

Research Article

# “... Above All, It’s a Matter of This Person’s Quality of Life”: Health Care Professionals’ Perspectives on Deprescribing in Older Patients With Limited Life Expectancy

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## Abstract

**Background and Objectives:** Deprescribing may be particularly relevant in older people with limited life expectancy. In order to effectively carry out deprescribing in this population, it is important to understand the perspectives of the full spectrum of health care professionals (HCPs) involved in the management of these patients’ medication. Thus, we aimed to explore different HCPs’ perspectives on deprescribing in older patients with limited life expectancy.

**Research Design and Methods:** Six qualitative focus group interviews were conducted using a semistructured approach. The groups comprised HCPs from both primary and secondary care, including family physicians (FPs), geriatricians, clinical pharmacologists, clinical pharmacists, nurses, and health care assistants. Interviews were audio recorded and transcribed verbatim. Results were analyzed using systematic text condensation.

**Results:** A total of 32 HCPs participated in the study (median age of 40.5 years; 22% male). The analysis elicited three main themes related to HCPs’ perspectives on deprescribing in older patients with limited life expectancy: (a) Approaching deprescribing, (b) Taking responsibility, and (c) Collaboration across professions. Within themes, subthemes were identified and analyzed.

**Discussion and Implications:** Our results imply that different groups of HCPs consider deprescribing an essential aspect of providing good care for older people with limited life expectancy and find that all HCPs play a crucial role in the deprescribing process, with FPs having the primary responsibility. In order to facilitate deprescribing among this population, however, the collaboration between different HCPs should be improved.

**Keywords:** Deprescription, Frailty, End of life care, Focus groups, Qualitative research methods

Deprescribing, defined as the planned, supervised dose reduction or stopping of a medication (Reeve, Gnjjidic, Long, & Hilmer, 2015; Scott et al., 2015), has the potential to reduce inappropriate medication use. As many older people with limited life expectancy receive medications of questionable benefit (Gallagher, Barry, & O'Mahony, 2007; Poudel, Yates, Rowett, & Nissen, 2017; Tjia et al., 2014), deprescribing is particularly relevant to this population.

In general, clinicians are faced with several challenges when prescribing medication for older people with limited life expectancy. First, there is a substantial lack of evidence for the beneficial effects of many commonly used medications among this population (Hilmer, McLachlan, & Le Couteur, 2007). Next, as most clinical treatment guidelines only address single diseases (Boyd et al., 2005), clinicians caring for these people may find such guidelines challenging to apply, as a large proportion of this population suffers from multimorbidity (Mc Namara et al., 2017). Moreover, optimizing treatment may be further complicated as the limited life expectancy in this population might exceed some medications' time to benefit (Holmes et al., 2013). Finally, goals of drug treatment in this population may shift from preventing disease and prolonging life to reducing burden of treatment and maintaining quality of life (Hilmer et al., 2007).

Due to the challenges outlined above, the proven benefits of many medications may not be consistent with goals of care for many older people, when they reach the last years of life. Despite this, clinicians frequently consider deprescribing challenging, and several barriers towards deprescribing have been identified among health care professionals (HCPs). Reported barriers include inertia, poor self-efficacy, and lack of resources and time (Anderson, Stowasser, Freeman, & Scott, 2014; Bokhof & Junius-Walker, 2016). Such barriers may complicate or hinder implementation of deprescribing strategies in practice.

A recent systematic review of qualitative studies has explored HCPs' attitudes towards deprescribing specifically in older patients with limited life expectancy (Lundby et al., 2019). However, the studies included in this review mainly concern the perspectives of primary care physicians. Many different HCPs are often involved in the care of these patients and may have different views and attitudes towards care and treatment which ultimately may influence deprescribing initiatives. As such, in order to effectively carry out deprescribing in this population, it is important to understand the perspectives of all HCPs who are frequently and closely involved in the management of these patients' medication. Thus, we aimed to explore different HCPs' perspectives on deprescribing in older patients with limited life expectancy.

## Design and Methods

A qualitative study design with semistructured focus group interviews was used to explore six different groups of HCPs'

perspectives on deprescribing in older people with limited life expectancy (Kitzinger, 1995). The reporting was carried out according to the COnsolidated criteria for REporting Qualitative research (COREQ) (Tong, Sainsbury, & Craig, 2007) (Supplementary Appendix 1).

The study was built on a phenomenological-hermeneutical approach (Laverty, 2003). Phenomenology is essential in the study of lived experiences of humans. Its focus is on the world as lived and experienced by a person. Hermeneutic aims to further clarify the conditions in which understanding itself takes place. We used a phenomenological-hermeneutical approach as we believe that understanding and interpretation are bound together, and that interpretation is always an evolving process.

## Setting

The Danish health care system is an open-access system, primarily financed through taxes. Family physicians (FPs) control access to most office-based specialists as well as inpatient and outpatient hospital care through a referral system, thus making them gatekeepers to specialized health care. Danish residents have free access to health care in both primary and secondary care, the latter provided that there is a referral from a FP (Pedersen, Andersen, & Søndergaard, 2012).

## Participants and Data Collection

Purposive sampling (Curtis, Gesler, Smith, & Washburn, 2000) was used in the selection of participants. Six focus groups, each consisting of four to six participants (Cleary, Horsfall, & Hayter, 2014), were organized, comprising (a) FPs, (b) geriatricians (from secondary care), (c) clinical pharmacologists (from secondary care), (d) clinical pharmacists (from secondary care), (e) nurses (from primary and secondary care), and (f) health care assistants (from primary care). Each group consisted solely of one group of HCPs. All participants were recruited from within the Region of Southern Denmark.

The six focus group interviews were conducted from November 2017 through January 2018 and lasted 90–120 min. All interviews were conducted with one author as moderator (C.L.) and observer (T.G. or D.N.), respectively. The interviews followed an interview guide, which was developed based on previous literature (Anderson et al., 2014; Bokhof & Junius-Walker, 2016; Lundby et al., 2019), comprising five main topics: (a) the patient population, (b) the HCPs' daily work, (c) the HCPs' collaboration with other HCPs, (d) the use of clinical treatment guidelines, and (e) the process of stopping a medication. In the beginning of each interview, a thorough introduction to the patient population, that is, older patients with limited life expectancy (defined as an expected life expectancy of 1–2 years), was given to the participants. This was done in order to make the participants have this particular

population in mind throughout the interviews and to help them remember their own experiences with treatment of similar patients. The participants were continuously reminded of the population throughout the interviews.

Additional information on the recruitment of participants and practical conduct of the focus group interviews is outlined in [Supplementary Appendix 2](#).

## Data Analysis

The interviews were audio recorded, transcribed verbatim, and analyzed using NVivo 11 (QSR International, n.d.). The transcription was performed by two research assistants under close supervision of C.L. The transcripts were checked for fidelity by C.L. and T.G.

Data were analyzed using systematic text condensation according to Malterud (Malterud, 2012). The analysis was carried out in a four-step process. First, the transcripts were read and sorted into preliminary themes to get an overall sense of the HCPs' perspectives. Next, the transcripts were read, line by line, to identify and classify meaning units and subsequently sort them into codes. The codes were scrutinized and distributed into code groups based on the preliminary themes. Code groups could contain codes describing similar concepts and/or different aspects of a concept. Hereafter, each code group was analyzed in correlation with the aim of the study, with main themes being identified, and meaning units within each of these themes were condensed. Finally, the content of the condensates were synthesized to generalized descriptions reflecting the HCPs' most prominent experiences with and attitudes towards deprescribing in older people with limited life expectancy.

The first three steps were carried out by C.L. and T.G. in close collaboration with D.N. The final step was carried out by C.L.

## Ethics

The study was approved by the Danish Data Protection Agency (approval 17/34563). The Regional Committees on Health Research Ethics waived registration due to the study's qualitative design. Inclusion of participants was based on informed and written consent.

## Results

A total of 32 HCPs ended up participating in the study (Table 1 and [Supplementary Appendix 2](#)). The analysis elicited three main themes related to HCPs' perspectives on deprescribing in older patients with limited life expectancy: (a) Approaching deprescribing, (b) Taking responsibility, and (c) Collaboration across professions (Table 2).

### Approaching Deprescribing

All participants recognized the importance of deprescribing and considered it an essential aspect of providing good care for older people with limited life expectancy. However, due to characteristics related to this particular population, they often found it challenging to assess the continued indication of certain treatments. Two subthemes emerged within this theme: (a) Deciding what matters most and (b) Assessing indication.

**Table 1.** Characteristics of Participants

|  | Median age<br>(range), years | Male, % | Median experience within<br>profession (range), years |
|--|------------------------------|---------|---|
| <b>Primary care</b>  |                              |         |   |
| Family physicians ( <i>n</i> = 5)                                  | 54 (42–67)                   | 60      | 21 (11–41) <sup>a</sup>                               |
| Health care assistants ( <i>n</i> = 5)                             | 39 (27–45)                   | 0       | 4 (4–4) <sup>b</sup>                                  |
| Working in municipal home care ( <i>n</i> = 3)                     |                              |         |   |
| Working in municipal nursing home ( <i>n</i> = 2)                  |                              |         |   |
| <b>Secondary care</b>  |                              |         |   |
| Geriatricians ( <i>n</i> = 5)                                      | 38 (36–45)                   | 20      | 8 (7–17) <sup>a</sup>                                 |
| During residential training ( <i>n</i> = 3)                        |                              |         |   |
| Clinical pharmacologists ( <i>n</i> = 5)                           | 41 (34–56)                   | 40      | 14 (9–28) <sup>a</sup>                                |
| During residential training ( <i>n</i> = 1)                        |                              |         |   |
| Clinical pharmacists ( <i>n</i> = 6)                               | 35 (29–60)                   | 17      | 8.5 (1–34)  |
| <b>Combined primary and secondary care</b>                         |                              |         |   |
| Nurses ( <i>n</i> = 6)   | 35 (25–55)                   | 0       | 7 (1–29)  |
| Working in municipal home care ( <i>n</i> = 3),<br>primary care    |                              |         |   |
| Working in geriatric department ( <i>n</i> = 3),<br>secondary care |                              |         |   |

Note: <sup>a</sup>Median experience within profession as a physician in general. <sup>b</sup>Not stated for three out of the five health care assistants.

**Table 2.** Schematic Example of the Steps in the Condensation from Meaning Units to Main Themes Inspired by Malterud (Malterud, 2012)

| Meaning unit  | Condensation  | Subtheme                                  | Main theme                       |
|---|---|---|----------------------------------|
| "I don't think I use guidelines that much. I believe that I use my common sense and experience over the years." (FP 4)  | Use of treatment guidelines   | Deciding what matters most                | Approaching deprescribing        |
| "I've also had some patients who wanted to take part in it [try deprescribing] because they got the opportunity, well, for temporary discontinuation, so if they really needed it [the drug] again, they could have it." (Pharmacologist 2) | Use of temporary discontinuation to increase patients' willingness to deprescribing | Assessing indication                      | Approaching deprescribing        |
| "And then sometimes you feel like you're caught between a rock and a hard place, thinking 'well, for Pete's sake, isn't there anyone who can help this patient?', right? [...] It's the patient who pays the price." (Nurse 3)              | Being caught between prescribing physicians   | Having or taking responsibility           | Taking responsibility            |
| "Well, if we aren't critical, or the patients aren't critical, then it [the medication] will just be continued." (Health care assistant 4)  | Being observant and ensuring the right medication                                   | Contributing to the deprescribing process | Taking responsibility            |
| "That's also the concern. When you actually contact a physician about some observations or concerns you have for a patient regarding some medicine, and then you are met by, yes, actually a door in your face." (Health care assistant 1)  | Not being heard by other HCPs   | -   | Collaboration across professions |

Note: FP = Family physician; HCP = Health care professional.

### Deciding what matters most

All six groups generally believed that treatment of an older person with a life expectancy of 1–2 years should be focused on maintaining quality of life, which the participants generally referred to as a life without feeling pain or any other discomfort as well as retention of functional level. The geriatricians, clinical pharmacologists, and clinical pharmacists also expressed this as a shift in treatment goals, that is, that the priority should be to maintain the patient's quality of life rather than preventing disease. As such, the participants also believed that treatment of an older person with a limited life expectancy should be restricted to treatment with symptomatic medications, for example, analgesics and antiemetics, as well as other drugs affecting the patient's functional level, for example, antiepileptic and antidiabetic drugs.

"... then it's all about the patient having the best possible life, really, above all, it's a matter of this person's quality of life in the last years. [...] Medications, which are preventive during a longer period, are unnecessary. The patients don't benefit from them." (Pharmacologist 2)

The participants frequently referred to the lack of evidence of the beneficial effects of many drugs in older people as well as the risk of many drugs' time to benefit exceeding the patient's life expectancy as reasons for deprescribing preventive medications. However, the participants also agreed that some preventive medications are more challenging to deprescribe than others, as stopping certain treatments may pose a significant risk to the patient's quality of life.

"If I have a patient with incipient dementia who is treated with Marevan [warfarin], for example, then the

patient has to constantly have blood samples taken, and everything is going somewhat up and down, but do you dare stop this treatment? [...] If the patient gets a blood clot, then what is the quality of life for this person?" (Pharmacist 1)

The participants also acknowledged, however, that patients' perception of good quality of life differs and that some patients may perceive a reduced number of medications as a deterioration in quality of life, as they want to "fight to the end." As such, they agreed that deprescribing of any drug should always, if possible, be decided in collaboration with the patient.

"We cannot put them [the patients] into boxes. You have to consider the whole person, and it differs, after all, what they will accept and what they consider quality of life. There are some people that will do anything to live." (Pharmacist 3)

Conversely, they also agreed that, in order to maintain quality of life, it may sometimes be necessary not to deprescribe, as it may burden some patients unnecessarily, for example, due to possible withdrawal symptoms.

"Yes, and then I let them eat their pills, that is, if it doesn't outright harm them, if they do not have side effects, if they have a good quality of life, as you say yourself, then it isn't at that point that I begin taking something from them." (FP 1)

Another frequently mentioned reason for deprescribing concerned the participants' experiences of the amount of prescribed drugs, which they considered as constituting a significant burden to many frail older patients, also

affecting quality of life. This particularly applied to the nurses and health care assistants who referred to their daily experiences of seeing patients struggling to take all their medications.

*“If it’s difficult for a patient to take their medication, then, well, then you need to get rid of everything that isn’t urgently necessary.”* (Nurse 3)

Thus, the general perception among the participants was that other factors become more important when treating these patients, for example, possible adverse drug reactions and their ability to take medication, which together may negatively affect quality of life.

*“It’s such a hazy picture of all sorts of other factors with our patients. You have the life expectancy and a combination of seven other different things, and are they even capable of taking the tablets, do they want to take them? I believe that a lot of other things come into play, something sort of emotional, whether the patient feels like doing it or feels comfortable about it, which will influence it [decisions about deprescribing].”* (Geriatrician 5)

In continuation hereof, most of the physicians and clinical pharmacists expressed confidence in deviating from treatment guidelines, referring to the importance of the patient’s well-being.

*“If you have the choice of deviating from an established guideline or follow a guideline, well, then it very well might be that you find it easier to just comply with the guideline, because then you have been a ‘good doctor’, however, in reality you have been a bad doctor, because you haven’t done what’s best for the patient.”* (Pharmacologist 1)

In accordance with this, the participants also expressed a need for clinical treatment guidelines to specifically address treatment of frail older people with limited life expectancy.

### Assessing indication

All six groups mentioned lack of indication for treatment as one of the main reasons for deprescribing among older people with limited life expectancy. However, besides the general lack of evidence for medication use in older people, the participants often found it challenging to actually assess the continued indication of certain treatments. They considered several characteristics specifically related to this particular population to complicate this assessment. First, they argued that, when being very old and in the last years of life, a person’s view of life may change, making it challenging to assess whether some patients suffer from, for example, depression.

*“Yes, and what is sadness, really, and what is ‘just being tired and done with life’?”* (FP 1)

Next, the participants considered it particularly challenging to get an impression of the effect of these patients’ medication and thereby to determine whether treatment is still indicated. This especially applied to participants in secondary care, that is, HCPs not seeing the patients regularly.

*“Like when you ask, ‘I can see that you have been taking a tablet for your mood, when did you start taking it?’, ‘I don’t know’. And when you ask, ‘have you felt any effect of it?’, ‘I don’t know’. Then it’s difficult, well, firstly to assess whether there has been any effect of the treatment, but also to figure out what the indication has been, and, well, then to stop the treatment.”* (Geriatrician 5)

Poor compliance, due to, for example, patients suffering from cognitive impairment and/or not being able to take all their medications, was also considered to significantly complicate this process. Another challenge frequently mentioned was the presence of multimorbidity. Due to disease-specific treatment guidelines, advocating initiation of one or several drugs to manage individual conditions, the participants frequently found these patients’ medication regimens to become excessive.

*“... for example, heart medication, well, there they can easily benefit from taking five different drugs and comply with a treatment guideline, but the problem is when they have several [diseases], they are multimorbid, and no guidelines exist for patients who suffer from both heart disease, COPD, pain, and all sorts of other diseases.”* (Pharmacist 5)

Lastly, the participants often found it challenging to assess whether new symptoms are side effects or signs of new disease, requiring initiation of additional treatment. Some participants argued that this scenario often leads to an increase in the patients’ medication.

*“You experience that they [the patients] get some drugs, and then they get some new drugs to handle the side effects from the first drugs, so, well, it quickly becomes a domino effect, right?”* (Nurse 3)

As such, multiple competing factors were considered to complicate assessment of indication and ultimately hinder deprescribing. A frequently mentioned approach to this, however, was to make use of temporary discontinuation, one drug at a time. If no symptoms appeared, the HCPs would become more certain about the lack of indication and thereby more willing to deprescribe. The physicians and clinical pharmacists also argued that this approach makes more patients willing to try deprescribing, as they know that they can always resume their treatment.

*“... they figure out that it didn’t change anything that they stopped taking it [a certain drug]. [...] Yes, and then say, ‘now we’ll try to take a break because your life has changed. That pill you started taking 20 years*

*ago – your heart isn't as strong as it was back then. Your blood pressure may have lowered. Now we'll try getting rid of it and then see what happens, right?"* (FP 5)

In continuation hereof, the participants argued that relatives also have an important role in this assessment. As the relatives see the patients continuously, they may be able to detect new symptoms, new signs of altered behavior, issues related to compliance, etc., which the HCPs are not necessarily able to detect. Several participants across the groups considered relatives an important collaborator in the deprescribing process and found many relatives to acknowledge the importance of deprescribing initiatives.

### Taking Responsibility

All participants generally identified the FPs as those being primarily responsible for deprescribing among older people with limited life expectancy. However, as many different HCPs are frequently involved in treating this particular population, they also believed that all HCPs play a crucial role in the deprescribing process. Two subthemes emerged within this theme: (a) Having or taking responsibility and (b) Contributing to the deprescribing process.

#### Having or taking responsibility

All participants generally considered physicians, independent of medical specialty, as the ones being responsible for deprescribing, also acknowledging that physicians have the legal responsibility. Further, the FPs, clinical pharmacologists, and clinical pharmacists specifically considered the prescribing physician as the one being responsible for also discontinuing the specific drug. A general perception, however, was that if a patient has been prescribed new medications during hospitalization, the patient's FP should take over the responsibility for the treatment after discharge. As such, all groups ultimately pointed out the FPs as those having the primary responsibility for initiating deprescribing activities.

*"As a rule, it's the prescribing physician [who is responsible], but if they [the patients] are transferred to primary care, then the FP must be the one to monitor it [the medication]. [...] If a patient is never to see a psychiatrist again or something like that, then there is no point in the patient taking psychotropics for the rest of their life, because the FP doesn't think that he can tamper with it. Well, that's absolutely grotesque."* (Pharmacologist 2)

The FPs also acknowledged that it makes sense that they have most responsibility for deprescribing as they see the patients regularly.

*"... we have a role in relation to the specialist departments who just keep adding to it [the medication list] within their specialty, that is, we see everything a little more in a helicopter view and are allowed of weeding it out a little."* (FP 4)

When discussing deprescribing specifically in the hospital setting, the geriatricians, clinical pharmacologists, and clinical pharmacists perceived the geriatricians as those having the primary responsibility. They also argued that other medical specialists actually expect the geriatricians to assess the patients' medication, as they themselves have more mono organ priorities.

*"We have to take responsibility for everything on the medication list. It's our core task. [...] We, as geriatricians, have an enhanced responsibility. People expect us to, well, the other specialties will expect that if we have reviewed the medication list, then it's in order."* (Geriatrician 1)

The clinical pharmacists were the only group that mentioned all HCPs to have an actual responsibility. They argued that the person, who identifies a problem, that is, treatment with a drug which a patient may no longer benefit from, has the responsibility to make sure that someone takes action.

*"... the responsibility falls on the one who identifies that the drug is no longer relevant. Yes, it might be that it isn't me that have initiated the treatment, but when I sense that something is amiss, and I of course have examined it closer, then it's actually without importance [who originally has prescribed the drug]."* (Pharmacist 1)

In continuation hereof, the clinical pharmacists often experienced hospital physicians and FPs to avoid the responsibility of deprescribing medications initiated by other physicians.

*"The hospital physicians believe that the FP should do it, and the FP thinks that the medical specialists at the hospital would probably make a decision about it."* (Pharmacist 2)

This was also a widespread belief among the nurses and health care assistants who frequently found the patients and themselves being caught between hospital physicians and FPs.

*"... I have seen, following hospitalizations, that the hospital has made changes to the medication, and then they [the patients] get back home, and then we have to deal with this medication, and then we contact the FP, and then the FP writes back that the responsibility falls on the hospital. Yes, well, but now the patient isn't really hospitalized anymore, and then it must be you who are responsible for this."* (Health care assistant 5)

The FPs and geriatricians themselves had mixed perceptions of how much each other take responsibility in the deprescribing process. While the geriatricians perceived some FPs to really commit to the task, they also perceived others to show no interest in it, and vice versa.

*"... I find that some of them [the FPs] are extremely good at it [deprescribing]. [...] And then there are others where you can see that it has to be 20 years since they have even looked at the medication list."* (Geriatrician 5)

### Contributing to the deprescribing process

The participants believed that all HCPs have an important role to play in the deprescribing process, arguing that their contact with patients differs. The clinical pharmacologists highlighted that it is sometimes a matter of timing when identifying potentially inappropriate medication.

*“Both nursing staff and pharmacists can raise some attention to it [the medication] that is senselessly continued or even inappropriate. [...] Sometimes it’s just a matter of being the one who asks the right questions, and as a physician you don’t always have the time for this. And here, the nurse is sometimes the one who caresses the patient on the cheek at the right moment, or the pharmacist manages to ask, more systematically, which medications the patient takes and why.”* (Pharmacologist 5)

The physicians also argued that it may be easier for nurses and health care assistants to actually identify potentially inappropriate medication, as they have most contact with the patients.

*“Well, at the hospitals it’s often those [the nursing staff] who know the most about how the patients are doing.”* (Geriatrician 3)

Thus, the physicians found that clinical pharmacists and nursing staff play a crucial role in the deprescribing process, as the physicians are dependent on their observations.

*“It’s a really important collaborator [nurses and health care assistants]. [...] Sometimes they pull themselves tight, the patients, when they visit us, and we see one picture of them. But seeing them in their own home, and the observations the nursing staff can provide us through this, that is extremely important.”* (FP 2)

In terms of deprescribing, the clinical pharmacists considered their most important role as asking critical questions regarding the appropriateness of medication.

*“Our role is to ask some critical questions. That is, these questions that concern what is necessary or not. [...] Whether it results in a geriatric consult or whatever it may be, I don’t care about. The most important part to me is that these things are thought through.”* (Pharmacist 1)

Likewise, the nurses and health care assistants perceived their most important role as being observant when dispensing medication, stating that many treatments otherwise may be continued despite no longer being indicated.

*“We do have a duty to be critical towards the medication we dispense. [...] We have an obligation to be critical, that is, if someone has prescribed 10 times Kaleorid [potassium chloride], well, then you have to consider this an extra time before you dispense it. That is, to*

*check with the physician, ‘what is this – is this the right prescription, have you written it wrong, or what is it?’”* (Nurse 1)

To this end, they explained that they sometimes try to reduce the dose of, for example, analgesics when they suspect patients no longer have pain. They also explained that they frequently prioritize in patients’ medication, especially when the patients are no longer able to take all their medications. Following such initiatives, however, they would always consult the responsible physician.

*“... when they start being unable to take all their pills, then we also start to say, well, if you take your prednisolone and painkillers, then we’ll figure out what to do with the other tablets’. That is, then we begin, for example, to cease Unikalk [calcium supplement] and then consult the physician.”* (Nurse 6)

Further, although the clinical pharmacists, nurses, and health care assistants perceived themselves as having a crucial role in the deprescribing process, they also highlighted the importance of recognizing own competencies and knowing when to consult a physician.

### Collaboration Across Professions

The participants found several challenges related to the collaboration between the different groups, which might affect the deprescribing process. One of the most frequently mentioned challenges concerned the collaboration across primary and secondary care. One of the clinical pharmacologists described this as sometimes being a “fight” between primary and secondary care where FPs alter or even reverse medication changes initiated by hospital physicians, and vice versa.

*“Sometimes it turns into some sort of battle about who is smartest [between primary and secondary care]. ‘They shouldn’t decide that’ or ‘I’m more knowledgeable about this’.”* (Pharmacologist 3)

This was also recognized by the clinical pharmacists who perceived FPs to sometimes think of suggestions and medication changes made at the hospital as a correction rather than a help.

*“I have a feeling that sometimes the FPs find it annoying being set straight by ‘the clever ones from the hospital’. ‘You have only seen them [the patients] for two years or two days, while we’ve been seeing them for I-don’t-know-how-many years’.”* (Pharmacist 3)

Regarding the clinical pharmacists, the physicians sometimes found this group to lack an overall understanding of how this patient population should be treated, stating that multiple competing factors affect deprescribing decisions among these patients due to the complexity of this particular population. The FPs and clinical pharmacologists often

found this to negatively affect the collaboration between physicians and clinical pharmacists, as it would force the physicians to consider issues they had already considered themselves.

*“There may be some good suggestions, but sometimes they [the pharmacists] lack that sort of insight into the reasons why the treatment was initiated. Conversely, you can say that they know something about interactions etc. which we aren’t always aware of.”* (FP 2)

The clinical pharmacists, on the other hand, believed that physicians and nursing staff are actually unaware of clinical pharmacists’ competencies and considered this a prominent factor in terms of negatively affecting the collaboration. They therefore considered it important to be physically present in the departments and make other HCPs aware of how clinical pharmacists can contribute in the deprescribing process. When being physically present in the departments, they often experienced an improved collaboration.

*“It’s our responsibility to be sufficiently visible and clear about our competencies. You need to go to the morning conferences and tell about what you do and what people [other HCPs] can ask from you, and we do that a lot.”* (Pharmacist 5)

In terms of the nurses and health care assistants, the physicians generally agreed that they cannot expect the same from health care assistants as from nurses, as nurses have stronger competencies regarding medicine. As such, while the nurses generally found physicians to be responsive towards their observations and concerns regarding a patient’s medication, the health care assistants more often felt that they were not listened to and not taken seriously by physicians, especially FPs. This would make some health care assistants refrain from contacting physicians regarding observations and concerns about a patient’s medication, also stating that this often end up harming the patient.

*“Then you don’t feel like contacting them [the physicians] again. Really, that’s the point where you, well, rather wait till 4 o’clock and then let the evening duty call them. [...] That’s how it goes because you just don’t want to be bothered with these fights with those physicians.”* (Health care assistant 4)

That the health care assistants were not always being heard was also recognized by the nurses who believed that one of the main reasons for this is that some health care assistants too quickly contact physicians, especially FPs, without being able to substantiate their suggestions when discussing with the FPs. This usually leads to an increased rate of contacts to the FPs, which the nurses considered to negatively affect the collaboration. This was also a widespread belief among the FPs. As such, the nurses stated the importance of having their arguments in place as this, from

the nurses’ perspective, usually will make physicians more responsive.

*“If they [the physicians] can tell that you hold professional competencies, that you know what’s wrong with the patient and what the symptoms are, well, then they are responsive.”* (Nurse 6)

In the end, however, all participants acknowledged the need for and expressed an interest in an improved collaboration across the different groups in order to succeed with deprescribing initiatives among this patient population.

*“I believe that we’re in a stronger position [regarding deprescribing] if we support each other. [...] It shouldn’t be regarded as a fight, we just need to figure out how we do this the best possible way.”* (Pharmacologist 2)

## Discussion and Implications

In this qualitative multiple focus group study, we found that different groups of Danish HCPs from primary as well as secondary care are open towards deprescribing and consider it an essential aspect of providing good care for older people with limited life expectancy, with maintenance of quality of life being the top priority in terms of treatment. The participants pointed out the FPs as those being primarily responsible for initiating deprescribing activities among this population but considered all HCPs to play a crucial role in the deprescribing process. Despite this, the participants also found factors related to the deprescribing process to sometimes hinder the initiation or continuation of deprescribing activities. These factors concerned the assessment of the continued indication of certain treatments, which the participants found to be complicated by characteristics specifically related to this patient population, as well as challenges regarding the collaboration between the different groups of HCPs. In terms of the collaboration between the different groups, all participants acknowledged the importance of improving the collaboration in order to succeed with deprescribing initiatives among this patient population. We did not see pronounced differences in the participants’ perspectives according to their affiliation to either primary or secondary care, besides HCPs from secondary care reporting it sometimes being challenging to get an impression of the effect of the patients’ medication and thereby determine the continued indication.

## Strengths and Limitations

The principal strength of this study is the inclusion of six different groups of HCPs. To our knowledge, this is the first study to qualitatively explore the perspectives of all HCPs who are frequently and closely involved in the management of these complex patients’ medication. Further, using the phenomenological-hermeneutical approach together with



our reflections and discussions during the analysis made it possible to become aware of possible biases and preconceived assumptions about what could be found in the study (Laverty, 2003).

The main limitation is inherent to the research method. While focus groups entail discussions among participants and highlight conflicts as well as agreements, they may also make participants report favorable opinions due to peer-pressure. However, the effect of peer-pressure is expected to be limited as several or all the participants in several of the groups knew each other well beforehand, thus creating a comfortable atmosphere during the interviews. Another weakness to the study may be that the organization of the Danish health care system differs from other health care systems, thus lowering the generalizability to other countries. This would particularly concern the challenges related to the collaboration across health care settings reported in this study.

### Comparison to Existing Literature

We recently reported a systematic review of qualitative studies exploring HCPs' attitudes towards deprescribing specifically in older patients with limited life expectancy (Lundby et al., 2019). Although this review mainly concerns the perspectives of primary care physicians, it is generally in accordance with the present findings within each of the identified themes, that is, with participants highlighting the importance of maintaining quality of life when considering deprescribing, pointing out the FPs as those being responsible for initiating deprescribing activities, and discussing challenges related to the collaboration between different groups of HCPs. In another recent study, the authors quantitatively explored which factors FPs, pharmacists, and nurses consider most important for deprescribing among residents in long-term care facilities (Turner, Edwards, Stanners, Shakib, & Bell, 2016). Although the different groups of HCPs individually ranked factors differently, a multidisciplinary group prioritized "residents' goals of care" as most important, thus highlighting the prioritization of the patient's well-being like in our study.

Our study suggests that Danish HCPs hold a different attitude regarding the initiation of deprescribing activities in this patient population. While several studies have described how HCPs, primarily physicians, may refrain from deprescribing due to, for example, uncertainty on how to apply research evidence on medication use to these patients (Fried, Tinetti, & Iannone, 2011; Lundby et al., 2019; Sinnott, Mc Hugh, Browne, & Bradley, 2013), fear of patients experiencing a deterioration in their health status (Harriman, Howard, & McCracken, 2014; Lundby et al., 2019; Turner et al., 2016), and feeling forced to continue prescribing due to disease-specific treatment guidelines (Lundby et al., 2019), the physicians and clinical pharmacists in our study expressed confidence in initiating deprescribing activities, stating that it all comes

down to trying to do what is best for the patient. As such, they also expressed confidence in deviating from treatment guidelines. Despite this, and consistent with previous literature (Turner et al., 2016), they also expressed a need for clinical treatment guidelines to specifically address treatment of frail older people with limited life expectancy.

The participants in our study considered all groups of HCPs to play a crucial role in the deprescribing process. In a recent study, the authors explored different groups of HCPs' perceptions of responsibilities and roles in management of polypharmacy, including FPs, geriatricians, pharmacists, nurses, and social workers (Farrell et al., 2018b). Consistent with our results, all groups considered themselves to hold competencies in terms of managing polypharmacy, although the number of identified competencies varied between the groups. In another recent study, the authors explored the effect of implementing evidence-based deprescribing guidelines and found such initiatives to increase long-term care clinicians', including FPs, pharmacists, and nurses, self-efficacy in developing and implementing deprescribing plans (Farrell et al., 2018a), thus also highlighting different groups of HCPs' perceptions and self-images in terms of contributing to the deprescribing process.

### Implications for Practice

Our study carries implications in terms of facilitating deprescribing among older patients with limited life expectancy. First, there seems to be a need for more evidence on the effects of commonly used medications among this population as well as development of clinical treatment guidelines, either including specific considerations or directly focused on treatment of frail older patients with limited life expectancy. Further, although the different groups of HCPs generally considered all groups to play a role in the deprescribing process, and despite the growing evidence of the positive effects of multidisciplinary interventions and approaches in terms of reducing inappropriate medication use (Gnjidic, Le Couteur, Kouladjian, & Hilmer, 2012; Tjia, Velten, Parsons, Valluri, & Briesacher, 2013), several challenges related to the collaboration were reported. As such, it seems essential to educate and encourage all HCPs to engage in the deprescribing process as well as recognize each other's roles and competencies. Ideally, this should include a continuous development of relevant competencies among the different groups of HCPs.

### Implications for Research

As the FPs were considered to have the primary responsibility for initiating deprescribing activities, it seems relevant to conduct more clinical trials in general practice, with deprescribing interventions being delivered primarily by FPs. Currently, most deprescribing trials conducted among frail older patients with limited life expectancy in primary

care settings have included pharmacist-led interventions, primarily conducted in some type of aged care facility (Ailabouni, Mangin, & Nishtala, 2019; Forsetlund, Eike, Gjerberg, & Vist, 2011; Pitkälä et al., 2014; Wouters et al., 2017).

In conclusion, our results imply that six different groups of HCPs consider deprescribing an essential aspect of providing good care for older people with limited life expectancy, with maintenance of quality of life being the top priority in terms of treatment. Although FPs are considered to be primarily responsible for initiating deprescribing activities, all groups of HCPs are found to play a crucial role in the deprescribing process. In order to further facilitate deprescribing initiatives among this patient population, however, it seems essential to improve the collaboration between the different groups of HCPs.

## Supplementary Data

Supplementary data are available at *The Gerontologist* online.

Appendix 1. Additional information on reporting according to the CONSolidated criteria for REporting Qualitative research (COREQ). Table A. Reporting according to COREQ (Tong et al., 2007).

Appendix 2. Additional information on recruitment of participants and practical conduct of interviews.

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## Conflict of Interest

None reported.

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