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Original Study

Generalist-Specialist Collaboration in Primary Care for Frail Older Persons: A Promising Model for the Future



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A B S T R A C T

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Objectives: The complex care needs of frail older persons living at home is a major challenge for health care systems worldwide. One possible solution is to employ a primary care physician (PCP) with additional geriatric expertise. In the Netherlands, elderly care physicians (ECPs), who traditionally work in nursing homes, are increasingly encouraged to utilize their expertise within primary care. However, little is known about how PCPs and ECPs collaborate. Therefore, we aimed to unravel the nature of the current PCP-ECP collaboration in primary care for frail older persons, and to identify key concepts for success.

Design: A qualitative multiple case study with semistructured interviews.

Setting and participants: A selection of 22 participants from 7 “established collaboration practices” within the primary care setting in the Netherlands, including at least 1 ECP, 1 PCP, and 1 other health care professional for every included established collaboration practice.

Methods: Transcripts of individual interviews were analyzed using largely double and independent open and axial coding, and formulation of themes and subthemes.

Results: Data analysis revealed 4 key concepts for success: (1) clarification of roles and expectations (ie, patient-centered care and embedding in existing care networks), (2) trust, respect, and familiarity as drivers for collaboration (ie, mutual trust through knowing each other and having shared goals); (3) framework for regular communication (ie, structural meetings and a shared vision); and (4) government, payer, and organization support (ie, financial support and emphasis on the collaboration’s urgency by organizations and national policy makers).

Conclusions and Implications: For a successful generalist-specialist collaboration, health care professionals need to invest in building relationships and mutual trust, and incorporating their efforts in the existing care networks to guarantee patient-centeredness. When provided with reimbursement and appreciation, this collaboration is a promising change in general practice to improve the care and outcomes of frail older persons.

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Aging of the world’s population will lead to twice the amount of people aged ≥ 60 years (from 12% to 22%) between 2015 and 2050.¹ In the Netherlands, the amount of people who are 75 years and older will increase from 1.4 million in 2018 to 2.0 million in 2030, of whom half will be frail.² With the implementation of the long-term care act (WLZ) by the Dutch government in 2015, the focus within older adult care shifted toward facilitating people to live in their own homes as long as possible with a good quality of life. Consequently, the threshold for admission to nursing homes became stricter, and

residential care homes were shut down.³ As a result, an increasing number of frail older persons receive care from primary care professionals,^{4,5} with the primary care physician (PCP) acting as gatekeeper and medical coordinator.⁶ The complexity of the holistic, geriatric, and palliative care needs of frail older persons composes a major challenge for PCPs in the Netherlands.⁷ Therefore, additional specialist expertise in the care for frail older persons living at home is required.⁸

The PCP's key role in the medical care for frail older persons living at home combined with the aging population has made countries around the globe aim for increasing the number of PCPs, stimulating interprofessional primary care including incorporating nursing professionals, and routine identification of frailty in order to meet the health care demand.^{9–11} Furthermore, 2 countries, in particular, have aimed to increase specialist expertise in primary care. Japan has launched a health plan to provide more care at home to frail older persons by increasing the number of home care physicians, who are PCPs or internists.¹¹ In the Netherlands, elderly care physicians (ECPs) are the perfect candidates for adding more specialized medical care for frail older persons living at home. The profession of ECPs is unique in the world. ECPs follow a 3-year specialist training program to care for frail older persons, primarily in nursing homes, but also sometimes in primary care.¹² Policy makers have emphasized the importance of ECPs' expertise, leading to reimbursement of ECP deployment in primary care.

ECPs are increasingly consulted in Dutch primary care; however, how they are deployed is not uniform,¹³ and how they collaborate with PCPs and other primary health care professionals is unknown. A contemporary understanding of the generalist-specialist collaboration between PCPs, ECPs, and other health care professionals is needed in order to incorporate the expertise of ECPs in primary care as effectively and efficiently as possible.¹⁴ Therefore, the aim of this study was to unravel the nature of the current PCP-ECP collaboration in primary care for frail older persons, and to identify barriers, facilitators, and key concepts for success.

Methods

Research Design

A qualitative study design with semistructured interviews was used to gain a deeper understanding of the participants' experiences and opinions on the topic of study. We used a multiple case design with embedded subunits, such that the case of interest, which is the current generalist-specialist collaboration model in Dutch primary care for frail older persons, consisted of multiple subunits that each used a different collaboration strategy. Each subunit was composed of an autonomous and established collaboration practice with PCP, ECP, and other health care professionals. This design was used as the case could not be considered without its context and to enable a cross-case analysis, as well as an exploration of differences between and within subunits in order to replicate findings.^{15,16} We followed the consolidated criteria for reporting qualitative research (COREQ).¹⁷

Setting and Participants

The study was performed in the Dutch primary care setting. For the selection of subunits, a background search consisting of a (gray) literature review and consultation with key experts in the field was performed to identify different generalist-specialist collaboration strategies (see [Supplementary Material 1](#) for further information on the setting). For every collaboration strategy that emerged, we purposively selected 1 subunit to study, being an “established

collaboration practice,” based on predefined validated criteria (see [Supplementary Table 1](#)).^{18,19} Additional inclusion criteria of the established collaboration practices were at least 2 years of structural collaboration and in-person contact between the ECP and the older person living at home.

For each established collaboration practice, a contact person was asked as to which colleagues with the most knowledge on and experience with the collaboration initiative could be approached for participation. We recruited at least 1 ECP, 1 PCP, and 1 other health care professional (eg, practice nurse—elderly care, geriatric nurse, nurse practitioner) per established collaboration practice ([Supplementary Box 1](#)).

All participants were provided with an information sheet detailing the study and provided audio-recorded informed consent prior to the interview.

Data Collection

An interview guide informed by the background search was used for the interviews after pilot testing (see [Supplementary Table 2](#)). The items on barriers and facilitators of the generalist-specialist collaboration were related to 4 groups of influential factors from the implementation literature: individual context, social environment, organizational context, and health care system and government.²⁰ Other items were related to “best practice” criteria and factors for success²⁰ to obtain as much information as possible for the identification of key concepts of success. The interviews were conducted between September 2020 and April 2021 and took place through videoconferencing or by phone, in case of (technical) problems with the videoconferencing. All interviews were recorded and fully transcribed. Consistent with qualitative research methods, the participants were invited to check, correct, and/or supplement the transcription of their interview. They received a secure email with the transcription and were asked to reply within 2 weeks. These checked versions were used for analysis.

Data Analysis

All interviews of subunit 1 and 2 were open coded independently by 2 researchers (A.W., T.V.). They started axial coding after completing subunit 1. The open and axial coding was discussed until consensus was reached. For each consecutive subunit, the axial codes that emerged from the previous subunit were used and adapted or supplemented if necessary. From subunit 3, 1 interview of each subsequent subunit was independently open coded by 2 researchers (A.W., T.V.) and discussed until consensus was reached. The other interviews of these subunits were coded by one researcher (T.V.) and discussed with the other researcher (A.W.) if necessary. For subunit 3 to 7, axial coding was performed by one researcher (T.V.) per subunit and discussed with the other researcher (A.W.). For this analysis, ATLAS.ti (version 8.4.20; <https://atlasti.com/>) was used. Three researchers from different health care backgrounds (M.P.: PCP; A.W.: nurse; T.V.: ECP trainee) collaboratively formulated themes and subthemes on corresponding codes while using an online visual collaboration platform. Thematic analysis commenced after the interviews of subunit 1 and continued until data saturation, based on the principle of inductive thematic saturation, was achieved.²¹

Ethical Consent

The study is in accordance with the Medical Research Involving Human Subjects Acts (WMO) and the declaration of Helsinki. The local

Table 1
Description of the 7 Established Collaboration Practices

Collaboration Practice	Key Differentiators Between the 7 Established Collaboration Practices						Results of the Key Differentiators
	Setting From which the ECP Is Deployed in Primary Care	Close Collaboration of ECP With Other Health Care Professional(S) (Nurse, Psychologist) From the ECP's Setting	Solo Deployment of ECP*	ECP Mainly Deployed as Copractitioner	Part of an Organization With Long-Term Care Beds	Possibility of Short-Term Admission in a Nursing Home Aimed at Clinical Assessment and Observation, and Short-Term Treatment	
1	Self-employed treatment center for elderly care at the same location as the PCP	x		x			Delegation of tasks from the ECP to a geriatric nurse was mentioned as a way to optimally use the available capacity and expertise, and to improve quality of care (theme 1). The ECP working at the same location as the PCP promotes accessibility and approachability, which helps build mutual trust (theme 2).
2	Long-term care organization with expertise center and team in primary care that closely collaborates with a regional hospital and the local PCP association	x			x		Delegation of tasks by the ECP to a geriatric nurse was mentioned as a way to optimally use the available capacity and expertise, and to improve quality of care (theme 1). Close collaboration with 1 hospital and the local PCP association facilitates opportunities to get to know each other and to clarify reciprocal agreements This serves the vision of well-coordinated elderly care in the region (themes 2, 3, and 4).
3	Long-term care organization participating in a strong regional collaborative care network, including the regional hospital	x	x		x		Delegation of tasks by the ECP to a psychologist was mentioned as a way to optimally use the available capacity and expertise (theme 1). Owing to the expressed need of the PCPs in the network to deliver appropriate care for older persons, a joint triage system of referrals in which the PCP, ECP, and involved hospital specialists are included is launched. This enables customization of patient centeredness in elderly care by combining multiple ways of thinking and the expertise of the involved physicians (themes 1, 2, and 4).
4	Independent care institution that delivers ECPs to long-term care organizations to structurally collaborate with a PCP in the primary care setting		x				The ability to work with the same ECP creates an obvious learning effect for the PCP by adding the expertise of the ECP. Therefore, the quality of care is improved (Theme 2).
5	ECP as freelancer (member of cooperation of freelancers) with structural and close collaboration with a number of general practices		x				This provides the ECP with the freedom to shape the care for the older patients as authentic patient centered care, as working as a freelancer prevents being restricted by regulations to a certain extent (themes 1 and 4).
6	Long-term care organization as a network partner of a PCP association that strongly promotes collaboration between PCPs and ECPs		x		x		Because of the need to work more efficiently in rural areas with an increased aging population, the ECP is employed as an accessible consultant for almost every PCP in the region. This collaboration promotes an explicit mutual learning effect, with the goal of boosting knowledge and expertise in elderly care in the PCP practice and thereby enabling the ECP to work more efficiently (themes 2 and 4).

7	Academic long-term care organization with an existing academic partnership with PCPs as a foundation for collaboration in primary care, with the possibility for short (diagnostic) admission	x	x	x	x	Delegation of tasks from the ECP to an NP was mentioned as a way to optimally use the available capacity and expertise (Theme 1). As a result of the deployment of the ECP as copractitioner, securing and fulfilling the patient's goals is the ECP's responsibility. This prevents a lack of action in response to the set goals and relieves the PCP (Theme 1). Existing relationships between ECPs and PCPs that are involved in academic partnerships facilitate fast decision making and expansion of their collaboration in primary care. Also, the underlying vision of the academic organization, with a strong belief in the importance of the innovative collaboration of the PCP and ECP, is helpful due to providing stable financial support of this vision (themes 2 and 4).
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The included practices had existed for 4 to 20 years and they were located throughout the Netherlands, including practices from more sparsely populated rural areas. Characteristics that were common to all established collaboration practices: ECP carried out home visits to patients, deployment of the ECP on consultation basis, structured multidisciplinary team meetings. *In case of solo deployment of the ECP, delegations of tasks took place (to a small extent) from the ECP to a practice nurse with expertise in older adult care who works in close collaboration with the PCP.

research ethics committee (CMO) waived the study for formal ethical approval.

Results

Participant Characteristics

A background search identified 7 PCP-ECP collaboration strategies. For each strategy, an established collaboration was included; their characteristics and key differentiators are displayed in Table 1. The practices were located across the Netherlands, including practices from both urban and rural areas. Twenty-three health care professionals were contacted to participate. One professional, a PCP, refused to participate owing to a lack of time. Seven PCPs, 7 ECPs, 7 other health care professionals (2 geriatric nurses, 1 nurse practitioner, and 4 practice nurses), and 1 coordinator of an overarching PCP organization were interviewed. The participants, 4 males and 18 females, were between 35 and 60 years old. Their work experience in their current profession ranged from 1 to 29 years. To prevent identification of the participants, individual characteristics are not shown.

Themes

The analysis revealed 4 themes and related subthemes describing the nature of the current PCP-ECP collaboration including their encountered barriers, facilitators, and key concepts for success: Clarification of Roles and Expectations; Trust, Respect, and Familiarity as Drivers for Collaboration; Framework for Regular Communication; and Government, Payer, and Organization Support (see Figure 1). On all 4 themes, data saturation was reached.

Theme 1. Clarification of Roles and Expectations

Collaborative roles and positions

Participants across all subunits mentioned that a patient-centered approach was crucial. The use of an individualized care plan and clear and open communication were considered effective strategies to accomplish this.

Practice nurse: It's all about the patient. ... You have to look at what the patient wants, that's the one in charge, not us as care professionals.

The PCP in the role of medical coordinator facilitated a clear division in responsibilities between the health care professionals involved, and also preserved the often long-standing relationship between PCP and patient. In 5 of the 7 subunits, the ECP was mainly involved as a consultant for the PCP, and their deployment in a specific patient case was mostly described as "temporary and advisory." PCPs described the role of the ECP as very supportive, adding expertise and proactivity to patient care. In 2 subunits, the ECP had the role of copractitioner together with the PCP for as long as was necessary. This type of collaboration required clarification of the responsibilities for both the health care professionals and the patient.

ECP: The PCP remains the medical coordinator at all times. ... I know how good the relationship between PCP and patient can be. ... That would mean they would lose their PCP during the winter of their lives. They don't want that, also, it's not necessary at all.

Employment of the ECP in the pre-existing care networks around the patient was found to be important in the preservation of relations and continuity of care. It was highlighted that several health care professionals in the networks, such as community nurses and welfare



Fig. 1. Key components of generalist-specialist collaboration in primary care for frail older persons.

workers, had a crucial mediating role in the collaboration which emerged from their signaling function and their participation in team meetings.

ECP: Our vision is to work with the people available in the network, who are sometimes known by the patients for many years. They will stay when we leave.... Knowing the network is significant, the existing relations are very valuable.

Delegation of tasks

Across all subunits, nursing professionals played an important role. Delegation of tasks from the physician to the nurse was mentioned as a way to optimally use the available capacity and expertise, and to improve quality of care. It was noted that the coordination of older adult care in general practice was an important task of the practice nurse. Also, nurses performed many tasks in the preparation of the ECPs' consultations and in the follow-ups afterwards. As such, nurses enabled both PCPs and ECPs to work efficiently.

ECP: Working with a nurse practitioner was very satisfying, ... because they are also good in the medical domain. ... They can do an awful lot that I can delegate.

ECP: In our region, we are able to meet the demand because the physicians are flexible to a great extent.... We are able to let go of tasks and to delegate to other physicians and nurse practitioners.

Theme 2: Trust, Respect, and Familiarity as Drivers for Collaboration

Mutual trust

Knowing each other was highlighted by all participants as very important as it allows for familiarity with each other's expertise and added value. This familiarity was mentioned as a key factor for acquiring mutual trust, which is considered a driver for collaboration. Physical proximity of the ECP during PCP care was identified as a facilitator in acquiring mutual trust, but was not a requisite. Both ECPs and PCPs expressed the importance of being trustworthy partners. The ECPs described their trustworthiness as "being available when needed" and "not withdrawing from primary care" in case of intramural scarcity of ECPs.

Practice nurse: Knowing each other, then you experience how someone works.... When I refer someone it is not just a referral,

but I know ... that I put the patient in the hands of a good health care professional.

ECP: It depends on the trust between the PCP and ECP, a stable team that provides the possibility of valuing each other.

Common Goal

Sharing a goal was also seen as a driver, including the urgency for collaboration in a changing society and the shared interest in preserving the quality of life of frail older persons. Involvement of a health care professional passionate for older adult care contributed to starting and maintaining a collaborative practice.

PCP: For me, it is so important that I have somebody who can think with me about the older person. That group is so big.... But it is also such specific knowledge. I learn from that every day.... I really can't imagine how to work without it.

ECP: We see that there is a need for collaboration due to the increasing demand for elderly care at home.... That is because people have to live in their own homes for longer and we can't offer the capacity intramural.

The perception of improved outcomes from the collaboration were similar across all subunits and supported the shared goal: better care due to the additional expertise; better health and quality of life as a result of this holistic approach; lower costs due to less hospital admissions, less referrals to outpatient clinics, and postponed admissions to nursing homes; and an increase in the meaning attached to the work by unburdening the PCP and instigating a mutual learning effect.

Geriatric nurse: What is the added value of the collaboration? ... It's more of a feeling, but I think we less often continue treatments which we may be doubtful of their added value. Also less admissions to the hospital.

PCP: For me it's very nice that I have such a colleague, we learn from the collaboration too, and from the other side, the ECP also learns from the PCP. So we both experience a mutual learning effect.

Underlying attitudes

Multiple factors concerning individual attitudes were outlined by several participants. First, exhibiting motivation and an openness to the collaboration was considered essential. This motivation was explained as the willingness of PCPs to invest in adapting their older adult care practice and collaborating with another physician in their own domain. Several ECPs noted that a lack of motivation was a reason to avoid investing in the collaboration with a PCP.

Geriatric nurse: There are still PCPs who think of elderly care as an inconvenient part of their job or that it's too time consuming. You see that with PCPs who are very motivated, we have to do less, ... because they learn and can do more by themselves.

Second, being able to adjust their approach to the PCP's practice was considered essential by the ECPs involved. ECPs aim to tailor their work based on the PCP's request and generally experienced positive outcomes when preserving the existing atmosphere in the different PCP practices they work with.

ECP: I will not force the PCPs to work in a certain way. ... I don't do that at all. So yes, for me it's all about arranging elderly care in a good way.

In 2 subunits concerning collaboration, exhibiting a sense of equality was mentioned as a third important underlying attitude. Participants indicated that possible feelings of inferiority from the PCP

might obstruct the ECP's approachability and should therefore be prevented.

PCP: We all have our own expertise. We are equal partners in communication and that is beautiful. Then you see people grow.

Theme 3 Framework for Regular Communication

Meetings and coordination

In every subunit, a structural multidisciplinary team meeting was the central collaborative strategy. Although the organization and course of the meetings differed between subunits, the goals of the meetings were similar, both as a way of fostering coordination between members and also building mutual trust. Having efficiently integrated digital systems with electronic patient records was mentioned as a prerequisite for coordination and the implementation of patient care. Ideally, health care professionals would have 1 shared digital system with electronic patient records to optimally comply with the care plan. Direct and frequent mutual contact in a small circle, either face-to-face or by phone/chat, was mentioned as an essential method of communication between the health care professionals and resulted in better coordination of care.

ECP: I find it especially important that I see people in the multidisciplinary meetings. That we are in contact with each other. That we get to know each other.

Vision and process agreements

In all subunits, some processes were based on implicit collaboration agreements. A number of participants expressed their wish to have more formalized process agreements, but most participants believed this was not strictly necessary. Similarly, the shared vision and goals of the established collaboration practice were often not explicitly discussed or formally recorded. Mutual trust was mentioned as a potential reason for the absence of formal agreements.

ECP: Did we formalize that? No, actually not. No, that just grew over the course of the time.

Theme 4 Government, Payer, and Organization Support

Top-down support

The feeling of support from organizations and national policy makers promoted the collaboration. The most commonly mentioned prerequisites in which the government or organizational policy played an important role were financial aspects in legislation, additional training, sufficient capacity of health care professionals, and insight and stability into complicated regulations within older adult care. In most subunits, a lack of these prerequisites never resulted in a termination of the collaboration because of the presence of the internal drivers for collaboration.

ECP: Within nursing homes, there is already a shortage of staff, which seriously limits professionals' time to work in primary care.

Emphasizing urgency

Health care professionals described that when an organization emphasizes the urgency of PCP-ECP collaboration in primary care, and particularly when it is included in the organizations' vision, they feel supported and motivated.

Coordinator of PCP organization: It's about sharing our vision, that feeling of importance. We visit every general practice 2 to 3 times a year and talk about the elderly care program.

ECP: The organization has to back the ECPs. That's very important.

Key Differentiators Between the Strategies of the PCP-ECP Collaboration Model

See Table 1 for the results of the analysis between subunits as to the key differentiators between the 7 established collaboration practices included. All of these differentiators were related to the themes identified in the cross-case analysis above. In particular, intrinsic factors, such as drivers for collaboration, building relationships and acquiring mutual trust, and prerequisites in organizational context, such as top-down support and emphasizing urgency, were covered by most of the key differentiators. Some of the main key differentiators were “close collaboration between ECP and other health care professional(s) (nurse, psychologist) from the ECP's perspective” of strategies/practice models 1, 2, and 3 and “ECP mainly deployed as co-practitioner” of strategies/practice models 1 and 7.

Discussion

Using a multiperspective approach, we have generated a deeper and novel understanding of the generalist-specialist collaboration between the PCP, ECP, and other health care professionals in Dutch primary care. For a successful PCP-ECP collaboration, the health care professionals need to invest in building relationships and mutual trust, while integrating their efforts in the existing care networks to guarantee patient-centeredness. Further, there is a dependence on structural support from the organizations and national policy makers to ultimately change general practice and improve the care and outcomes of frail older patients by providing patient-centered proactive older adult care.

Comparison With Previous Research

Although the cornerstone of primary care in the Netherlands, with a personal and integral approach from the PCP, is a good foundation for older adult care,^{22,23} our study suggests that collaboration with an ECP is a valuable addition to the care for frail older persons at home. ECPs can facilitate the required shift toward a more proactive and patient-centered care atmosphere in a primary care setting, which has a traditionally reactive nature.²⁴ ECPs are able to provide their specific expertise and methods, which are known to increase the appropriateness of the care provided.²⁵ In accordance with the literature, we found that PCPs want to keep a central role in the care of frail older persons and deliver integrated care.^{26,27}

Limited literature is available on the role of ECPs in primary care. A recent pilot study showed the importance of a close professional relationship and clearly defined roles and responsibilities as key to fostering a good collaboration between PCP, ECP, and case managers in dementia care (van Beusekom J.M.A., Nieuwboer M.S., Perry M.: unpublished data). These findings correspond to the results of our study. In addition, our study provides a deeper understanding of the mutual learning effect.²⁸ This may enable PCPs to provide better care to frail older persons, and allow ECPs to work more efficiently, which is an important finding in light of the shortages within both professions.

The delegation of tasks, also known as skill mix change, in which specialized nurses perform tasks previously reserved for PCPs and ECPs, played an important role in all of the investigated subunits. Previous research regarding collaboration between PCPs and nurses in primary care confirms our findings that regular communication, respect, and trust are facilitators for collaboration.^{29,30} Further, skill mix change was found to increase the quality of health care and patient-centeredness.³¹ This, in combination with the increased

efficiency that was experienced in our study, makes skill mix change a way to optimize the primary care of frail older persons in primary care.

Current evidence regarding integrated older adult care mainly focuses on microclinical care processes.³² Valentijn et al demonstrated the importance of integrating functions at the micro-, meso-, and macro-levels to be able to deliver integrated primary care.³³ Our study confirms the importance of this cohesion and the role of top-down support. We found that the central role of multidisciplinary team meetings not only serves clinical integration at the micro-level but also provides an opportunity for professional integration at the meso-level. During such meetings, facilitators such as knowing each other, meeting each other, and sharing the same goals, which we identified as strong intrinsic drivers and were described as essential elements for team collaboration,³⁴ develop easily and naturally.

Strengths and Limitations

In this study, we have provided in-depth insight into the current nature of the collaboration between PCPs, ECPs, and other health care professionals in Dutch primary care. By applying data source triangulation and investigator triangulation, we not only enhanced the validity of our study but also added a rich perspective from both theoretical and practical viewpoints.^{35,36} Further, performing thematic analysis until data saturation and multiple deliberations until consensus enhanced the reliability and quality of the findings. Although in-person interviews are seen as the highest standard of interviewer-participant encounters, because of the COVID-19 pandemic, the interviews took place either by videoconferencing or over the phone. Videoconferencing enabled researchers to experience the interaction equally as well as in person with the maintenance of nonverbal and social cues.³⁷ As phone interviews produced similar findings as the videoconferencing interviews, this use of medium also probably did not influence the outcomes.

Implications for Practice, Policy, and Research

Collaboration between PCPs, ECPs, and other health care professionals in primary care is a promising and efficient strategy to enable frail older persons to live at home with the high-quality care they need. However, this collaboration requires investment. Investing in the development of strong intrinsic drivers, such as mutual trust and motivation, is necessary to overcome barriers, to build and reinforce existing professional relationships, and subsequently create an environment for mutual learning. Emphasizing this in the first year of collaboration is essential for the eventual progress toward a mature collaboration.³⁸ Although the presence of strong intrinsic drivers, such as trust, respect, and familiarity, contributed in overcoming a lack of support from the macro level across several subunits, a broadly implemented collaborative PCP-ECP practice ultimately depends on support from policy makers. Such an important transition in primary older adult care requires structural top-down support, consisting of time and reimbursement, as well as appreciation of and trust in the health care professionals involved. Only with this support can collaborations become sustainable.

In recent years, multiple propositions on the necessity of creating a nursing home medical specialty were posed.^{12,39–41} In most countries, general practitioners provide medical care in nursing homes, resulting in a lack of continuity in care and patient-physician relationships.⁴⁰ Creating a nursing home medical specialty, similar to the ECP, may contribute to overcoming these shortcomings in nursing home care. In this study, we illustrated the value of a movement in the opposite direction: adding the ECP's specialist expertise to generalist primary care for frail older persons, as proactivity and better-quality primary older adult care may prevent or delay nursing home admissions and thereby reduce health care costs.^{38,42} We found that serving the needs

of frail older persons living at home by small, team-based, interprofessional collaborations with nurses to enable skill mix change is a promising model. Despite the uniqueness of the ECP, which only exists in the Netherlands, the generalist-specialist collaboration model that was studied could inspire other countries to adapt their current care framework. In particular, the collaboration practices 1, 2, and 3 of the PCP-ECP collaboration model highlighted in this study, in which the ECP closely collaborates with other health care professionals from the ECP's setting, could be suitable and provides promising strategies to shape sustainable care for frail older persons in both the Netherlands and other countries worldwide. Supplementing existing older adult care teams, like the US model,⁹ which includes an MD (generally a PCP), nursing professionals, and social workers with specialist geriatric expertise, for example, provided by a geriatrician, are therefore promising options for global implementation.

The value of integrated care for frail older persons was studied frequently. Nonetheless, the effectiveness of such interventions was not convincingly demonstrated.⁴³ The promising results of this qualitative study indicate a potential positive impact on all aspects of the quadruple aim: improvement of the population's health, patient experience and health care professional's work life, and a reduction of costs as a way to optimize health system performances.⁴⁴ Future research on the effects of structural PCP-ECP collaboration on the quality and efficiency of the care of frail older persons is therefore needed.

In conclusion, deployment of an interprofessional care team, supplemented with specialized geriatric knowledge, is a promising opportunity to shape and improve integrated primary older adult care in a changing society. For a successful generalist-specialist collaboration between PCP, ECP, and other health care professionals, investment in building relationships and mutual trust, and integrating their expertise into existing networks is essential.

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Supplementary Data

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Supplementary Material 1

A background search consisting of a (gray) literature review and consultation with key experts in the field of primary care physician (PCP)–elderly care physician (ECP) collaboration, including ECPs with a double role, for example, researcher, project leader, or board member and policy officers of the Dutch Association of Elderly Care Physicians, and various long-term care organization and PCP

cooperations, was used to identify different generalist-specialist collaboration strategies. The background search resulted in almost 90 national initiatives of structural deployment of the ECP in primary care; those were incorporated in an overview and classified into 7 strategies, based on common characteristics. From every strategy that emerged, we purposively selected 1 subunit to study, being an “established collaboration practice” based on predefined validated criteria (see [Supplementary Table 1](#)).

Supplementary Table 1
Definition of Best Practice

Definition of Best Practice ^{1,2}
Best practices are innovative and promising interventions that, based on experiences and (limited) evidence on their effectiveness, promote qualitatively good care or improvement of quality of care. This means that a best practice contains a work practice, a good approach or example that achieves successful results in a certain context.
Criteria for selection of a best practice in long-term care:
1. Best practices are innovative, meaning advanced and original.
2. Best practices are based on some degree of consensus with existing literature and expertise in care related to the specific topic.
3. Best practices have convincing methods and are applicable in the current practice.
4. Best practices are transferable, meaning they have potential for adaptation in other settings with another context.
5. Best practices promise positive outcomes, meaning they result in a meaningful and tangible improvement of quality of care and/or quality of life, based on experience and (limited) evidence on their effectiveness.
6. Best practices are linked to substantive strategic developments in the health care sector.

Supplementary Table 2
Topic Guide for Semistructured Interviews

Established collaboration practice ¹ and background search	<p>Can you describe what the model is that you apply for the employment of the ECP in primary care?</p> <p>How did this manner of collaboration come about?</p> <p>What was the reason to employ the ECP in this way, in the general practice in which you work?</p> <p>Sub-questions:</p> <ul style="list-style-type: none"> - From when did you apply this model? - Can you describe the context in which you are applying this model? - What is the main target group? How is the case finding formalized? - What is the goal of your collaboration? - What is your model based on? - What is the result of the application of your model? - How is this result determined? <p>How is continuity of care ensured, regarding the treatment and the goals that are set?</p> <p>Which health care professionals are involved in the model that you apply and what is their division of roles?</p> <p>Sub-questions</p> <ul style="list-style-type: none"> - How do you experience the collaboration with the ECP? - How do you experience the collaboration with the other involved health care professionals? - What is your interest in collaborating with the ECP? What are the interests for the others involved? <p>What are the necessary prerequisites for an optimal deployment of the ECP in primary care?</p>
Barriers [†]	<p>What do you think are barriers for the optimal deployment of the ECP in primary care in the model that you are applying?</p> <p>Apply this question to the following 4 domains:</p> <ul style="list-style-type: none"> - Individual context (cognitions, motivation, routine) - Social environment (team/network) - Organizational context (structure/culture/resources) - Health care system and government (financial incentives and legislation)
Facilitators and factors for success ^{1,3}	<p>What do you think are facilitators for the optimal deployment of the ECP in primary care in the model that you are applying?</p> <p>Apply this question to the following 4 domains:</p> <ul style="list-style-type: none"> - Individual context (cognitions, motivation, routine) - Social environment (team/network) - Organizational context (structure/culture/resources) - Health care system and government (financial incentives and legislation) <p>What is your vision on the employment of the ECP in primary care? How did this vision come about? Who shares this vision?</p> <p>What does the business case of your model look like? Is the collaboration cost effective?</p> <p>What was the role of your organization in the implementation of this model in practice?</p>

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Supplementary Box 1. Professional Roles Involved in Collaboration Between PCP and ECP in Primary Care

Primary Care Physician (PCP), also known as General Practitioner (GP) or Family Physician (FP): In the Netherlands, the PCP has a gatekeeping function on hospital care and other medical care providers. They have a central role as the first point of contact for all medical care and provide care close to the patient's home. PCPs have enduring relationships with patients, because patients are registered at 1 general practice.¹ The profession of the PCP is known worldwide. In the United States, PCPs and FPs fulfil this role in primary care. They practice either solo, in small-group private practices or as hospital employees in similarly sized practices owned by hospitals. Recently the staffing configurations in primary care practices have changed, with a greater percentage of nurses involved (ie, nurse practitioners and physician assistants) as a way to optimize the role of primary care in the United States in order to meet the health care needs of the aging population.²

Elderly Care Physician (ECP): The ECP is a unique profession in the Netherlands. The ECP is specialized in long-term care for frail elderly persons and chronic patients with complex health problems, and strives to maintain the best possible level of functioning and quality of life for those patients. ECPs provide specialist elderly care in long-term care organizations and can be consulted by the PCP in regard to frail older patients with complex care demands in home settings.³ The ECP combines the competencies of a PCP with those of a geriatrician.⁴

Geriatrician or Geriatric Physician: A geriatrician is a globally recognized profession, focusing on the unique needs of the elderly and fulfilling those needs in the context of multiple chronic conditions, while also preserving function. In the Netherlands and the United Kingdom most geriatricians are hospital physicians, whereas in the United States geriatricians are primary care physicians who serve in a variety of roles including hospital care, long-term care, and home care.

Nurse Practitioner (NP): The NP is a globally recognized profession, having a master's degree in advanced nursing practice and is licensed to perform medical treatments. The NP in primary geriatric care in the Netherlands can work alongside the ECP with the possibility for the ECP to act as a supervisor to the NP.⁵

Geriatric nurse: The geriatric nurse in the Netherlands is a baccalaureate-educated registered nurse with additional training on aging processes and geriatric care. The geriatric nurse can be deployed alongside the ECP in primary care and carries out a variety of additional tasks to the ECP, but is not licensed to diagnose or perform medical treatments.⁵

Practice nurse—elderly care: The practice nurse—elderly care in the Netherlands is a baccalaureate-educated registered nurse with additional training on geriatric care and works in close collaboration to the PCP at a general practice. The practice nurse supports the PCP in the care for community-dwelling older persons.⁶

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