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Original article

Healthcare professionals' perceptions of malnutrition management and oral nutritional supplement prescribing in the community: A qualitative study



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SUMMARY

Background & aim: Protein-energy malnutrition is under-recognised in the community despite being common in older adults due to physiological and social changes which are often compounded by chronic disease. This qualitative study aimed to explore the opinions of healthcare professionals (HCPs) working in the primary care and community settings about the management of malnutrition and the prescription of oral nutritional supplements (ONS), often included in the treatment of malnutrition.

Methods: Twelve healthcare professional (HCP) focus groups with 75 participants were conducted: community dietitians (n = 17), registered dietitians working in industry (n = 5), community and residential care nurses (n = 22), physiotherapists (n = 12), pharmacists (n = 9), occupational therapists (n = 6) and speech and language therapists (n = 4). Focus group discussions were audio-recorded and transcribed verbatim. The data were coded and analysed using thematic analysis and key themes with illustrative quotes extracted are presented.

Results: Similar views on malnutrition management existed across professions. 'Gaps in Primary Care Management' was the first key theme wherein HCPs identified limitations in malnutrition management in the community. Barriers included limited or no dietetic services available in primary care and poor communication between general practitioners and wider primary care team members which resulted in inappropriate or delayed treatment. The second key theme, 'Challenges with ONS use in the Community', encapsulated several issues HCPs experienced with ONS usage including inappropriate prescribing and lack of monitoring of treatment goals. Conflicts of interest regarding dietitians working in industry assessing and treating older adults in residential care settings was highlighted by participants.

Conclusions: This study highlights that more emphasis is needed to identify patients when they are at risk of malnutrition to avoid advanced or severe malnutrition presentations currently seen. Community

Abbreviations: CD, Community dietitian; CN, Community-based nurse; CP, Community pharmacist; GP, General practitioner; HCP, Health care professional; ID, Industry dietitian; ONS, Oral Nutritional Supplement; OT, Occupational therapist; SLT, Speech and language therapist.

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dietitians for older people are required to address many of the issues raised including the need for awareness, education and training, resources, and malnutrition care pathway structures.

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1. Introduction

Malnutrition is an issue in community settings in developed countries, with many negative health consequences [1,2]. Older adults aged over 65 years are more vulnerable to developing malnutrition owing to a range of physiological and social factors [1,3,4]. Compared to their well-nourished counterparts, those classified as at risk of malnutrition have an increased risk of all-cause mortality, and are at greater risk of hospital readmissions, reduced quality of life, and loss of independence [5–7]. By 2050, it is expected that 16% of the total world population will be over 65 years [8]. It is imperative, therefore, to plan community care that promotes healthy, independent living for older adults.

Malnutrition is frequently left undiagnosed and untreated; therefore, many patients who may be at risk can be missed even when they encounter health services [9]. Healthcare professionals (HCPs) in primary care including general practitioners (GPs), community-based nurses (CNs), pharmacists, and speech and language therapists (SLTs), have been identified as stakeholders that can play a meaningful role in malnutrition identification and management in the community [10–13]. However, HCPs have reported being inadequately equipped, in terms of knowledge and resources, to manage malnutrition [12,14,15]. A lack of nutritional training on the identification and treatment of malnutrition [12,14,16] and time constraints have been noted as barriers for HCPs addressing malnutrition [12,14,15,17]. While dietitians are the nutrition experts within the healthcare team, patients are more likely to first consult their GPs, community nurses, or pharmacists about nutritional or weight loss concerns [10,12,14,18,19].

Oral nutritional supplements (ONS) are commonly prescribed in clinical practice to treat malnutrition [20]. ONS usage can be most effective for treating malnutrition when combined with nutritional advice and regular monitoring of the patient and ONS usage [21,22]. However, in practice, patients may initiate ONS therapy with little guidance on how it should be taken, or why it is justified [16,23,24]. Prescribing pathways may explain some inappropriate ONS usage, whereby non-dietetic HCPs including GPs and tertiary care doctors act as approved prescribers [24]. However, additional insight from other healthcare disciplines would be useful to understand their experiences of ONS use among older adults with malnutrition in the community.

GPs, community nurses, and pharmacists have previously been consulted on their views of malnutrition management in the community [10,12,15]. However, with healthcare delivery increasingly focused on primary care teams and networks [25,26], consultation with the wider multi-disciplinary team members that commonly provide care for older community populations would be valuable for moving forward with models of shared care. Additional HCPs involved in community care for older adults include physiotherapists, occupational therapists (OTs), and SLTs. The aim of this research was to explore the views of HCPs from the wider multi-disciplinary team involved in older adult care and report their experiences of malnutrition management and ONS prescribing in the community.

2. Methods

This qualitative study is part of a larger project investigating malnutrition management by HCPs in primary care, ONS prescribing and experiences of older adults living with malnutrition in the community (ONSPres) [15,27]. The current analysis used data collected from focus groups (FGs) with HCPs who were currently working or had previous experience with older adults living in the community. Consolidated criteria for reporting qualitative research (COREQ) were used to describe the methodology of this study (Supplementary File 1). The study received ethical approval from the University College Dublin Human Research Ethics Committee (Reference number: LS-18-50-Corish).

2.1. Participant recruitment

Dietitians, community and residential care nurses, pharmacists, SLTs, OTs and physiotherapists were eligible for participation. GPs were also recruited for interviews and the findings published in 2020 [15]. Participants were recruited through professional networks, contacting primary care centres, and through professional bodies. Participating HCPs were purposively selected to include those working from a variety of primary care centres located in the greater Dublin area. Twelve FGs in total were carried out, three with community dietitians (CD) ($n = 17$), three with nurses ($n = 22$), one with SLTs ($n = 4$), two with community pharmacists (CP) ($n = 9$), one with OTs ($n = 6$), one with physiotherapists (Physio) ($n = 12$), and one with dietitians working in industry (ID) ($n = 5$) between November 2018 and October 2019.

2.2. Data collection

A topic guide was used for each FG (Supplementary file 2). The topic guide explored the following domains: perceived barriers and facilitators in the management of malnutrition, experiences of ONS in the primary care/community setting, and future directions in the management of malnutrition and ONS prescribing. Each FG lasted approximately 45–60 min, and most were held in the primary care centres where the participating HCPs worked to facilitate participants' schedules. All FGs were recorded and transcribed verbatim, with participant information anonymised at transcription. Brief field notes were taken by the interviewer and used alongside the interview transcript during the analysis phase to provide the researchers with additional context.

2.3. Data analysis

A qualitative approach with inductive thematic analysis was used to analyse the transcribed FGs [28]. Qualitative analysis software MAXQDA2018 was used to manage analysis. The first step was familiarization and immersion in the data to identify initial descriptive codes, used to summarise concepts being discussed. Transcripts were initially coded by two dietetic researchers PDC and LK and these were later reviewed and discussed with CMER

and KM to agree on coding decisions. In the instances where data represented more than one concept, they were coded in two or more ways. The codes were then grouped together, refined, and relabelled resulting in several subthemes. A broader overarching theme was identified, and links between these and the subthemes were identified by PDC and LK and reviewed and discussed with CMER and KM. Illustrative quotes representing themes and subthemes were extracted from the transcriptions and a narrative description of findings presented.

3. Results

3.1. Participants

The characteristics of the 75 participating HCPs are presented in Table 1. The majority were female and their experience working in primary care ranged between 1 and 30 years.

3.2. Focus group findings

Two dominant themes identified from FG analysis were [1]: Gaps in primary care management and [2] Challenges with ONS use in the community. Several sub-themes, and relationships between sub-themes were identified and are summarised in Fig. 1.

4. Theme 1: Gaps in primary care malnutrition management

The subthemes and illustrative quotes below describe the key issues that explain 'Gaps in primary care malnutrition management'.

Table 1
Characteristics of healthcare professionals included in the qualitative study.

Healthcare Professional		
Dietitians (n = 22)		
Sex		
Female (n, %)	22	100
Level/Specialty		
Senior level (n, %)	13	59
Entry level (n, %)	4	18
Industry (n, %)	5	23
Years working in primary care ^a , Median (range)	6.5 (1–24)	
Nurses (n = 22)		
Sex		
Female (n, %)	22	100
Level/Specialty		
Community nurse (n, %)	9	41
Public Health Nurse (n, %)	5	23
Residential care (n, %)	8	36
Years working in primary care, Mean (range)	13 (1.5–29)	
Other Healthcare Professionals (n = 31)		
Sex		
Male (n, %)	3	10
Female (n, %)	28	90
Discipline		
Physiotherapist (n, %)	12	39
Pharmacists (n, %)	9	29
Occupational therapists (n, %)	6	19
Speech and language therapists (n, %)	4	13
Years working in primary care, Mean (range)	5.75 (1–30)	

^a Median and range provided for dietitians working in community/primary care (n = 17).

4.1. Sub-theme 1.1: 'Limited scope in the community for malnutrition management'

The practical implications of food-first advice for older patients, living alone with limited social supports, was argued by dietitians. They felt that the ability of these patients to both prepare meals and fortify them in many cases was not feasible, and that ONS was a more reliable treatment.

"Whereas if you have somebody who is just in a really socially difficult place and you know me turning around and saying 'add milk powder to your milk' it's just not going to happen."

—CD14

Nurses and other HCPs reported that the limited time allocated for home carers to visit patients means that personal hygiene care is commonly prioritised over food preparation. In some instances, home carers may not be permitted to help with food preparation in patient homes.

"And to me, not being able to get support for around meal preparation is just crazy because everything deteriorates. That pressure sore wounds, everything suffers. But they're clean!"

—CN5

In addition to the limitations of home care supports, discussions across HCP groups also highlighted the risk of rapid decline among patients in poor social situations while on waiting lists for home care packages and support services such as Meals on Wheels:

"And then there's waiting lists, limited resources and sometimes you can't meet the need, so then it's not as successful as you would like it to be. You still have a period where they're on a list waiting on meals on wheels to come and you're trying to figure out in the short term what to do until that starts, so that's the other difficulty"

—OT4

Dietitians reported the need to keep patients on ONS during such waiting periods to avoid further weight loss.

"Definitely, in the ideal world everyone would have a homecare package where the carers would prepare meals ... I know that they may have a homecare package but just the time isn't there I wouldn't take them off [ONS] because I would probably expect then in six weeks that their weight has dropped again"

—CD13

Another practical challenge identified by pharmacists was difficulties in transporting a heavy crate of ONS from the pharmacy to the home.

"And aside from the storage, a lot of elderly patients don't drive and carrying them [ONS] home can be an issue for people as well 'cause they are heavy, they are a big crate of 28, 200 mL bottles ... And especially a frail old person living on their own and carrying that now we carry it out to the car if they are driving but even getting them in, there is a risk of back injury and stuff."

—CP6

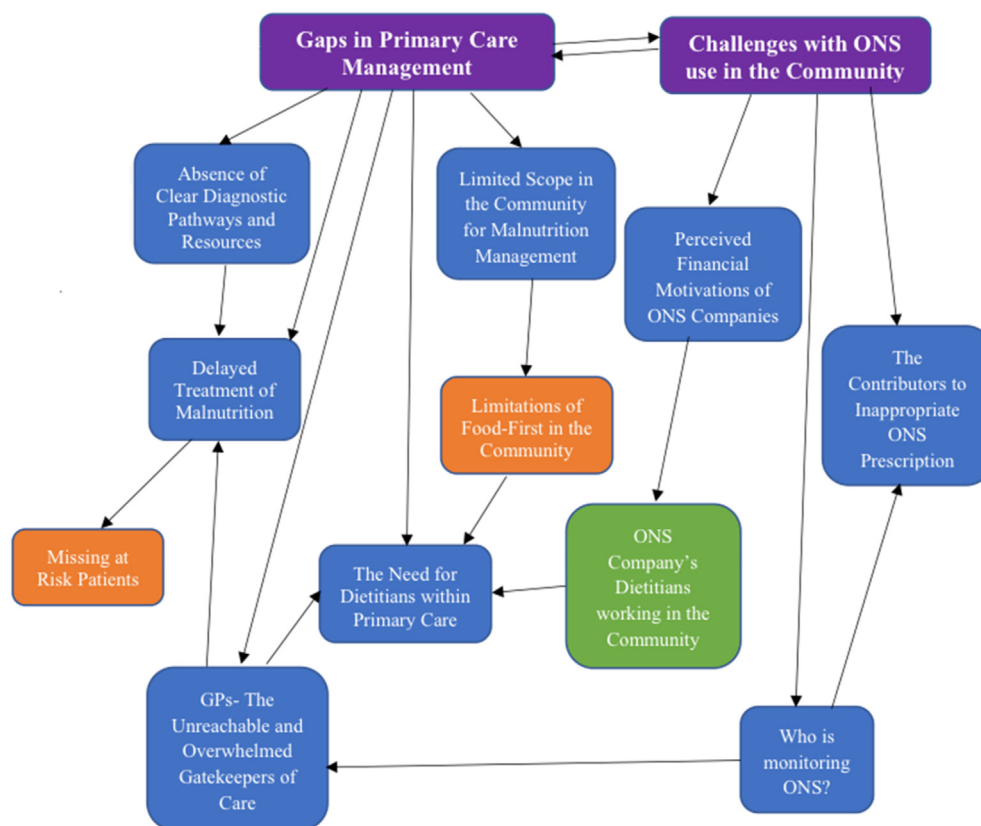


Fig. 1. Thematic map for the themes and subthemes identified in the analysis. Overall themes are shaded in purple, with subthemes shaded in blue. Perceived outcomes arising from subthemes are shaded in orange and any contributor to the development of subthemes shaded in green. Several relationships between subthemes were identified in this study. Of note, the limitations of GPs in managing malnutrition in primary care, the absence of clear diagnostic pathways and resources for HCPs were found to contribute to the development of the delayed treatment of malnutrition in the community. This in turn leads to patients who may be at risk of malnutrition not being identified, highlighting the lack of malnutrition prevention currently in primary care. Challenges with ONS use in the community include inappropriate ONS prescriptions and lack of monitoring, related to the large responsibilities placed on the GP for patient care. The need for adequate numbers of dietitians working in the community to provide expert, non-biased, nutritional care was highlighted.

4.2. Sub-theme 1.2: 'GPs- the unreachable and overwhelmed gatekeepers of care'

An underlying feeling of frustration existed among all HCPs with regard to poor communication pathways with GPs. GP engagement within multidisciplinary or primary care meetings was viewed as beneficial, but this was reported to be rare and a barrier to multidisciplinary team care as illustrated in the quotes below.

"It is very hard to get GPs, yeah. And we have primary care team meetings, and not all of them work well anyways, but the ones that do work, you wouldn't really get a GP into it anyways ..."

—SLT4

"Cause one of the primary care team meetings I go to GPs did come to it every time because they are in the same building, but they are really good ... it's an amazing primary care team meeting and it makes such a difference."

—CD3

Dietitians working in industry face different communication channels with GPs as they sit outside of primary care or multidisciplinary teams but still faced the same barriers:

"Sometimes you wouldn't have a direct conversation with a GP. It will be more going through somebody else or paperwork or a letter

or email, or whatever, but then the patient's left in the middle and they don't know ..."

—ID1

The diverse range of medical conditions that GPs see daily was highlighted by all the HCP groups, which informed their view that GPs have limited time to keep abreast of developments in nutrition therapies and need additional training in areas such as malnutrition.

"Like the general practitioners are not experts in every single area, so that's quite hard"

—Physio4

"But I think when they are trained that they really do take it on board the GPs, I think they just have so much to manage that it's hard to keep updated."

—CD2

4.3. Sub-theme 1.3: 'Delayed treatment of malnutrition'

Delayed referral and treatment meant that patients were presenting to primary care when malnutrition was already an issue,

rather than being identified when they are at risk so that this could be treated, and more severe issues prevented.

"...you're prioritising your referrals, so you are prioritising the ones that are really malnourished, but in an ideal world there would be more dietitians and you would actually be able to see those patients that are at risk and prevent it from getting to the stage where it is even harder to bring back from that ..."

—CD12

The issue of waiting lists arose among dietitians and other HCPs, which can raise concerns at the referral stage when certain moderate risk patients would benefit from preventative interventions:

"... you do take into account waiting times too, when you're thinking of the people you are referring and maybe those people who would be perceived as a low priority, now given they're not the people you would possibly be thinking of giving ONS for, but you know you're kind of thinking, 'god, you would be months and months being seen.' It does influence your decision, so more bodies on the ground I think at the end of the day would be more helpful"

—SLT4

The functional consequences of delayed treatment for malnutrition were acknowledged by OTs and physiotherapists as illustrated in the following quote:

"... people aren't referred into us unless they have a problem. And unless malnutrition has an impact on functional living, they won't become OT or physio radar ... They will go to the GP and then possibly be referred onto the dietitian ... I think, family need to see, or the client themselves need to see, the functional impact of what is actually happening to them before they'll actually seek help."

—OT7

4.4. Sub-theme 1.4: 'The need for dietitians within primary care'

Community dietitians reported being overwhelmed with large geographical areas and primary care networks to cover, resulting in limited capacity to see patients. This was true for SLTs too who highlighted the challenges associated with working between primary care centres:

"Dietitians are like us, most staff in the HSE are dedicated to a primary care team, but dietetics and speech therapy aren't. We're dedicated to a network. So, we would have 4+ primary care teams each. There's not as many of us basically. So that the big problem is that you've got 4 teams and you're sending your referrals to one person."

—SLT2

HCPs saw the benefits of having a dietetic service in the community but reported insufficient access to dietitians for their patients. In the absence of any or adequate dietetic services, other HCPs reported feeling a responsibility to provide nutritional advice but did not feel fully equipped to do so.

"And more dietitians that could help ... We mentioned already one but we're not dietitians. We don't have the same knowledge."

—CN5

Community pharmacists indicated that they would not know how to access a community dietitian, despite acknowledging that it would be the most appropriate referral route when encountering patients at risk of malnutrition.

"I wouldn't know where to send them [patients] even though I think that [a dietitian] would be the most appropriate place for them to go"

—CP5

4.5. Sub-theme 1.5: 'Absence of clear diagnostic pathways and resources'

The need for additional education around the existing malnutrition pathway for non-dietetic HCPs was reported by dietitians.

"The [malnutrition] pathway that we have in place at the minute is good, but I know from ringing GPs that they don't know anything about it. It's just getting it out there ... And getting that mandatory training of everything to do with malnutrition, what it is, the risks, the cost, the screening tool, everything, just how to even do a screening tool."

—CD8

The need for standardised education and resources for HCPs and patients was highlighted by non-dietetic HCPs to support them in identifying and managing malnutrition.

"I would really like to have like a handbook, do you know. Something visual. So, if something did come up, you could flip through it."

—SLT1

Face to face, rather than online, dietetic-led workshops and training sessions were explicitly preferred by some (nurses and SLTs) who spoke of the importance of team rapport building.

"We learn from workshops ... the role of the community nurses is varied, you are dealing with everything ... so it's not enough to have had done an e-learning module six months ago on nutrition ... you want a person to talk to, to say, 'Can I bounce this off you?'"

—CN12

5. Theme 2: Challenges with ONS use in the community

The subthemes and illustrative quotes below describe the key issues that explain 'Challenges with ONS use in the community'.

5.1. Sub-theme 2.1: 'Inappropriate ONS prescription'

Dietetic and non-dietetic HCPs encountered inappropriate ONS use in the community, with prescriptions originating from the patient's GP and sometimes on hospital discharges. Non-dietetic HCPs viewed dietitians as the expert in choosing ONS to meet patients' needs and, in their experience, community dietitians typically recommended a change or discontinuation of GP-led prescriptions.

"Yeah, I mean when you see somebody on a supplement and it's being prescribed by the GP, the first thing I'd probably do is refer to

[dietitian] and I think she changes it probably 99% of the time. She changes it to something else cause it's not appropriate."

—CN3

"But what I would see is a lot of clients would come to us for swallow or communication and you ask them, "are you on any supplements?", and they're underweight ... the GP has put them on supplements. And they don't know why they're on supplements and it doesn't seem to be working."

—SLT2

In addition to a lack of evidence for many ONS prescriptions seen in the community, HCPs also identified social reasons for prescribing, for example "... just a little augmentation and if you follow the MUST guidelines, they are probably prescribed against the MUST guidelines but it's a bit more nuanced than that ..." — **Physio8** and "there's often socio-economic reasons that someone is on a supplement as opposed to say, a medical reason or nutritional reason ..." — **ID2**.

5.2. Sub-theme 2.2: 'Who is monitoring ONS?'

It was common for HCPs to encounter patients who were on repeat ONS prescriptions, which were not reviewed. ONS were often not consumed by patients, with stores building up in patients' homes.

"I think when you are going out to visit somebody you can always check and see what supply they have there. Sometimes it could be stacked up in the hallway as you walk in the door and you realise, they haven't been taking it at all. And the cat is taking it!"

—CD1

"I think the compliance with taking them and following through on them is very poor. And you often see a lot of wastage at home with the unopened packages."

—OT7

GP-led prescriptions appear to contribute to a situation where ONS are on repeat order indefinitely, without a clear review plan in place as evidenced in the following quote by a community nurse:

"I think on paper, they're supposed to be monitoring (GPs), but I think in reality, there's no monitoring. Once they are on the nutritional drinks, they're supposed to, but they keep rolling over on the prescription ..."

—CN12

Another issue highlighted is that older adults feel reassured knowing they are receiving nutrients from "one bottle" and fear their discontinuation.

"... I would see patients that do get very attached to the supplements because they have been on them for years and would be reluctant for the input of a dietitian, because they fear that they will take the supplements away."

—SLT1

5.3. Sub-theme 2.3: 'Perceived financial motivations of ONS companies'

There was concern among community dietitians about the perceived control that nutrition companies may have on ONS prescribing. In some settings, for example private nursing homes, dietetic services are provided free of charge in return for an ONS contract with the nutrition company. In addition to nursing homes, community nurses also receive recommendations and branding from nutrition companies, which community dietitians disapproved of. Whether the "food-first" approach is the first-line advice given by industry dietitians was questioned by community dietitians.

"And that's the thing that these private nursing homes are referring to nutritional companies who have got dietitians who are prescribers and providers, and there is definitely a conflict of interest there."

—CD11

One SLT coming in contact with industry dietitians in nursing homes shared the same view:

"And I do feel very much that they [Industry dietitians] do push the ONS side of things rather than going the food-first elements. So, to be honest with you, because of that I don't refer to them ..."

—SLT2

Dietitians working in industry were aware of how other HCPs viewed their conflicts of interest; however, believed their clinical training was an advantage for patient care.

"it's difficult sometimes, because as an industry-based dietitian, even though the dietitians are working clinically, there is that feeling from some GPs that there will be some bias there. Even though we're CORU (Irish Health and Social Care Regulator) registered working very much clinically ... but that can be a bit of a challenge as well."

—ID2

6. Discussion

6.1. Key findings

This qualitative study with multidisciplinary HCPs working in the community identified several issues with identifying and managing malnutrition and the appropriate use of ONS. HCPs reported consistent barriers to an integrated approach to malnutrition management including poor communication with GPs, long waiting lists and poor access to dietetic services, inadequate home-care supports for food, and the absence of diagnostic and management pathways and standard resources for non-dietetic HCPs. Several issues with ONS usage were highlighted including inappropriate GP prescribing without dietetic support, lack of monitoring for effectiveness and compliance, poor compliance and wastage, and industry influence on ONS prescriptions in residential

care settings. According to HCPs, gaps in primary care management and standard treatment pathways contribute to delayed diagnosis and treatment, whereby patients present at late stages of malnutrition when opportunities for prevention have passed.

6.2. Comparison with prior work

While GP involvement was identified by HCPs in the current study as important for a more integrated malnutrition management service, a recent study with GPs as part of the ONSPres project concurs with other HCP views that malnutrition *can* indeed be a secondary concern compared to higher priority issues presented by patients [15]. Older adults typically present first to their GP with concerns about nutrition [29], if indeed they recognise malnutrition at all. Recent reviews report that patients may not recognise signs of malnutrition as problematic. Furthermore, older adults may wish to persist with healthy eating guidelines and weight loss can be viewed as positive, hence there can be a reluctance to gain weight [30,31]. One opportunity highlighted here is when community pharmacists identify malnutrition risk. A recent study indicates that pharmacists are highly likely to interact with patients with nutrition concerns presenting for supplement advice [10]; therefore, this is another pathway in the primary care service that needs to be considered as an opportunity for identification and early intervention. While participating community dietitians indicated that standard care pathways are in place for their own services, awareness and direct links may be lacking. Pharmacists, for example, were not aware of referral pathways to dietetics, and this is reflective of the reality whereby community pharmacists need to recommend a dietetic assessment to the GP in the first instance.

Screening and identification for prevention of malnutrition can potentially be implemented by a range of community HCPs. However, GPs have acknowledged a lack of knowledge and skills to effectively implement care plans for malnutrition [15], which was also identified as a gap among HCPs in the current study. A lack of nutrition education has been reported globally in medical and nursing curricula [32,33]. Nutrition education at undergraduate level can be beneficial for medical students and other HCPs [34]. HCPs feel more comfortable in providing nutrition advice to patients when they are equipped with the appropriate resources to do so [13,35]. Interventions for malnutrition management have been tested for feasibility with some HCPs in primary care, to include training in screening, a structured care pathway for the management of low, moderate and high malnutrition risk, and referral pathways to specialist dietetic services in the community [13,35]. The value of expanding such programmes is not in dispute, given the many modifiable contributors to malnutrition [3], and the cost of inaction adding up as the population ages [36]. Inadequate resourcing and poor prioritisation of nutrition in older adults appear to explain many of the gaps identified by HCPs including inadequate dietetic services and home care supports and agreed multidisciplinary care pathways.

Primary care teams and networks are integral to future healthcare provision in the community [25,26]. Primary care team members in Ireland have previously reported valuing the structure and communication channels within their teams [37]. GP participation in primary care teams was considered particularly important for effective teamwork in a study surveying GPs and the wider multi-disciplinary team [38]. Geographical spread and multiple locations can be a barrier to effective communication in primary care [39,40]. HCPs value co-location to facilitate face-to-face meetings between team members; however, GPs may not rate co-location as highly as other HCPs and in one recent study, GPs placed more emphasis on compensation for attendance at primary care meetings than other HCPs did [38]. It is important to note that

GPs in the Irish primary care team system act independently, typically running their own practices as sole traders or partnerships, while the wider multi-disciplinary team members are health service employees. The primary care strategy has been developing gradually over the last decade, often in the absence of distinct team leaders or managers at team or network level [37,38]. These factors may explain some challenges experienced by HCPs in the current study including GP engagement with primary care teams.

6.3. Oral nutritional supplements

One key issue raised that seems to be exacerbated by poor communication and referral channels was inappropriate prescribing and monitoring of ONS. The cost of inappropriate ONS prescribing has been raised in many jurisdictions and leads to both economic wastage and poor patient outcomes [21,24,41]. In response, some health systems (e.g., Sweden and the UK) have moved forward with a formal role for dietitian prescribing within their own scope of practice [42,43]. There is evidence to support such practices as dietitian involvement in management can improve ONS compliance, reduce hospital readmission in older patients, reduce malnutrition-associated healthcare costs and reduce ONS cost inefficiencies [13,21,42,44,45].

The bias issue raised in relation to industry dietitians providing care in settings such as nursing homes was highlighted by community dietitians and others. While dietitians working in industry may have the relevant clinical expertise to assess and implement a nutrition care plan, a clear conflict of interest with corporate policies was described that is directly related to patient care. This finding, to our knowledge, has not been reported previously in the literature and highlights how residential settings for older adults are finding corporate-based alternatives to a high priority need. However, older adults have a right to access health services that meet their unique needs, regardless of the setting in which they reside [46].

6.4. Strengths and limitations

A strength of this study was the multidisciplinary cohort of HCPs which allowed an erudite investigation among those experienced working with older adults at risk of malnutrition. Interviews were guided using a standard topic guide and conducted by trained facilitators. One limitation of the study was the self-selection nature of participation, which can lead to response bias in terms of interest in malnutrition and, as such, may not represent all HCPs working in the community. There was a strong female bias among respondents; therefore, another limitation was the underrepresentation of male HCPs. All focus groups were conducted in urban areas, and experiences of HCPs working in rural areas may differ to those presented in this study.

7. Conclusion

This study highlights that more emphasis is needed to identify patients when they are at risk of malnutrition to avoid advanced or severe malnutrition presentations currently seen in practice. Community dietitians and home care supports are required in primary care to address many of the issues raised regarding malnutrition management among older adults in the community.

7.1. Implications for practice and research

A broad recommendation arising from this work is the requirement to implement malnutrition screening and care pathways across primary care settings including GP practices, community

pharmacies, primary care teams and networks, and residential settings for older people. Additional training and resources will be needed to implement such systems, and dietetic personnel required to service these structures also needs clear planning. Commercial involvement in older adult care requires additional research to clearly define conflicts of interest that may currently influence nutrition care in certain settings.

Credit author statement

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Declaration of competing interest

None to declare.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.clnesp.2021.04.024>.

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