2024

Patients’ Perceptions of Interprofessional Collaboration: A Scoping Review

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Cover Page Footnote
Conflict of interest and source of funding: The authors declare that they have no conflict of interest. Funding has been provided by the National Research Foundation (NRF). Opinions expressed, and conclusions arrived at, are those of the authors and are not necessarily attributed to the NRF. Author contributions: RG was involved in conception, design, interpretation of data, and drafting the manuscript. AK was involved in the study design, statistical analysis, and manuscript review. All authors read, commented and approved the final version of the manuscript.

This research is available in Patient Experience Journal: https://pxjournal.org/journal/vol11/iss1/19
Patients’ Perceptions of Interprofessional Collaboration: A Scoping Review

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ABSTRACT

Collaboration has emerged as a pivotal element within an intentional person-centred healthcare framework. However, there is a need for evaluative feedback from patients to enhance interprofessional collaboration and its outcomes. The objective of this review was to describe the state of knowledge on the perspectives of patients living with a chronic condition regarding their experiences of interprofessional collaboration. A scoping review across five online databases (EBSCOhost, Google Scholar, PubMed Central, ScienceDirect, and Taylor & Francis Online; February 2023) identified all peer-reviewed literature published in English between the years 2018 and 2023 that reported on patients’ perspectives of, and experiences with, interprofessional collaboration and/or its effect on patient care and outcomes. Articles selected for final appraisal were descriptively and thematically analysed. The literature search yielded 3454 articles. One hundred and four (104) full-text articles were included for appraisal based on the eligibility criteria. Once study selection and critical appraisal were completed, 25 studies were included in the review. Three themes were reported on the patient’s perspective of interprofessional collaboration: (i) Team functioning, (ii) Patient involvement, and (iii) Coordinated care. Interprofessional relations, role clarification, and team-based communication were the main factors essential to successful team functioning as perceived by patients. Further exploration of these key factors is necessary to guide the development of improvement strategies or interventions focused on strengthening interprofessional collaboration and the patient’s experience. The patient’s perspective of interprofessional collaboration still warrants further investigation to improve patient experience, quality of care, and outcomes in a collaborative environment.

Keywords: Healthcare team, Interprofessional collaboration, Patient experience, Person-centred care

1. Introduction

Collaboration has emerged as a pivotal element within an intentional person-centred healthcare framework.1 Interprofessional collaboration (IPC) is defined as a relationship between a team of healthcare professionals (HCPs) from various professional backgrounds and a patient in a participatory and collaborative process to shared decision-making regarding healthcare matters.2-3 The inclusion of patients, families and even the community’s perspectives4,5 have become essential in healthcare, with the aim of ‘caring together with people, instead of caring for people’.6 This approach recognises person-centred care (PCC) as a central element of collaborative practice,2,4,5 and differs significantly from traditional clinician-centred healthcare.7

The literature related to PCC has identified IPC as a way for improving the patient’s health-related outcomes, quality of life, satisfaction, service delivery and safety through better team functioning.1,3,4,8 Furthermore, increased collaboration between HCPs creates opportunities to learn from each other, broaden their understanding of the problem to be solved, and gain an awareness of each other’s contributions9.
which has been positively associated with enhanced professional practice. However, despite the existing body of knowledge supporting IPC, barriers such as ineffective communication, limited awareness of other HCPs’ roles, authority imbalances, lack of trust, and a shortfall of formal team structures and leadership may hamper successful participation of all team members in collaborative healthcare. These factors, coupled with an overburdened healthcare system, present a threat to the quality of care received by the patient.

The literature has shown that the advancement of IPC globally originates from the multifaceted nature of patients’ healthcare needs, with research advocating that enhanced IPC may be key for the provision of effective and comprehensive care. Patients with a chronic condition, and more commonly multimorbidity, present a complex healthcare challenge. However, healthcare teams comprising of various professional backgrounds working with the patient have been shown to improve health-related outcomes and costs. Extensive research has been conducted on IPC and how it adequately addresses aspects of the quadruple aim of healthcare; a framework which focuses on four key objectives for optimising healthcare system performance which include: improving population health outcomes, enhancing the patient’s experience, reducing healthcare-related costs, and most recently improving HCPs’ experiences. For example, existing review studies have explored whether IPC improves professional practice, healthcare outcomes, and healthcare-related costs. Furthermore, the experiences of HCPs regarding IPC in the literature, whereas the patient’s experience of IPC has received little attention.

The core position of the patient is the essence of IPC. Thus, there is a need for evaluative feedback from patients to enhance IPC and its outcomes. While publications exploring patients’ experiences of healthcare have increased, much less is known regarding the patient’s perspective of IPC. Furthermore, literature exploring patients’ perceptions of facilitators and barriers to IPC remains scarce. A scoping review published in 2020 became the starting point for the exploration of patients’ perspectives of IPC. Seven studies were identified and included in the review, and the authors suggested that future research expand on this topic to determine common themes, facilitators, and barriers to improve healthcare quality and patient outcomes.

Another more recent integrative review sought studies that evaluated how patients with chronic conditions experience IPC. The review identified 48 studies for inclusion, and the authors proposed that patient experiences regarding potential facilitators to IPC should be investigated further to establish improvement strategies. The authors specifically noted exploring the role of the patient in IPC to enhance healthcare experiences and outcomes. If the healthcare system intends to have the patient as part of shared processes, greater comprehension of how patients understand IPC and their perceived role in collaboration are needed. The objective of this scoping review was, therefore, to describe the state of knowledge on the perspectives of patients living with a chronic condition with regard to their experiences of IPC. The study questions were:

- How has patient perspectives of IPC been explored?
- What is known on patient perspectives regarding facilitators and barriers to IPC?
- What are the research gaps in the literature?

2. Methods

The chosen methodology used to answer the study aim was a scoping review. Given the comprehensive nature of the aim, employing a scoping review as a methodology would be better suited to address the study inquiries. This study utilised the five-stage scoping review methodological framework developed by Arksey and O’Malley, while considering the recommendations put forth by Levac et al. The methodology was reported following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) extension for scoping reviews checklist as outlined by Tricco et al. Ethical approval for the study was granted.

2.1. Eligibility criteria

2.1.1. Participants

This scoping review considered studies that included any adult patient, especially one living with a chronic condition.

2.1.2. Phenomena of interest

Studies concentrating on patients’ perspectives of, and experiences with, IPC and/or its effect on patient care and outcomes were identified for inclusion in this review.
2.1.3. Context

Studies conducted within any healthcare setting over the previous five years were taken into consideration.

2.1.4. Types of evidence sources

As the phenomena of interest was on patients’ perspectives, only primary sources that sufficiently represented the voices of patients were included. This review, therefore, emphasised qualitative data. In addition, appropriate data collection and analysis descriptions were required to be selected for this review. Data quantitative in nature were also included for the term “satisfaction”. Furthermore, studies where patient perspectives were indivisible from perspectives of HCPs were excluded, coupled with grey literature.

2.2. Search strategy

The review process began by consulting a research librarian specialising in Health Sciences who provided assistance in selecting appropriate search terms and devising the search strategy. On 20 February 2023, a three-step search strategy was implemented to identify relevant peer-reviewed articles. The search was limited to publications in English between the years 2018 and 2023. This time frame was chosen based on the observation that existing reviews on the patient’s perspective of IPC mostly covered a period from 1990 to 2018. Therefore, this review aimed to provide the most up-to-date evidence on the topic.

The initial step involved conducting a preliminary search using selected search terms in EBSCOhost and PubMed Central. These search terms were refined from a comprehensive list of approximately 45 terms identified from five IPC review articles focusing on the patient’s experience. The specific search terms can be found in Table 1. This initial search was followed by reviewing the title, abstract and keywords of the articles to identify relevant studies.

In the subsequent step, a comprehensive search was conducted using all the identified search terms and keywords across five online databases: EBSCOhost, Google Scholar, PubMed Central, ScienceDirect, and Taylor & Francis Online. Additionally, database-specific Medical Subject Headings (MeSH) were incorporated in each database search. Finally, the retrieved articles’ reference lists were searched by hand to discover any additional studies.

2.3. Study selection

After implementing the search strategy, all retrieved references were organised and uploaded into EndNote X9 (Clarivate Analytics, PA, USA) where duplicate articles were removed. Two researchers then assessed titles and abstracts for applicability to the predetermined eligibility criteria. Retrieval of full prospective articles were then independently inspected by the two researchers. Lack of consensus during the study selection was resolved by consulting an independent researcher.

2.4. Data extraction

The data extracted from the selected final articles were recorded and organised in a data charting form using Microsoft Excel. Where attainable, data delineated included descriptive study information, such as the author(s), year published, location, design, setting, and participant information. The selected articles were further assessed for the following features: the use of interprofessional education (IPE) strategies; how the team intervention was implemented; and an overview of key results applicable to the patient’s experience of IPC. Data extraction was carried out by one researcher while a second researcher verified the data for reliability purposes. Any data item dissimilarities were discussed between the two researchers and if consensus could not be reached, a third researcher was consulted. The researchers met throughout the study, increasing in regularity for key discussions.

2.5. Data analysis and presentation

Articles selected for final appraisal were analysed and presented via two methods: firstly, through a descriptive numerical analysis which provided insight into the distribution, nature and scope of the selected studies, and secondly, a summary of the research landscape in which patient perspectives were clustered into thematic categories which were utilised as a foundation for a narrative synthesis of established evidence.

<table>
<thead>
<tr>
<th>Table 1. Search terms.</th>
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<tr>
<td><strong>Sample</strong></td>
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<tr>
<td>Patient Client</td>
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<tr>
<td>Interdisciplinary</td>
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<tr>
<td>Interprofessional</td>
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<tr>
<td>Multidisciplinary</td>
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<td>Teamwork</td>
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3. Results

3.1. Descriptive numerical analysis

A total of 3454 articles were recognised through online databases (Fig. 1). Once duplicates had been removed and articles screened by their titles, 104 full-text articles were included for appraisal based on the eligibility criteria. After applying the eligibility criteria, the remaining 42 articles were examined (see Fig. 1). Once study selection and critical appraisal were completed, 25 studies met the scoping review’s eligibility criteria.

Among the 25 studies, a range of methodological designs were employed, including qualitative (n = 17), quantitative (n = 6), and mixed methods studies (n = 2). Of the qualitative studies, designs varied from case study (n = 3), ethnography (n = 2), grounded theory (n = 1), and phenomenology (n = 1), with ten studies defining their research as a qualitative design without further detail. All quantitative studies were cross sectional in design (n = 6). Majority of the included studies were conducted in Canada (n = 5), the United States of America (n = 4), England (n = 4), Norway (n = 4), and the Netherlands (n = 3). The age of participants ranged from 18 years to 88 years. Chronic conditions in the studies ranged from cancers (n = 2), chronic pain (n = 4), diabetes (n = 3), and depression (n = 1), with the remaining studies exploring other chronic conditions and/or multimorbidity (n = 15).

Included studies occurred in various healthcare settings including palliative care centres (n = 2), primary healthcare clinics/practices (n = 14), inpatient care settings (n = 1), university-led home visits (n = 1), telehealth (n = 1), university training clinics (n = 4), and outpatient rehabilitation centres (n = 2).

Collaboration activities followed four different structures: (i) the patient consulted a team of two or more HCPs from various professions who functioned interprofessionally; (ii) the patient consulted different professions, followed by regular interprofessional team meetings with the patient involved; or (iii) without the patient involved; or (iv) the patient received healthcare services delivered by different independent HCPs who collaborated through cross-referrals.
Eight of the 25 studies implemented some form of IPE prior to service delivery. Of the eight studies, five of these studies delivered IPC as an intervention conducted over a specific period of time. Two additional studies executed IPC as an intervention without some form of IPE. Majority of the studies exercised IPC as the standard of care (n = 18). Five studies were conducted at university training clinics, however only two of these studies had the students providing healthcare services in an interprofessional team environment. Important characteristics of selected studies are outlined in Appendix 1.

3.2. Narrative synthesis of findings

Three themes were reported on the patient’s perspective of IPC: (i) Team functioning, (ii) Patient involvement, and (iii) Coordinated care. These themes were further supported by various sub-themes discussing facilitators and barriers to IPC.

3.2.1. Team functioning

This theme encompasses key experiences related to the functioning of healthcare teams by patients. These experiences have been presented as five sub-themes: (i) Recognition of healthcare teams, (ii) Teamwork, (iii) Hierarchical nature of healthcare teams, (iv) Team-based communication, and (v) Interactions with professionals.

3.2.1.1. Recognition of healthcare teams. Participants described an unawareness of certain consulting HCPs and, therefore, struggled to identify with them. Participants felt that role clarity has a strong influence on team functioning and healthcare outcomes. and described how their relationships with their HCPs lacked trust and support, which might be due to this lack of familiarity. This resulted in participants not knowing who they should contact, or who was responsible for various components of their treatment. A lack of understanding regarding who is involved in the team and their respective roles may result in a team approach not being visible to patients.

‘You just see the random people that come into your room or that are doing these different jobs but you don’t actually know who that is or that’s the team.’ – Patient.

3.2.1.2. Teamwork. When teamwork was effective participants emphasised their preference for this level of care and described how it provided support at various stages of their treatment, and allowed for shared goals and solutions to be discussed by HCPs with diverse clinical expertise. Participants described their appreciation for HCPs who knew when to refer them to a different profession and who had respectable relations with other HCPs who may better address their healthcare matters. Participants perceived collaboration as important and valuable.

‘Very informative as far as what he said to me and what he did in the referrals he made, but it was all the referrals that’s where I got my help.’ – Patient.

Participants highlighted relationship building among HCPs as essential to enhanced continuity of care. To build relations and mutual respect within the team, participants described how a collaborative attitude and an awareness of other members were required. Even so some participants explained how certain HCPs displayed disrespectful attitudes towards team members where they would dismiss each other’s inputs on treatment plans which left patients feeling confused, postponed decision-making, and decreased their trust in the process.

‘... healthcare providers argued about whether my husband should come off dialysis or not. Neither one of them wanted to listen to ... the other.’ – Patient.

3.2.1.3. Hierarchical nature of healthcare teams. Hierarchies were perceived to facilitate teams in understanding members’ roles and responsibilities and identifying various levels of accountability, decision-making and responsibility. Participants explained that they experienced satisfaction with their healthcare when there was increased understanding of various responsibilities among team members.

‘I think it allows everyone to know their place.’ – Patient.

However, not all participants associated hierarchical structures as facilitators. Many participants discussed how respect is needed for hierarchies to work. Without respect, decisions may be undermined by members thus negatively affecting team functioning and patient care. Participants expressed disappointment with the hierarchical behaviour of specialist HCPs towards patients.

‘... healthcare professionals who think that they are smarter than patients, and not ... communicating with patients and with each other.’ – Patient.
3.2.1.4. Team-based communication. The quality of communication and information exchange between HCPs were perceived as important to IPC by participants and influential to their care. An absence of effective communication resulted in repetitive information sharing which created frustration among participants as large amounts of time was assigned to information retrieval and/or duplication. 33,35,39,55

‘Every single one of them wrote down notes . . . then nothing happened because the next person I saw . . . didn’t have access to that information.’ – Patient. 33

Participants often experienced confusion and stress when information was not clearly communicated which led to feelings of suboptimal care, the possibility of healthcare errors and an ineffective team. 33 This information disconnect was perceived as a barrier to care. 35 Several participants also mentioned that their HCPs contradicted each other without explaining or considering their team member’s perspective. Participants believed that limitations in information transfer were a direct result of distrust among members in the team. 33 Following this, participants were undecided on where they should place their trust, and this hindered their decision-making. 32,39

‘They work in such different ways. Different healthcare professionals say different things . . . In the end, you don’t trust yourself.’ – Patient. 32

Overall, participants reported that effective communication was essential to build partnerships 35,46,51 and where correspondence was achieved, participants described how they felt like collaboration had occurred. 37

3.2.1.5. Interactions with professionals. A few participants experienced difficulty developing proper relationships with each HCP in the team. Participants explained that consulting with the same HCP may facilitate relationship building to allow for the provision of continuation of care. 35

‘Continuation of care is important. Seeing the same person rather than if you’ve got like 3 different physios . . . that you don’t have to repeat yourself . . .’ – Patient. 38

Participants valued a good relationship with their HCP which made it easier to connect and feel comfortable with them. 39,43,47 Moreover, participants described how listening was a top priority to relationship building and valued feeling heard by HCPs within the team. 35,36,39,42,43,47 Many participants appreciated interacting and experiencing HCPs as human beings who empathised with and listened to what they had said while providing clear advice and collaboratively acting upon the information they provided. 32,35,39,44

‘. . . you meet real people before you meet the professional . . . And what’s surprising is that when you say something, they actually listen to you.’ – Patient. 32

However, this was not always the case with several participants explaining how they did not feel listened to or supported 40,41 which negatively affected how they perceived the quality of care they received. 37 Participants concluded that person-centred interactions set the tone for successful relationships with HCPs who were encouraging and caring. 39,43,47 This created trust which resulted in improved shared decision-making as explained by participants. 31,32

3.2.2. Patient involvement

This theme describes patients’ perspectives that defined their level of involvement in their own healthcare and how self-management can be achieved. These experiences have been discussed as three sub-themes: (i) Active participation, (ii) Being a bystander, and (iii) Providing the tools for self-management.

3.2.2.1. Active participation. Participants valued their involvement in shared decision-making regarding their healthcare management”. 31,32

Participants felt appreciated for the role they could play as experts in their own healthcare and as part of the team 39 and appreciated HCPs who supported active patient participation. 47,53 Some participants even mentioned how they appreciated that they were encouraged to bring immediate family members to their consultations who understood their condition allowing HCPs to gain a bigger picture of their health story. 35

‘. . . they have given me a choice . . . They let me think about what I feel would be right for me and they have given their opinions . . . I can make the final decision . . .’ – Patient. 36

Many participants acknowledged that they needed to be active contributors rather than passive recipients of professional agendas. 35,36 Setting up patients’ goals was identified as a facilitator to engage with HCPs. 35,48 However, there were conflicting views
from some participants as to whether or not the patient should be an active member of the healthcare team.\textsuperscript{33,52} Participants did, however, discuss that active participation may not be possible for every patient and/or situation and that HCPs should talk to patients about their expectations regarding their level of participation.\textsuperscript{39}

3.2.2.2. Being a bystander. A number of participants felt restricted in taking an active role because of their interactions with HCPs which left them feeling like bystanders in their own healthcare process while decisions were being made for them instead of with them.\textsuperscript{34,38,43} Several participants echoed these feelings by explaining how they wanted to express their own opinions and goals but hesitated to do so because they felt that they were given insufficient information and, therefore, were unable to confidently make a decision. This created anxiety around complex decisions and led participants to delegating the decision-making responsibility to their HCPs.\textsuperscript{36,38,40,41,43}

‘…without a doubt. It’s got to be the doctor’s decision. How could I make a decision like that?’ – Patient.\textsuperscript{38}

Participants found that the rigidity of treatment recommendations obstructed open discussions about their available treatment options and, thus, discouraged shared decision-making. Participants mentioned how HCPs did not always explore their values and preferences because they may know best.\textsuperscript{34,38} Participants, therefore, emphasised the distinction between being informed and being engaged by HCPs, and how the goals of the healthcare system and the goals of patients may not align.\textsuperscript{36}

3.2.2.2.3. Providing the tools for self-management. Participants reported valuing a team approach as they felt that they had gained important education and awareness about their condition, how to self-manage it, and acquired improved healthcare independence.\textsuperscript{31,52,54} This was supported by several participants reporting better experiences of their healthcare with improved access to self-management support provided by their healthcare team.\textsuperscript{47,51} Furthermore, participants mentioned that they respected HCPs who kept them informed and educated about their conditions and treatment options\textsuperscript{47} and how it linked to their goals.

Regarding patient education, participants reinforced how they thought it was crucial to maintain patient engagement through lay language and comprehensible terminology.\textsuperscript{35} Participants expressed appreciation towards HCPs for their efforts in helping them understand complicated theories and adapting their interventions to the patient’s level of comprehension.\textsuperscript{42}

‘I have been met several times to make sure that I understood well. Because it is difficult to understand it [complex notions] completely . . .’ – Patient.\textsuperscript{42}

Unfortunately not all participants received adequate education to support their self-management. Few participants described the need for elaboration regarding their condition, results, treatment plan and future healthcare management.\textsuperscript{35,36,41} Participants believed that this limited understanding of their condition inhibited them from collaborating with their healthcare team\textsuperscript{41,43} and further attributed their low sense of autonomy to a lack of knowledge.\textsuperscript{43}

3.2.3. Coordinated care

This theme represented patients’ perspectives regarding the availability of healthcare services in a team environment and how patients perceived the roles of various professionals to ensure coordinated care. These experiences are reflected as two sub-themes: (i) Accessibility and affordability, and (ii) Roles of professionals.

3.2.3.1. Accessibility and affordability. Participants described how they felt their access to healthcare services had improved with a team approach in terms of available and timely healthcare, access to a wide range of HCPs,\textsuperscript{42,48,52,55} increased ease in scheduling appointments and decreased waiting periods.\textsuperscript{31,52,54} Participants also perceived reduced specialist appointments, emergency visits and hospital admissions, all of which have a significant effect on lowering healthcare costs.\textsuperscript{51-53}

3.2.3.2. Roles of professionals. Participants felt that their general practitioner should play a coordinating role.\textsuperscript{39} This was supported by several participants who saw general practitioners as team leaders and favoured receiving healthcare from a doctor.\textsuperscript{52} In this interpretation of collaboration, participants identified doctors as the leader of overall clinical decision-making responsibility, with other HCPs functioning in a supportive role.\textsuperscript{45,52} Many participants did acknowledge that substandard and unsupportive leadership could hinder a collaborative environment.\textsuperscript{31}
4. Discussion

The purpose of this scoping review was to examine the available evidence on the perspectives of patients living with a chronic condition regarding their experiences of IPC to gain a better understanding of perceived facilitators and barriers to collaboration in healthcare. This resulted in 25 studies meeting the eligibility criteria.

The foundation of IPC is the central position of the patient in their healthcare and in decisions related to their care.22 Thus enhancing our understanding of the patient’s experience is crucial to quality improvement and outcomes of IPC.17,21 The review found that patients understood IPC in terms of team functioning, patient involvement, and coordinated care. The themes reflect varied experiences of IPC accentuated by both patient perceived facilitators and barriers. Even though some patients were not always aware of IPC,33,37 when IPC was visible and effective patients perceived this as valuable and emphasised their preference for this level of care.31,35

Patients were attentive to the following factors when discussing teamwork: interpersonal relations, role clarification within the healthcare team, and team-based communication. Patients emphasised relationship building as essential to enhanced continuity of care and IPC.33,35,39,43,47 The type of relationship and level of respect can promote or inhibit team functioning and collaboration.33,39 Professionals who listened and showed empathy and encouraged built trust with patients which improved shared decision-making.31,32,35,36,39,42–44,47 This supports a PCC framework proposed by Santana et al.56 which suggested that providing respectful and empathetic care fosters relationship building and has been shown to improve patient outcomes. This narrative review went on to say that for patients to feel respected, listened to and empowered, HCPs need to engage with patients and recognise them as experts in their own healthcare.56

Patients perceived role clarity and its influence on team functioning and healthcare outcomes as significant.33,50 For an interprofessional team to be seen as effective by patients, an understanding of who is involved in the team and their respective roles are required.33,37 Patients described how an absence of role clarification exacerbated feelings of distrust and neglect.41 This result is supported by the finding of Didier et al.10 who explained how team members should acquaint patients with their various roles to avoid confusion or intimidation. The importance of role clarification was not just for the patients themselves but also for members of the healthcare team. Understanding team members’ responsibilities and identifying various levels of accountability and decision-making among members were perceived to facilitate teamwork and functioning.35 This is in line with findings by Seaton et al.21 who stated that team functioning is positively influenced by increasing levels of familiarity and trust among HCPs. Lack of role clarification is thought to be a great impediment to IPC as it creates confusion and power struggles.1

Interestingly, many patients felt that their healthcare team should have a leader to coordinate team activities and responsibilities.31,39 Several other patients agreed and associated doctors as team leaders.39,52 This is confirmed by a study by Rydenfält et al.57 who identified leadership as a key element for successful teamwork. In support of this study’s finding Rydenfält et al.57 further discussed how doctors are often elected team leaders, thus making their notion of teamwork particularly influential. Unfortunately, patients did observe power issues between doctors and other HCPs. This is in line with research by Karam et al.1 who explained how power issues are a significant barrier to IPC. Hartford et al.9 further discussed how doctors’ attitudes towards supportive therapies vary and may impede cross-referrals. Thus, acknowledging team members’ roles is not enough, with patients explaining how HCPs also need to respect each other and their part within the team. Without this respect the team may not function collaboratively as decisions may be undermined which could adversely affect patient care.33 Quartey et al.12 agreed by stating that poor interprofessional relations, mistrust and undervaluing the roles of others may hinder effective participation of team members in collaborative decision-making.

The quality of communication was perceived to strengthen or hinder collaboration and team operations.33,39,45,55 When communication was effectively delivered, patients reported better relationships with their HCPs.35,46 This result corroborates with the finding of Hartford et al.9 who recognised relational attributes, such as empathy, trust and listening, as key contributors to information exchange. However, when patients described an absence of communication this was often coupled with feelings of frustration, confusion and stress.35,35,39,55 which led to perceptions of suboptimal care.33 This may support research by Fox et al.58 who discussed that interprofessional communication still occurs behind the
scenes, away from patients. Hartford et al. further explained how patients perceived not being listened to as a hindrance to active participation.

A further pivotal finding was the level of involvement carried out by patients which varied throughout the studies. However, what was consistent was patients' appreciation towards HCPs who engaged with them regarding shared decision-making. Many patients believed active participation was central to the success of PCC. The patients' perceptions of IPC within this study endorse literature on PCC which describes the patient at the centre of shared decision-making. Despite patients' preferences to be given a choice to participate in their own care, HCPs did not always amalgamate patients into the interprofessional team. Peduzzi and Agrell and Engel et al. suggest that partnerships with patients continue to be a supported notion that is not well operationalised in IPC. A possible reason for this may be due to overburden systems that lack the resources and workforce exacerbated by fragmented healthcare services.

4.1. Limitations

A limitation identified in this review was the inclusion of studies that only reported on patients' perspectives and, therefore, omitted studies reporting on the experiences of families, communities and caregivers. This could possibly result in important outlooks on IPC being missed. Another limitation was the variance when patients discussed their healthcare teams. The researchers, therefore, meticulously assessed the study context and the patients' narratives to establish whether the patients were referring to an interprofessional team or individual HCPs. This leads on to the search strategy employed in the current review whereby broad search terms were used in the initial search, such as interdisciplinary, interprofessional and multidisciplinary practice. This lack of specificity may have resulted in relevant articles being missed. Further, a mixed-methods exploration of patients' perspectives was lacking.

4.2. Implications for practice and recommendations for future research

Results from this review demonstrate potential to inform changes in practice by improving the nature and quality of interprofessional interactions in healthcare teams. Patients' experiences of their care influence their perspectives of IPC. Therefore, the way HCPs act as a team and towards their patients directly effects how patients perceive IPC, their care, and their role in the team. Professionals should individually consider patients' expectations and preferences regarding their level of participation and comprehension of IPC. Roles should be clearly discussed to patients and within the team to avoid confusion with clear interprofessional communication adapted to the patients' levels of understanding. Leadership was identified as important when managing collaborative activities with mutual trust, understanding and respect as the foundation for interprofessional relations.

It is recommended that future studies employ a mixed-methods exploration of the perspectives of families, communities and caregivers to help gain a more comprehensive picture of IPC by providing key observations of collaborative moments that may have been missed by patients themselves. Finally, educational strategies should be actively encouraged to provide important information on IPC to enhance the quality of team functioning. Such strategies should become a key component of a team’s continuing education. Findings from this paper may be useful in informing interprofessional curriculum expansion.

5. Conclusion

This scoping review has identified important facilitators and barriers related to IPC as perceived by patients. Interprofessional relations, role clarification, and team-based communication were the main factors essential to successful team functioning as perceived by patients. Further exploration of these key factors is necessary in order to guide the development of improvement strategies or interventions focused on strengthening IPC and the patient's experience. The findings from this review show that the patient's perspective of IPC still warrants further investigation in order to improve patient experience, quality of care, and outcomes in a collaborative environment.

Author contributions

RG was involved in conception, design, interpretation of data, and drafting the manuscript. AK was involved in the study design, statistical analysis, and manuscript review. All authors read, commented and approved the final version of the manuscript.

Funding

Funding has been provided by the National Research Foundation (NRF). Opinions expressed, and conclu-
sions arrived at, are those of the authors and are not necessarily attributed to the NRF.

**Conflict of interest**

The authors declare that they have no conflict of interest.

**References**


### Appendix 1: Table 2. Important characteristics of selected studies.

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<tr>
<th>Authors (Year published), Country</th>
<th>Study design</th>
<th>Study setting</th>
<th>Condition &amp; Age of Patient (# of Patients)</th>
<th>IPE present</th>
<th>Form of delivery of IPC</th>
<th>Reported study findings related to the scoping review research aims</th>
</tr>
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</table>
| Abdulrhim et al. (2021), Qatar    | QL, case study | Qatar Petroleum Diabetes Clinic, PHC | Type 2 Diabetes, Adults 53 ± 8 yo (n = 12) | Yes | - Standard of care  
- Diabetes team provides personalised patient education, develop treatment plans, and designs appropriate action plans in consultation with the patient. | - Easy access to and communication with competent and pleasant HCPs.  
- Appreciation of extra time spent with HCPs, frequent follow-up visits, and health education, which empowered self-management. |
| Banfield et al. (2019), Australia | QT, cross sectional | General practice, PHC | Type 2 Diabetes and Mental health disorders, Adults 18-75 yo (n = 18) | No | - Standard of care  
- General practice care plans designed to improve the management of chronic illness, facilitating team care and enabling GPs and consumers to work collaboratively. | - Facilitated access to allied HCPs, but did not improve the quality of care they received.  
- Access viewed as one of the most positive aspects of the process.  
- Did not have an active role in shared decision-making. |
| Battin et al. (2022), Norway      | QL, ethnography | Inpatient hospital setting | Complex pain conditions, Adults (n = 26) | No | - Intervention  
- Biopsychosocial pain rehabilitation programme  
- Approach had a cognitive focus combined with patient education.  
- Group-based programme with more use of group education, counselling, and training sessions. | - Interprofessional teams perceived as supportive.  
- Patients felt believed in and heard.  
- Encounters perceived as positive due to the continuity of the professionals’ communication, while facilitating a personal learning process where patients feel they are seen as credible. |
| Cutler et al. (2018), England     | QL, case study | North West of England Higher Education Institute | Various chronic conditions, Adults 16-69 yo (n = 14) | No | - Standard of care  
- North West of England Higher Education Institute who had accessed care through a National Health System provider. | - Participants noted the importance of key characteristics in effective teams, but felt that these were not always consistently present.  
- Communication was considered to be the most important attribute in team working.  
- Challenges impact patient involvement in the team: (a) patients feel misunderstood and less involved that they would like when professionals take control, and (b) patients have to balance the conflicting opinions of different HCPs.  
- Professionals do not often consider patients to be part of the team. |
| Doekhie et al. (2018), Netherlands| QL, phenomenology | PHC | Various chronic conditions, Older adults 65 yo or older (n = 19) | No | - Standard of care  
- Primary care team interactions | | (continued on next page) |
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<thead>
<tr>
<th>Authors</th>
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<tbody>
<tr>
<td>Fu et al. (2018), England</td>
<td>England</td>
<td>QL, grounded theory</td>
<td>National Health Service chronic pain management clinics located in three health centres in northern England.</td>
<td>Chronic back pain, Adults 27-69 yo (n = 26)</td>
<td>No</td>
<td>• Standard of care &lt;br&gt;• Variety of HCPs worked together in the clinic. &lt;br&gt;• HCPs helped patients developed goals and taught self-management strategies based on their individual needs.</td>
<td>• Patients preferred being treated as an individual person by a team for pain management. These attributes were perceived to facilitate the development of a patient-professional partnership and patients' self-management ability. &lt;br&gt;• Limited communication with HCPs can have an impact on patients' health outcomes, evidenced by frequent admission to hospital and a handing over of responsibility to HCPs. &lt;br&gt;• Negotiating a self-management strategy that is individualised and cohesive requires a positive therapeutic alliance between each patient and HCP. &lt;br&gt;• The lack of specific information on the pain management service from GPs was perceived as a barrier, and some patients were unaware of support and care provided after their referrals. &lt;br&gt;• The domination of communication by HCPs contributes to the marginalised status of patients and families in the healthcare team. &lt;br&gt;• The lived experiences of patients and families are overshadowed by the needs of the healthcare system. &lt;br&gt;• Patient and family engagement has the potential to support the implementation of PCC and IP practice in healthcare delivery. &lt;br&gt;• The elderly often do not experience the integration of team care as such. This is a real opportunity for teams to improve their care and to make the patients' experiences better in line with what they are aiming: allowing patients to live at home as healthy and independently as possible for as long as possible.</td>
</tr>
<tr>
<td>Gao et al. (2022), Canada</td>
<td>Canada</td>
<td>QL</td>
<td>Royal University Hospital, Saskatoon, Saskatchewan, Canada - a tertiary referral centre including adult internal medicine and paediatrics.</td>
<td>Not specified (n = 11)</td>
<td>Yes</td>
<td>• Standard of care &lt;br&gt;• IP rounds at acute care medicine and paediatric units. &lt;br&gt;• Team members engaging in discussion of ongoing care plans. &lt;br&gt;• IP bedside rounds, inclusive of patients and families.</td>
<td>• The domination of communication by HCPs contributes to the marginalised status of patients and families in the healthcare team. &lt;br&gt;• The lived experiences of patients and families are overshadowed by the needs of the healthcare system. &lt;br&gt;• Patient and family engagement has the potential to support the implementation of PCC and IP practice in healthcare delivery.</td>
</tr>
<tr>
<td>Grol et al. (2020), Netherlands</td>
<td>Netherlands</td>
<td>QL</td>
<td>Four general practices, PHC</td>
<td>Various chronic conditions, Older adults 84 yo [69–98] (n = 44)</td>
<td>No</td>
<td>• Standard of care &lt;br&gt;• Dutch general practices provide a comprehensive and patient-oriented approach with a high continuity of care, and can also coordinate care for frail older patients with complex care needs.</td>
<td>• The elderly often do not experience the integration of team care as such. This is a real opportunity for teams to improve their care and to make the patients' experiences better in line with what they are aiming: allowing patients to live at home as healthy and independently as possible for as long as possible.</td>
</tr>
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</table>
### Appendix 1: Table 2. (continued)

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<tbody>
<tr>
<td>Hamilton et al. (2022), England</td>
<td>QL, ethnography</td>
<td>Head &amp; neck cancer centres</td>
<td>Head &amp; neck cancer, Adults 38-87 yo (n = 30)</td>
<td>No</td>
<td>Standard of care, Team meetings and team outpatient clinics</td>
<td>• Informal caregivers often form communication bridges between patients and professionals.</td>
</tr>
<tr>
<td>Hustoft et al. (2018), Norway</td>
<td>QT, cross sectional</td>
<td>Seven somatic rehabilitation centres</td>
<td>Various chronic conditions, Adults 18 yo or older (n = 655)</td>
<td>No</td>
<td>Standard of care, These centres deliver services via IP teams.</td>
<td>• Deeper consideration should be given to how the team incorporates the patient perspective and/or delivers its discussion of options to the patient.</td>
</tr>
<tr>
<td>Janssen et al. (2020), Netherlands</td>
<td>QL</td>
<td>Primary–secondary care interface</td>
<td>Various chronic conditions, Adults 24-75 yo (n = 16)</td>
<td>No</td>
<td>Standard of care, Patients treated in both primary and secondary care.</td>
<td>• A ‘cycle of paternalism’, where anxious patients have little real choice other than to accept the clear guidance offered by the expert team.</td>
</tr>
<tr>
<td>Jensen et al. (2022), Norway</td>
<td>QL, case study</td>
<td>Community health centre and online encounters</td>
<td>Various chronic conditions (n = 5)</td>
<td>Yes</td>
<td>Intervention, Student teams were encouraged to collaborate by providing daily care for patients, conducting holistic health assessments, and different kinds of consultations. The teams worked concurrently and had their workspace for preparations and debriefings.</td>
<td>• Team function is associated with better patient-reported continuity of care and higher ADL-benefit scores among patients after rehabilitation.</td>
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<td>• Patient experienced increased satisfaction with care when there was shared knowledge, shared goals and mutual respect among team members.</td>
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<td></td>
<td>• PCC</td>
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<td>• Relationship building, both with patients and with other HCPs.</td>
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<td>• Transparent collaborating: be able to provide clarity on the process of collaboration and on roles and responsibilities of those involved.</td>
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<td>• HCPs willing to acknowledge mistakes, give and receive feedback.</td>
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<td>• Patients’ narratives were not always heard and appreciated by the students. Some patients expressed that they did not feel they had the opportunity to tell their stories to the interprofessional students.</td>
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</table>
| Klipatrick et al. (2021), Canada | QT, cross sectional | PHC | Not specified (n = 309) | No | • Standard of care  
 Patients needed to be cared for by a healthcare team with a nurse practitioner. | • Strategies to support role clarity and to develop non-technical skills, such as communication, is crucial. Interventions, including debriefing, structured communications, and speaking-up, show promise to improve team functioning.  
 • Positive perceptions of team functioning and outcomes when team processes include decision-making, communication, care coordination, cohesion, problem-solving, a focus on the needs of patients and families, and trust.  
 • Obstacle components to IPC included incompleteness of health personnel, no knowledge of patients about HCPs and no involvement of patients in decision-making.  
 • Enabling elements to IPC included PCC, collaboration among HCPs, active patient participation.  
 • Patient satisfaction with the telehealth model of care was high.  
 • Patients reported their experiences were impacted by access to care, IP practice, and enhanced care for chronic back disorder and technology. |
| Kurniasih et al. (2023), Indonesia | QL | Breast unit of an Indonesian referral centre hospital | Breast cancer, Adults 44-60 yo (n = 9) | No | • Standard of care  
 Outpatient IPC in the breast care unit of an Indonesian referral centre. |  |
| Lovo et al. (2019), Canada | Mixed methods | Rural community, PHC | Low back and/or leg-related pain, Adults 50.84 ± 13.87 yo (n = 19) | Yes | • Intervention  
 • IP videoconferencing with patient.  
 • A full neuromusculoskeletal assessment for the lumbar spine was completed on each patient.  
 • Patients were provided with a lay summary of assessment findings, management recommendations, and education regarding expectations for treatment needs, and answers to any questions they had. |  |
| Miller-Rosales & Rodriguez (2021), USA | QT, cross sectional | 14 community health centres sites, PHC | Type 2 Diabetes, Adults, 26-76+ yo (n = 1277) | No | • Standard of care  
 • Interdisciplinary PHC team expertise can aid patient self-management of type 2 diabetes. | • Patients with access to care team expertise in self-management support, report better experiences of chronic care.  
 • These team roles may reduce barriers to patient self-management and improve patients’ overall experiences of chronic care. |

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<tr>
<td>Ngangue et al.</td>
<td>2020</td>
<td>Canada</td>
<td>QL</td>
<td>PHC</td>
<td>Multimorbidity, Adults 47-72 yo (n = 9)</td>
<td>Yes</td>
<td>• Invention</td>
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<td>• Patient provided with a one-hour initial assessment by a PHC nurse.</td>
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<td>• Patients had an average of 2.6 hours of interprofessional interventions throughout the 4 months of the intervention.</td>
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<td>• PCC approach increased patient appreciation and satisfaction.</td>
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<td></td>
<td>• Challenges of service accessibility and follow-ups.</td>
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<td>Shrader et al.</td>
<td>2019</td>
<td>USA</td>
<td>Mixed methods</td>
<td>Interprofessional Teaching Clinic - clinical setting within the University of Kansas Department of Family Medicine outpatient clinic</td>
<td>Not specified (n = 181)</td>
<td>Yes</td>
<td>• Standard of care</td>
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<td>• IP student teams provide care under the supervision of a team of IP preceptors.</td>
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<td>• Composition of each student team depends on the patient's needs and profession availability each day of the week.</td>
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<td>• IP Teaching Clinic is associated with a positive experience of care for patients.</td>
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<td>• The majority of patients receiving care in the clinic by IP teams of students report satisfaction with their care and they would return to the clinic.</td>
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<tr>
<td>Sorensen et al.</td>
<td>2020</td>
<td>Norway</td>
<td>QL</td>
<td>Four general practice, PHC</td>
<td>Diabetes and Multimorbidity, Adults 60 yo (45–72) (n = 11)</td>
<td>No</td>
<td>• Standard of care</td>
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<td>• A diabetes specialist nurse, nurse or medical secretary provided routine diabetes controls independently.</td>
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<td>• These professionals worked in parallel with the GPs, who were only consulted when needed.</td>
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<td>• All HCPs reported to have training in diabetes care and in patient-centred or motivational communication skills.</td>
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<td>• Patients experienced attention towards the psychological and emotional aspects of living with diabetes.</td>
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<td>• Compared to GPs, whose appointments were experienced as stressful, patients found a team more approachable and more likely to address patients' questions and worries.</td>
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<td>• Patients emphasised how they disliked being asked to prioritise one medical concern over another in GP-led appointments, which contrasts with the essence of self-management support, where patients' perspective on illness and their need for knowledge should steer the conversation.</td>
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### Appendix 1: Table 2.

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</table>
| Stewart et al. (2022), USA       | QL           | University-led home visits | Not specified, Older adults 65 yo or older (n = 95) | No          | Standard of care, Interprofessional team visit to patient’s home. | • Participants expressed little or no involvement in decisions regarding their treatment or in setting lifestyle goals. Instead, participants asserted that it was their providers’ responsibility to attend to their diabetes and that they themselves, although they wanted to, felt they had limited knowledge about how to influence their illness and its outcomes.  
• Ineffective provider communication skills, poor PCC, and lack of professionalism can lead to delays in care, confusion, and negative health outcomes.  
• How HCPs communicated was important.  
• Empathy and emotional support are critical to satisfying patients’ needs.  
• Interpersonal communication among HCPs: witnessing HCPs dismiss each other’s contribution to the care plan which left the patient confused, delayed decision-making, and increased their mistrust in the care. |
| Szafran et al. (2018), Canada    | QT, cross-sectional | Five family medicine academic teaching clinics, PHC | Not specified, Adults 18 yo or older (n = 565) | No | Standard of care, PHC clinic with access to various HCPs.  
• The physicians practiced as part of an IP team with clinic staff and HCPs. | • Patients perceive that team-based care improved their knowledge and access to care, overall health and avoided some emergency department visits and hospital admissions, how to manage their condition, and improved psychological wellbeing and healthcare independence.  
• Patients preferred to receive care from a doctor, rather than any other HCP within the family practice clinics. Patients appear to identify doctors as the team leader.  
• Patients felt that they were an active team member, making decisions about their care together with HCPs. |
<table>
<thead>
<tr>
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</table>
| Taranta & Marcinowicz (2020), Poland | QL | Eight general practice clinics, PHC | Various chronic conditions, Adults 30-88 yo (n = 37) | No | • Standard of care  
  • PHC team  
  • PHC team and its members collaborate with medical specialists, school nurses, school principals and representatives of health organisations and institutions. | • Recognised the need for collaboration between a nurse and a doctor so as to ensure proper care for the patient.  
  • The perception of this collaboration (or sometimes a lack of collaboration) results from the participants’ varied experiences and observations during their visits to the clinic.  
  • The traditional model of nursing care and the hierarchical relationship, with the dominant role of the doctor, are evident in the patients’ statements. |
| Taylor et al. (2018), England | QL | General practices, PHC | Depression, Older adults 65-85 yo (n = 13) | No | • Intervention  
  • The intervention group received a low-intensity intervention of collaborative care delivered by a case manager for an average of six sessions over 7–8 weeks alongside usual GP care, while the control group received usual GP care.  
  • The collaborative care intervention included five components: patient-centred assessment, symptom monitoring, medication management, active follow-up, and behavioural activation. | • The collaborative care framework has the potential to optimise patient outcomes, but implementation requires integration in day to day general practice.  
  • Increasing GPs’ understanding of collaborative care might improve liaison and collaboration with case managers, and facilitate the intervention through better support of patients. |
| Tiozzo et al. (2019), Italy | QT, cross sectional | Community-based practice, PHC | Chronic heart failure and multimorbidity, Older adults greater than 65 yo (n = 68) | Yes | • Intervention  
  • Care Management Programme - received a combined education and training on care management using a collaborative team-based approach.  
  • Care manager nurses performed a comprehensive home-based assessment of patients included in the intervention group. | • Programme reduced Emergency Room visits and hospital admissions for elderly patients with multimorbidity.  
  • Emphasizing prevention, self-management, continuity and coordination of care was beneficial among older community-dwelling multimorbid persons compared to usual care. |
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<tr>
<td>Wells et al. (2020), USA</td>
<td>USA</td>
<td>QL</td>
<td>PHC</td>
<td>Back pain, Older adults 65 yo or older (n = 115)</td>
<td>Yes</td>
<td>Intervention</td>
<td>• On the basis of this assessment, the care manager nurse and the GP formulated an evidence-based tailored integrated individualised healthcare plan. • The plan was shared with the patient, his caregivers, and other providers to help coordinate complex care taking account patients’ wills and values. • The nurse then conducted a proactive monitoring follow-up by telephone, in-practice visits, or at home. • The nurse consulted with the GP as needed, regularly updating the individualised healthcare plan to ensure that the patients’ needs were being met and to assess whether changes to the plan were necessary. • Engaging the patient in the planning process: patients are encouraged to take responsibility on their own health, setting their own goals, developing strategies, activities and solutions. • Patients actively participate in reaching treatment goals also because the plan makes sense to them and fit with their lifestyle.</td>
</tr>
</tbody>
</table>

Abbreviations: ADLs, Activities of daily living; GPs, General practitioners; HCPs, Healthcare professionals; IP, Interprofessional; IPC, Interprofessional collaboration; IPE, Interprofessional education; LBP, Low back pain; PCC, patient-centred care; PHC, Primary healthcare; QL, Qualitative; QT, Quantitative; USA, United States of America; yo, Years old; #, Number.