not apply to the Medical Research Involving Human Subjects Acts (WMO) (35). After scheduling an interview, informed consent (IC) was obtained by email prior to the start of data collection. Both the respondent and the researcher (R.O.) signed the IC form. All collected data were handled confidentially and stored in a safe and encrypted research drive of the Hogeschool Utrecht. Participation was voluntary and respondents could withdraw from the study at any time without providing a reason for withdrawal.

3. Results

Recruitment stopped after 12 interviews because data saturation was achieved. Eleven interviews were conducted online using Microsoft Teams and one was conducted face-to-face at the office of the home care organisation. Interviews lasted between 30 and 60 minutes. None of the included respondents withdrew from the study. Eleven were female and one was male, and all respondents had a Bachelor's degree. The work experience as a

home care nurse ranged from two to 25 years, and their ages ranged from 26 to 60 years (see Table 1).

[Table 1]

The respondents provided rich information with regard to their challenges and experiences with recognising, anticipating, and managing acute health events in frail older people. Three main themes emerged after analysis: complexity of acute health events, the role of home care nurses, and prevention of acute health events (see Figure 1).

[Figure 1]

3.1 Complexity of acute health events

Throughout the interviews, respondents expressed a common view of the complexity of acute health events in frail older people. The complexity was experienced in different areas and this theme consists of three subthemes: expertise level of home care nurses, patient-centred care, and the role of frail older people's network.

3.1.1 Expertise level of home care nurses

On the one hand, expertise level was filled in by the knowledge level, whereby respondents indicated that they lacked sufficient knowledge about acute health events and had to rely more on clinical reasoning. Moreover, respondents did not have a consistent definition of an acute health event. It varied from a hospital or general practitioner (GP) referral for treatment to the need for additional care to a life-threatening situation. On the other hand, acute health events were recognised because frail older people behaved differently than normal. Respondents thus used their common sense and instincts to recognise, anticipate, and manage acute health events.

Because of the increase of multimorbidity in frail older people and the fact that home care nurses had generic qualifications, respondents noted that the lack of expertise could lead to an underestimation of the severity of an acute health event. Respondents expressed interest in casuistry and training, but the majority of expertise was acquired from practice.

> *'Well I believe I do have a lack of knowledge; let's say I notice they've been working in healthcare for years and I haven't, so I haven't seen anything yet. And yes, I'm not sure if I'd recognise that immediately.' – Respondent 3*

3.1.2 Patient-centred care

Respondents were highly patient-centred, which also played a major role during acute health events in frail older people. Respondents noted that they collaborate as closely as possible with frail older people. Recognising, anticipating, and managing acute health events was challenging because frail older people were increasingly care avoiders. As a consequence, reacting to signs that could lead to an acute health event was precarious, causing frustration and misunderstanding among the respondents.

> *'And in the meantime, he refused all care, so we're not allowed to talk about medication for example. Um yes let me say that there is a discrepancy that both irritates and confuses me. Of course, I do it for him because I care for him and want the best for him.' – Respondent 8*

3.1.3 The role of frail older people's network

Because frail older people continue living independently for as long as possible, they are more reliant on informal care along with home care. Respondents described the growing impact of the frail older people's network in coordinating acute care. With an increasing number of frail older people having a limited or non-existent social network, it has become difficult to provide appropriate care. The isolation of frail older people from the outside world increases the risk of home escalation and, as a result, acute health events.

> *'What I found particularly unfortunate was her desperation. She has no children, her husband died, she has no network, she has no friend, and we, as home care nurses, are her network' – Respondent 11*

3.2 The role of home care nurses

Respondents expressed several challenges to assume the most appropriate role in recognising, anticipating, and managing acute health events in frail older people. The most pronounced factors were formed by three subthemes: collaboration with healthcare professionals, adequate communication with healthcare professionals, and coordination of acute health events.

3.2.1 Collaboration with healthcare professionals

Respondents indicated the value of knowing the community's healthcare professionals and depending on the severity of the situation, the most appropriate discipline was involved. The quality of collaboration was dependent on the GP; differences were described in accessibility

and valuing the respondents' expertise and skills. This caused frustration and a sense of powerlessness. Moreover, calling the general practice centre had a higher threshold than calling the GP because hospitals were overloaded, and respondents did not want to waste time making unnecessary calls. When the collaboration went well and a situation was effectively managed, respondents expressed more enjoyment and satisfaction.

> *'And then there's the collaboration with GPs, which is essential, because with one GP it just works very well, while with the other GP you get the impression you aren't taken seriously so that an acute health event can't be prevented, which is sometimes difficult.' – Respondent 9*

3.2.2 Adequate communication with healthcare professionals

Respondents described adequate communication with healthcare professionals as a challenge. On the one hand, this appeared to be due to a hierarchy in which GPs did not necessarily comprehend respondents' expertise and skills. On the other hand, it was due to the fact that respondents lacked the necessary tools to communicate clearly and accurately about the situation at hand. Respondents stated that this could mean they had to persuade GPs of the severity of the situation.

> *'That is very difficult for me because you are in a situation where something urgently needs to be done, and you are not the person who can do it at the time. Sometimes you have to persuade the other person who would be able to help you to come by, which can be annoying.' – Respondent 5*

3.2.3 Coordination of acute health events

When an acute health event in a frail older patient was recognised, few respondents indicated that they remained in the coordinating role. Moreover, respondents described that the coordinating role during acute health events was missing, resulting in policy uncertainty; that a more proactive attitude was expected from a GP; and that adequate action was taken too slowly. Experienced respondents, on the other hand, indicated they did take on a coordinating role and were confident in doing so. Furthermore, they described the necessity to take on a coordinating role to recognise signs of a possible acute health event in a timely manner.

'Actually, I'm a nurse, and in such cases, I'm at my best. So, while I can't say I like it because 'like' isn't a good word, it doesn't make me nervous or anything. At such time, I can prioritise and think clearly about what is required; in fact, I am at my best.' – Respondent 6

3.3 Prevention of acute health events

Prevention of acute health events in frail older people seemed to play a role in the care described by the respondents. Two subthemes emerged: continuity in care and monitoring frail older people.

3.3.1 Continuity in care

Respondents noted that acute health events may have been caused by frequent interruptions in care and insufficient communication between healthcare professionals. According to respondents, acute health events may have been prevented if there had been more care continuity at weekends and holidays, as GPs saw frail older people again after the weekend, which was often too late. Another factor that affected care continuity was the number of healthcare professionals involved and their unfamiliarity with each other's specialties. The value of an integrated consultation was discussed; it provides an overview of frail older people's health and allows for regular discussions in regard to care continuity.

'It was just before a weekend, so things were more difficult to arrange. And the GP would take it up again the following Monday after the weekend, but then it actually went wrong.' – Respondent 10

3.3.2 Monitoring frail older people

In addition to a lack of care continuity, respondents stated that they lacked the necessary tools to prevent acute health events in their role as home care nurses. Risk signalling in frail older people was described when the complexity of care increased. However, respondents often observed risk signalling not being implemented in practice.

When respondents recognised an acute health event and sought to anticipate it, measuring tools such as blood pressure monitors and a temperature meter did not appear to be routinely utilised. According to the respondents, this was because that is not part of the role of the home care nurses, and the GP is responsible for it. However, respondents saw it as a flaw because an acute health event's severity is revealed by measuring vital parameters.

'Yes, the GP saw that it was serious, but that was focused entirely on those measurements. Then you realise how important it is to have some additional tools with you to draw a specific conclusion.' – Respondent 4

4. Discussion

This study explored the challenges and experiences of home care nurses with acute health events leading to ED admission of frail older people. Three main themes emerged: complexity of acute health events, the role of home care nurses, and prevention of acute health events. The complexity of acute health events was expressed in lack of expertise, an increase in care avoiders, and decrease in frail older people's social network. Respondents struggled to assume an appropriate role in regard to collaboration, communication, and coordination during acute health events. Furthermore, both care continuity and utilisation of screening and measuring tools to prevent or recognise acute health events are insufficient.

Remarkably, respondents lacked an unambiguous definition of an acute health event; definitions included a hospital or GP referral for treatment, the need for additional care, and life-threatening situations. This finding corresponds to a report by the Council for Health and Society which stated that there are various definitions of acute care, each with a different focus. Definitions vary in their perspectives as to who determines whether a care demand is acute, as well as the severity of the perceived health problem (36). An unambiguous definition of an acute health event ensures that knowledge gaps are identified, and a definition that is utilised by all healthcare professionals improves communication.

Respondents stated that not enough is being done to prevent acute health events. To prevent acute health events and to recognise them in a timely manner, respondents described the value of screening frail older people but noted that it was infrequently performed in practice. According to Cusveller et al. (2017), nurses often lack time, the advantages of the screening instrument are not necessarily recognised, and the obligation to use it is also not conducive (37). However, Winkel's study showed that a quarter of the ED admissions of frail older people could have been prevented with monitoring by home care nurses (18). Moreover, the use of tools to measure blood pressure and temperature when respondents recognised and sought to anticipate an acute health was a point of disagreement among the respondents. Some respondents thought this was the GP's responsibility, and others thought the severity of the situation could be recognised more

quickly. A potential explanation for these conflicting attitudes may be the disparity in work experience, self-confidence, and the perception of a possible hierarchical relationship between home care nurses and GPs.

Another remarkable finding is that respondents experienced GPs who did not value home care nurses' observations, and they had to persuade GPs of the severity of the situation. As a result, collaboration with GPs depended on how highly the GP regarded the respondent's expertise and skills. A study performed by Nieuwboer et al. (2018) found that this often occurs because home care nurses and GPs do not necessarily know each other personally, making trust difficult to establish (38).

Respondents agreed that knowing who had the coordinating role during an acute health event was important and that this was occasionally unclear. The GP was frequently referred to as the person in charge. This is consistent with Nieuwboer's (2019) study, which found that GPs were most frequently described as preferred leaders (39). In the present study, experienced respondents were self-confident and could manage acute health events well. In contrast, respondents with less work experience were relieved that coordination was not their responsibility. Work experience appears to play a role here, and employers should value experienced home care nurses and use their expertise to support other healthcare professionals and to optimise acute care.

These findings must be considered in light of the study's strengths and limitations. This study was strengthened by using peer review, member checking, and triangulation during data analysis. Respondents were recruited from different home care teams, with varying lengths of work experience as a home care nurse, and with varying ages to improve the generalisability of the findings. Transferability was improved by achieving data saturation on all themes after 12 interviews. The trustworthiness of the study was improved because the work was done in consultation with two researchers (R.O. and W.H.), and peer review processes from multiple researchers were implemented throughout the study. To increase the comprehensibility of the report, a native English speaker reviewed the report and made adjustments.

This study has some limitations. First, due to the COVID-19 pandemic, most of the data were collected through video calls via Microsoft Teams. As a result, the researcher (R.O.) had less control over the interview location, which resulted in some respondents being distracted by telephones or colleagues, potentially affecting the quality of the interviews. However, the

researcher (R.O.) could still observe the non-verbal communication and interaction with the respondent, and the interviews were less time-consuming. Second, the sample population was recruited from one home care organisation. As a result, the findings may not reflect the circumstances of home care nurses from other home care organisations. Furthermore, maximum variation was not achieved concerning education level. Only respondents with a Bachelor's degree were interviewed which may have skewed the results.

The findings of this study provide home care organisations insight into the complexity of acute health events in frail older people, both at the patient and home care nurse level. It must be determined which training programs are required in this area, and how to optimise collaboration in the community. Future research needs to establish an unambiguous definition of an acute health event in home care. As a result, knowledge gaps are filled in with regard to the epidemiology of acute health events in frail older people, communication and collaboration skills, and home care nurses' coordinating role during acute health events. These findings can be incorporated into the development of training curricula and programs. Subsequently, mapping the perspectives of frail older people to analyse their experiences during acute health events is also important to optimise acute care in the community.

Conclusion

This study provided insight into the challenges and experiences of home care nurses with recognising, anticipating, and managing acute health events leading to ED admission of frail older people. Ensuring optimal acute care at home calls for an unambiguous definition of an acute health event, a clear delineation of the role of home care nurses, and more efficient collaboration and adequate communication between healthcare professionals. Finally, care continuity and utilisation of screening and measuring tools should be improved in practice.

5. References

1. Verver D, Merten H, de Blok C, Wagner C. A cross sectional study on the different domains of frailty for independent living older adults. BMC Geriatrics. 2019 Mar 1;19(1):1–12.
2. Kinsella KG, Phillips DR. Global aging: The challenge of success. Population Bulletin. 2005;60(1):5–42.
3. Boeije H, Verkaik R, de Groot K, Kappen H, Korevaar J. Kwaliteit van leven van langer thuiswonende ouderen Sessies met de praktijk. Utrecht: Nivel; 2019.
4. Hodes E, Tibosch C, Ophuis MO. Zorgplan Kwetsbare Ouderen. ketenzorgnu.nl. Utrecht: ZorgNu; 2015.
5. Yarnall AJ, Sayer AA, Clegg A, Rockwood K, Parker S, Hindle J v. New horizons in multimorbidity in older adults. Age and Ageing. 2017 Nov 1;46(6):882–8.
6. Verbeek-Oudijk D, Plaisier I, den Draak M, de Klerk M. Knelpunten in de zorg voor thuiswonende ouderen. Sociaal Bestek. 2019 Jun 14;81(2):13–5.
7. Buurman BM. Haastige spoed is zelden goed: het belang van samenwerken bij acute zorgvragen van ouderen. 2016.
8. Buurman BM, Hoogerduijn JG, de Haan RJ, Abu-Hanna A, Lagaay AM, Verhaar HJ, et al. Geriatric conditions in acutely hospitalized older patients: Prevalence and One-Year survival and functional decline. PLoS ONE. 2011 Nov 14;6(11):1–7.
9. Nederlandse Zorgautoriteit. Marktscan Acute Zorg. 2017.
10. Stuurgroep Kwaliteitskader Wijkverpleging. Kwaliteitskader Wijkverpleging. 2018.
11. Putter ID de, Francke AL, Veer AJE de, Rademakers JJDJM. Kennissynthese de wijkverpleegkundige van vandaag en morgen: rollen, samenwerking en deskundigheid van wijkverpleegkundigen. NIVEL; 2014.
12. Yildirim B, Özkahraman Ş. Critical Thinking in Nursing Process and Education. International Journal of Humanities and Social Science. 2011;1(13):257–62.
13. Xu K, Nelson B, Berk S. The changing profile of patients who used emergency department services in the United States: 1996 to 2005. Elsevier. 2009;54(6):805–10.
14. Leonard C, Bein KJ, Latt M, Muscatello D, Veillard AS, Dinh MM. Demand for emergency department services in the elderly: An 11 year analysis of the Greater Sydney Area. EMA - Emergency Medicine Australasia. 2014;26(4):356–60.
15. Lowthian J, Curtis A, Stoelwinder J, Mcneil J, Cameron P. Emergency demand and repeat attendances by older patients. Internal Medicine Journal. 2013 May;43(5):554–60.
16. Deschodt M, Devriendt E, Sabbe M, Knockaert D, Deboutte P, Boonen S, et al. Characteristics of older adults admitted to the emergency department (ED) and their risk factors for ED readmission based on comprehensive geriatric assessment: A prospective cohort study. BMC Geriatrics. 2015 Apr 26;15(1).

17. Pallin DJ, Allen MB, Espinola JA, Camargo CA, Bohan JS. Population Aging And Emergency Departments: Visits Will Not Increase, Lengths-Of-Stay And Hospitalizations Will. Health Affairs. 2013 Jul 2;32(7):1306–12.
18. Winkel E, de Kousemaeker G. Onderzoek naar duurzame inrichting spoedzorg keten voor ouderen. Fluent; 2017.
19. Lambregts J, Grotendorst A, van Merwijk C. Bachelor of Nursing 2020: Een Toekomstbestendig Opleidingsprofiel 4.0. Springer. 2016.
20. Bleijenberg N, Hoeijmakers M, van Straalen L, Schuurmans M. Rapport kennisagenda wijkverpleging: een routeplanner voor de toekomst. 2018.
21. Holloway I, Galvin K. Qualitative Research in Nursing and Healthcare. Fourth edition. Chischester: Wiley Blackwell; 2017.
22. Cooper S, Endacott RJEMJ. Generic qualitative research: A design for qualitative research in emergency care? Emergency Medicine Journal. 2007 Dec;24(12):816–9.
23. Boeije H. Analysis in Qualitative Research. London: Sage; 2014.
24. DeJonckheere M, Vaughn LM. Semistructured interviewing in primary care research: A balance of relationship and rigour. Family Medicine and Community Health. 2019 Mar 1;7(2):1–8.
25. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. International Journal for Quality in Health Care. 2007 Sep 16;19(6):349–57.
26. Creswell JW, Poth CN. Qualitative inquiry and research design: choosing among five approahes. Fourth edition. London: Sage; 2018.
27. Malterud K, Siersma VD, Guassora AD. Sample Size in Qualitative Interview Studies: Guided by Information Power. Qualitative Health Research. 2016 Nov 1;26(13):1753–60.
28. Microsoft Teams: vergader, chat, bel en werk samen, allemaal op één plek [Internet]. Nederland. 2021 [cited 2021 Mar 7]. Available from: https://www.microsoft.com/nl-nl/microsoft-teams/group-chat-software
29. Nederlandse Zorgautoriteit. Monitor acute zorg 2018. 2018.
30. Houghton C, Casey D, Shaw D, Murphy K. Rigour in qualitative case-study research. Nurse Researcher. 2013;20(4):12–7.
31. Braun V, Clarke V. Using thematic analysis in psychology. 2006;3(2):77–101.
32. Qualitative Data Analysis Software | NVivo [Internet]. 2021 [cited 2020 Oct 23]. Available from: https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home
33. Morse JM, Barrett M, Mayan M, Olson K, Spiers J. Verification Strategies for Establishing Reliability and Validity in Qualitative Research. International Journal of Qualitative Methods. 2002 Jun;1(2):13–22.

34. World Medical Association. World Medical Association declaration of Helsinki: Ethical principles for medical research involving human subjects. JAMA - Journal of the American Medical Association. 2013;310(20):2191–4.
35. Your research: Is it subject to the WMO or not? | Investigators | The Central Committee on Research Involving Human Subjects [Internet]. [cited 2021 Mar 7]. Available from: https://english.ccmo.nl/investigators/legal-framework-for-medical-scientific-research/your-research-is-it-subject-to-the-wmo-or-not
36. Raad voor Volksgezondheid en Samenleving. Van deelbelangen naar gedeeld belang: een handreiking voor regie op toegankelijke acute zorg. Den Haag; 2020.
37. Cusveller B, van Hell M. Screening van complicatierisico's: Welke factoren beïnvloeden het registreren van kwaliteitsindicatoren? Tijdschrift voor verpleegkundige experts. 2017 Aug 21;127(4):50–4.
38. Nieuwboer MS, Perry M, van der Sande R, Maassen ITHM, Olde Rikkert MGM, van der Marck MA. Identification of influencing factors and strategies to improve communication between general practitioners and community nurses: a qualitative focus group study. Family Practice. 2018;35(5):619–25.
39. Nieuwboer MS, van der Sande R, van der Marck MA, Olde Rikkert MGM, Perry M. Clinical leadership and integrated primary care: A systematic literature review Clinical leadership and integrated primary care: A systematic literature review. European Journal of General Practice. 2019;25(1):7–18.

Tables and figures

Table 1: Home care nurses demographics

Characteristics	Number (n = 12)
Gender, n (%) **Female**	11 (91.7%)
Age in years, mean (min-max)	41.7 (26-60)
Work experience as a home care nurse in years, mean (min-max)	10.2 (2-25)
Working hours a week, mean (min-max)	29.9 (16-36)

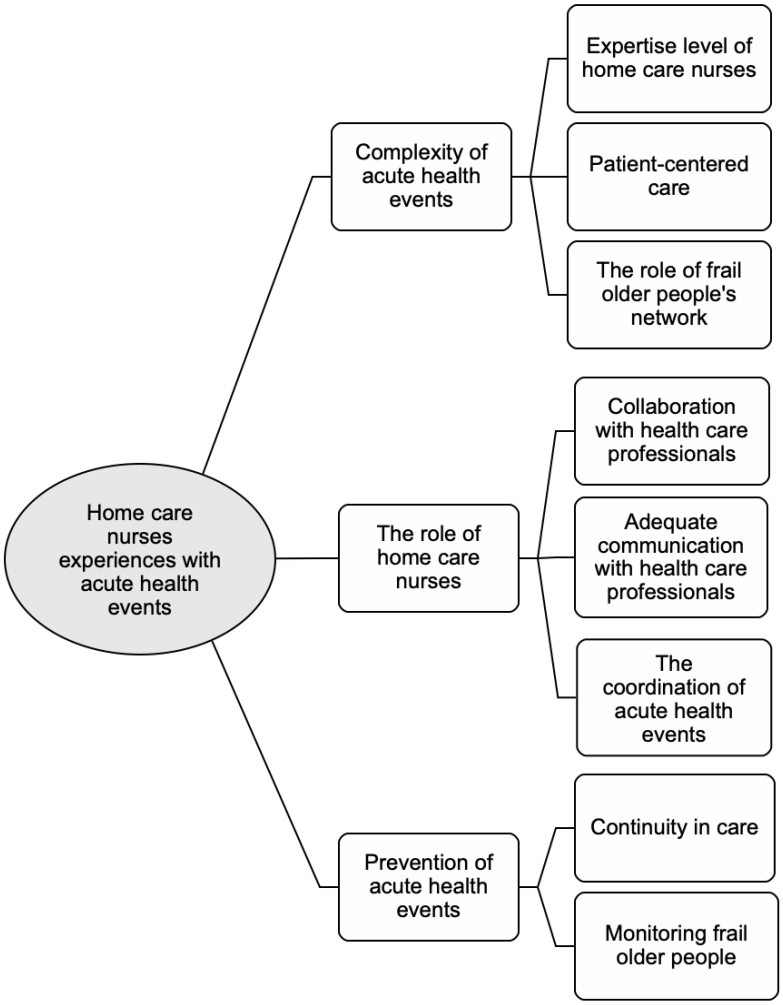

Figure 1: Thematic mind map

Appendix 1: Interview guide of the semi-structured interviews with home care nurses

Topics	Questions
Grand tour question	The number of older people is growing, and more and more of them are frail, so the emphasis is on maintaining independence living in the community as long as possible. How do you experience this transition in care? As a result of the growth in frail community-dwelling older people, we're seeing an increase in acute health events among them. How do you experience this? How do you define an acute health event in frail older people in home care?
Recognising acute health events	Discuss an acute health event the respondent most remembered or experienced recently. Continue asking for: • How to recognise • Feeling during recognising • Knowledge level • Collaboration • Points of improvement
Anticipating acute health events	Discuss an acute health event the respondent most remembered or experienced recently. Continue asking for: • Sequence of anticipating • Feeling during anticipating • Knowledge level • Collaboration • Points of improvement
Managing acute health events	Discuss an acute health event the respondent most remembered or experienced recently. Continue asking for: • Contact other disciplines • Progress collaboration • Feeling during managing

	• Knowledge level • Points of improvement
Impact and the future	• Impact of acute health events • Organising acute care in the community
Baseline characteristics	• Gender • Age • Work experience as a home care nurse • Working days per week