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General practitioners' perceptions of interprofessional collaboration in Belgium: a qualitative study

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Abstract

Background Belgian primary care is facing significant challenges due to increasing healthcare demands and an overall decline in the workforce. Most general practitioners (GPs) work solo or in mono-disciplinary practices, leading to suboptimal outcomes in areas such as preventive care and health promotion.

In response, the Ministry of Health introduced a "New-Deal" for GPs, which includes additional funding to support innovative practice organisation models. A think tank of GP representatives was established to guide the initiative, with input from practising GPs gathered for further insight.

This study aims to identify the professionals needed to support GPs in daily practice, define their roles, and explore the conditions necessary for integrating them into the GP-centred model of care.

Methods Eleven focus groups were conducted with 122 GPs, ensuring geographical and linguistic diversity across Belgium. Participants were selected through purposive sampling to ensure a diverse range of organisational models across the country. A structured focus group guide was designed, incorporating three scenarios to examine tasks commonly encountered in GP practices. Data analysis was conducted using a codebook developed through an inductive approach.

Results GPs expressed a preference for relatively small-scale teams, generally consisting of nurses and receptionists. The role of a practice assistant was more ambiguously defined, positioned between clinical and administrative responsibilities. Key tools for effective team integration included co-location, well-defined protocols, a shared electronic health record, care coordination, and unified logistical management, all of which are critical to fostering multidisciplinary collaboration.

Conclusions This study explores Belgian GPs' preferences for integrating healthcare professionals into their practices, with team composition adjusted to workload and patient needs. However, the traditional autonomy of practice design may hinder change. Future research is needed to refine financial models and integration tools for collaborative care.

Keywords General practitioners, Practice organisation models, Team integration, Interprofessional collaboration, Nurses, Receptionists, Practice assistants

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Background

Primary care is under increasing pressure, with growing demand and significant workforce shortages, particularly among general practitioners (GPs) and nurses [1, 2]. The role of primary care, and especially that of GPs, must adapt to new contexts and the increasingly complex health needs of populations. There is a clear need for a broader range of healthcare and social services, greater workforce capacity, and economies of scale to meet these demands [3]. As people live longer and experience multiple chronic conditions, the need for care coordination and proactive management continues to rise [4, 5]. The COVID-19 pandemic reconfirmed that primary care serves as the foundation of healthcare systems, playing a critical role in linking individuals to the wider health system. It underscored the importance of accessible, comprehensive, and patient-centred primary care services in both pandemic response and overall public health [6, 7]. Moreover, as medical technologies advance and health care costs rise, there is increasing pressure on primary care to take on more outpatient responsibilities, such as organising prevention campaigns, conducting cancer screenings, and performing practice management tasks. Yet, this comes at a time when primary care is grappling with a severe workforce crisis [8]. Many European countries, including Belgium, are facing GP shortages and have begun proposing new practice models to address the issue [2, 9]. In Belgium, the GP workforce is shrinking, with quotas set by the planning commission falling short (40% GPs vs. 60% specialists) [10]. A large proportion of GPs are nearing retirement, while younger GPs are fewer in number and tend to prefer fewer working hours to maintain a better work-life balance [11].

Given the increasing needs and workforce challenges, the OECD has called for action to restructure primary care practices. This includes promoting teamwork through greater interprofessional collaboration, developing community-based teams, and strengthening preventive medicine and care coordination [3]. There is also a need for revised payment schemes and non-financial incentives to support these changes [3].

In Belgium, primary care is typically delivered through independent medical practices, where GPs enjoy considerable freedom in choosing their organisational model. These practices operate under two main financial schemes, leading to a wide variety of practice configurations. Most GPs work in solo or monodisciplinary group practices, relying on a fee-for-service model and serving around 95% of the population.

Only about 5% of the Belgian population receives primary care through capitation-based practices, which tend to involve multidisciplinary teams of GPs, nurses, physiotherapists, and a dedicated receptionist (INSTITUT NATIONAL D ' ASSURANCE MALADIE INVALIDITÉ Note CGSS 2024 / 045 - Communication personnelle. 2024, [12]).

The Belgian Health Care Knowledge Centre (KCE) reports low coverage for several care performance indicators, such as breast cancer screening, flu vaccination, dental care, mental health services [10], and chronic care management [13]. Additionally, in 2022, 75% of Belgian GPs reported that they were no longer accepting new patients [11].

In June 2022, the Belgian Federal Ministry of Health launched the "New-Deal for General Practice", a policy reform aimed at addressing these challenges through additional funding and structural changes at the GP practice level [14], Table 1 outlines the key themes of this reform.

A working group (WG), composed of key stakeholders such as GP interest groups and trainees, sickness funds, federal health service representatives, and universities, was tasked with developing a new organisational and financial model for GP practices.

The WG reached a consensus on several key tasks that should serve as the baseline for organising GP practices. These tasks include: 1) Serving as the first point of contact for diagnosis and triage, 2) Performing certain technical procedures, such as gynaecological exams, blood

Table 1 Main themes of the New-Deal for General Practice in Belgium. June 2022

Themes	Description
GP workforce and geographical distribution	To guarantee enough GPs to cope with announced retirements and the different work-life balance of the new generation To ensure a better geographical distribution in line with needs
Administrative workload	To reduce unnecessary administrative workload at the GP's level: digitalisation, automation, sick leave requiring a medical certificate, etc
Accessibility of GP	To improve financial accessibility to GP for general and specific populations
A new organisational model	To enable larger list-size with organised task-shifting, multidisciplinary work with shared electronic health records (EHR), remote consultations
A new financial model	To enable a better cooperation between disciplines, ensuring care continuity, quality, prevention and health promotion

pressure monitoring, suturing, ultrasonography, and point-of-care testing, 3) Managing multimorbidity and chronic diseases, 4) Organising individualised preventive care, 5) Organising ambulatory palliative care, 6) Coordinating complex home care, including home hospitalisations, 7) Overseeing population health, and 8) Taking care of practice management.

It was immediately recognised that these tasks should not be mandatory or restricted to GPs alone. Instead, the model should allow for an evolution from solo practice to a multidisciplinary team, built around the GP, with a task-sharing approach organised at the practice level. However, a knowledge gap remained regarding the composition of such teams in the Belgian context.

Aim

This study aims to explore and evaluate GPs' perceptions of the most appropriate professionals to support them in managing daily tasks within their practices, as well as the necessary conditions for effective implementation. The findings will inform strategies for optimising team composition and task delegation in primary care, with the goal of enhancing interdisciplinary collaboration and improving patient care delivery.

While previous studies have evaluated interprofessional team models based on performance indicators, workforce efficiency, and patient outcomes, this study focuses on GPs' perspectives regarding which professionals they perceive as most suitable for integration into their practice and the conditions required for effective collaboration. This distinction is important, as perceptions influence the feasibility and acceptability of interprofessional collaboration at the practice level.

Methods

Study design

To gain an in-depth understanding of the issue by capturing diverse perspectives from professionals in various practice settings and contexts, a qualitative research design was employed. Focus groups were organised to facilitate discussions among participants from a wide range of GP practice configurations.

This method was chosen as it enables interactive discussions, allowing participants to reflect on and refine their views through peer exchange. Additionally, it provided a pragmatic and efficient approach by leveraging pre-existing Local Quality Evaluation Groups (LQEGs), which regularly bring together GPs in structured discussions.

This study follows an inductive qualitative approach, where insights were derived from participants' discussions rather than predefined theoretical constructs. The analytical framework was informed by prior discussions in the New-Deal Working Group, which outlined key GP tasks to address the challenges identified in primary care. This ensured that the themes emerging from the data aligned with real-world practice challenges: chronic disease and multimorbidity management, serving as the first point of contact with healthcare system for a diverse patient population, practice organisation and management, population-level responsibility for prevention, etc.

The researchers structured this information into concrete case studies to facilitate participants' immersion in real-world scenarios. These case studies were categorised into three distinct cases, encompassing the key tasks identified by the New-Deal Working Group. This study followed the Standards for Reporting Qualitative Research (SRQR) [15].

Ethical approval was granted by the Ethics Committee of the University Hospital of Liège under reference 2022/244.

Recruitment and sampling strategy

Focus groups were conducted within pre-existing Local Quality Evaluation Groups (LQEGs) for GPs, as part of Belgium's physician accreditation system. These groups meet at least four times a year with GPs working in the same region, allowing the study to leverage existing group dynamics and streamline recruitment. The research team decided in advance to select 11 LQEGs to ensure geographical diversity (five groups in Flanders, two in Brussels in each language regime, and four in Wallonia; rural–urban) so that practices are carried out in different environments.

Other selection criteria aimed to maximise the diversity of general practice within each group: Diversity of organisational and financial models of practice—A minimum of 50% group practices and at least one participant from a capitation model, based on the different categories listed within the NIHDI; Diversity of participant age—A minimum threshold of 30% under 40 years old, as the aim is to gather GPs' perception regarding the evolution of the profession in the future; And finally gender distribution – A minimum threshold of 50% female GPs, in line with the feminisation of the profession.

Recruitment was carried out in September 2022 via the National Institute for Health and Disability Insurance (NIHDI) website. For reasons of confidentiality, the Institute could not provide the personal contact details of the LQEGs directly to the research team. The GP responsible for the LQEG had to complete a form containing information on the selection criteria detailed above, which was then sent to the research team.

Interview guide

The topic guide was first developed in English (Additional file 1.pdf), then translated into French and Dutch. A pilot test of the French version was conducted with a group of academic GPs working in different practice configurations. Following minor revisions, the guide was finalised.

The topics covered three key areas that GP practices must address in the future: 1) Chronic health and social care for patients with multimorbidity, 2) Organising practice activities as the first point of contact for different patient profiles, and 3) Population health responsibilities and practice management.

Data collection

The focus groups were conducted between October and November 2022 at the usual locations of the LQEGs, in either French or Dutch, by native-speaker moderators. Informed consent was obtained from all participants prior to the sessions.

After a brief explanation of the focus group method and objectives, the moderator presented the New-Deal process and its goals. Participants were provided with a portfolio outlining the three practical situations to be discussed. Each situation was debated sequentially, with key points recorded on a whiteboard. Once discussion on one situation was exhausted, the moderator moved to the next. All discussions were audio-recorded, transcribed verbatim, and anonymised for confidentiality.

Data analysis

The verbatim transcripts were analysed using QSR-NVIVO® software (version 14). An inductively developed codebook, based on criteria such as acute and chronic activities, necessary conditions, professional roles (in or out of practice), and management tasks, guided the coding process.

HJ and DT coded the data in their native languages. The data were then extracted, categorised in Excel, and translated into English. The transcripts were reviewed by another researcher, and regular meetings were held to discuss the main ideas generated. Disagreements in coding and any changes to categories were resolved through group consensus.

Results

A total of 61 LQEGs applied to participate in the study. Through a blinded selection process, 11 LQEGs that met the predefined criteria were selected. A total of 122 GPs participated in the focus groups, with an average of 11 GPs per group (see Table 2 for details).

At the start of the focus groups, some participants were sceptical about the study process and the research team, leading to initial hesitancy to engage. This cautious attitude was particularly evident in the context of government discussions, where concerns were raised about the potential implications for professional autonomy. Some participants feared that the consultative process would align with a pre-determined political agenda, which influenced the dynamics of the early discussions.

However, as the discussion progressed within the group, participants generally became more engaged, allowing for a more open exchange of views.

Quotes will be identified using the following abbreviations based on language and province: Dutch-speaking groups [OVL_nl], [BRX_nl], [WF_nl], [ANT_nl], [LIM_nl], [VB_nl]; and French-speaking groups [BRX_fr], [H_fr], [LIE_fr], [LUX_fr], [BW_fr].

Integration of Professionals into GP Practices

GPs prefer to integrate nurses and receptionists as core members of their practices. As one participant stated: *"the nurse and the secretary..."* [H_fr]. Nurses are seen as essential for clinical support, while receptionists play a crucial role in patient coordination and administrative management.

Although the role of a practice assistant was mentioned, its responsibilities remain unclear, as tasks

Table 2 Composition of focus groups

Total participating GPs		
122	Average age (years)	45
	Gender	70 women, 52 men
	Localisation	21 urban, 40 semi-rural, 61 rural
	Practice organisation	28 solo 12 monodisciplinary network 41 monodisciplinary co-located 24 multidisciplinary working fee-for-service 17 multidisciplinary working capitation-fee
	Financial mix	105 working mainly fee-for-service 17 working mainly capitation-fee

assigned to this role often overlap with those of nurses or receptionists. Other professionals, including physiotherapists, pharmacists, occupational therapists, psychologists, midwives, social workers, health coaches, and dieticians, were discussed, but their integration depends on local care needs and availability. Information technology (IT) personnel were also highlighted as relevant for managing digital health records and supporting electronic health systems.

Some functions, such as case managers, population health coordinators, and team leaders, were discussed but without a clear assignment to a specific professional. While some participants supported the introduction of a practice manager, others emphasised that any management function should be in collaboration with the GP, as one participant explained: *"If there were a form of manager or something of that order, it would have to be in collaboration with the general practitioner"* [H_fr].

Patients and family members were also recognised as active participants in healthcare, particularly in prevention and chronic disease management.

Task Allocation to Professionals

GPs identified their core responsibilities as diagnosis and treatment planning, ensuring continuity of care, and guiding patients through the healthcare system. They viewed themselves as the final authority in patient management, as one GP explained: *"You do have final responsibility as a doctor"* [BRX_nl].

However, many participants expressed frustration over the growing administrative burden and the increasing social complexity of consultations, which they felt detracted from their core medical role. One participant remarked*: "A lack of respect for the profession… I didn't study for years to deal with paperwork and social work"* [BW_fr]. Another added: "*Here, in the north of the city, we have a significant number of vulnerable patients for whom we need a lot of social support for housing and income problems. So we've set up links with the Public Social Welfare Centre in order to have this help…"* [H_fr].

To alleviate these pressures, delegation and task-sharing were widely supported, though concerns remained about losing clinical oversight and the impact on professional identity. Many GPs favoured an expanded role for nurses, particularly in routine technical tasks such as electrocardiograms, blood pressure monitoring, spirometry, cervical swabs, vaccinations, medication management, and therapeutic education. One participant stated: *"If we had a nurse for blood tests and vaccinations, it would free up so much time for actual patient care"* [WF_nl].

Beyond individual care, nurses were also viewed as key figures in prevention and health promotion. Many participants suggested that nurses could help implement public health initiatives, such as chronic disease monitoring, lifestyle coaching, and mental health screening. Some envisioned a stronger role for nurses in organising population-level interventions, such as immunisation campaigns and screenings in collaboration with local authorities.

However, concerns about blurring professional boundaries persisted. One participant emphasised*: "If it is the first time at the practice, I would prefer to see the patient myself first. We can delegate follow-ups, but initial contact should stay with the GP"* [ANT_nl].

While nurses were widely accepted within the practice, the role of the receptionist was more controversial. Receptionists were generally regarded as the first point of contact, responsible for appointment scheduling, coordinating patient flow, and compiling at-risk patient lists for targeted prevention efforts. Some participants saw potential for receptionists to take on triage tasks, particularly in directing patients to the most appropriate professional.

However, this raised concerns about medical liability and patient safety, with some GPs arguing that any triage function should be carefully structured and supported by protocols. One participant noted: *"The patient can visit the professionals, but there must be someone who will be the first point of contact"* [BRX_nl]. Others emphasised that receptionists must be trained to identify urgent cases and redirect patients appropriately. A GP proposed: "*A well-qualified medical secretary with extensive experience and familiarity with chronically ill patients can significantly assist doctors. They can manage calls, coordinate appointments, and promptly contact the physician when necessary, particularly in emergencies…"* [BRX_fr].

The practice assistant role remained the most ambiguous. Some participants strongly supported a hybrid role that combined medical technical tasks with administrative duties, while others preferred clearer professional boundaries. The uncertainty over the role led to mixed views on whether it should be a distinct profession or simply a combination of existing receptionist and nursing roles. One participant reflected: *"For practical reasons, it would be better to delegate medical tasks to a nurse and let the practice assistant focus on triage"* [VB_nl]. Another expressed concern about a lack of standardised training for practice assistants, stating*: "To be honest, I don't quite understand the background of a practice assistant…"* [BRX_nl].

Although the integration of nurses and receptionists was widely supported, the role of other professionals, such as physiotherapists, psychologists, and social workers, remained more context dependent. Many GPs valued

their contributions but preferred them to be external rather than embedded within the practice.

A psychologist's role was seen as particularly valuable in supporting both patients and care teams, with one participant suggesting*: "The psychologist could also be a supervisor for the working team. Finally, they could work for both patients and caregivers"* [BRX_fr].

The issue of workload and practice size also shaped perspectives on task delegation. Many participants acknowledged that larger practices had more flexibility to integrate additional professionals, while smaller practices had to prioritise delegation within existing resources. Regarding workload, GPs are aware of the paradigm shift between older doctors and the younger generations. One participant expressed concern*: "We don't have enough GPs in our town. Every day, new patients are calling in because they don't have a GP. And the day the old doctors in the area retire, it's a disaster, it's a disaster!"* [BW_fr]. There is a certain ambivalence about practice size, as one participant noted: *"…bigger structure equals fear of losing control a bit. A smaller structure means having to manage a lot of things on yourself, which is a bit like the other side of the coin…"* [LIE_fr].

However, some GPs remained reluctant to shift too much responsibility away from doctors, arguing that team-based care should not come at the expense of clinical autonomy.

Conditions for successful integration

A shared location was seen as a key factor for successful integration, particularly for GPs, nurses, and receptionists. Proximity facilitates direct communication and rapid responses in emergencies, though some participants highlighted logistical challenges, such as space constraints. As one participant noted: *"We need bigger waiting rooms too because the nurses will go faster than us"* [LUX_fr].

Effective collaboration also requires communication tools such as shared electronic health records (EHRs) and regular team meetings. One participant emphasised what he considered to be the most relevant: " *Most important would be that there is only one software package for all GPs, to be used individually at practice level and also to be shared with other colleagues who are not GPs.*" [OVL_nl]. While many participants favoured structured team meetings, others preferred frequent but informal check-ins to facilitate information exchange. One GP explained: *"More frequent contact reduces the communication gap and makes it easier to share information"* [BRX_nl].

GPs emphasised that training and a clear medico-legal framework are essential for successful task delegation. They highlighted the need for primary care nurses with specialised training and called for clearer legal definitions of professional roles to ensure accountability. One participant stated: *"… We need primary care nurses who are specially trained …"* [BRX_fr].

While most GPs recognised the value of interprofessional collaboration, they strongly supported patient freedom of choice, particularly regarding access to external professionals. Some favoured multidisciplinary collaboration at a network level rather than within a single practice, to maintain flexibility and diversity in care options. One participant noted: "*We also have to respect the patient's freedom of choice… it should not be mandatory to work with a fixed team"* [LIM_nl]. Nevertheless, patient freedom can also restrict doctors' autonomy. Indeed, if the patient chooses their service providers from the network, it becomes the patient's network rather than that of the GP. This contrasting viewpoint is emphasised by one participant: "*…patient freedom limits us a little in our network formation, I think …*" [BW_fr].

The feasibility of integrating new professionals depends on practice size and workload. Larger practices find it easier to justify hiring full-time professionals, while smaller practices often rely on shared staffing models across multiple locations.

However, some GPs expressed concerns that larger practices could lead to more complex coordination challenges and weaker personal relationships with patients. As one participant reflected: *"Larger structures might mean better efficiency, but they also increase coordination time and reduce personal connections." [LIE_fr].*

While some professionals, such as psychologists, social workers, and physiotherapists, were considered valuable, GPs generally preferred these roles to remain external rather than integrated into the practice. The pooling of certain profiles across multiple practices was proposed as a strategic approach. One GP suggested: *"…to employ one social worker for several practices, but not in the practice… Just in the network*" [OVL_nl]. The idea of a population health manager coordinating services across multiple practices was discussed, but feasibility concerns remain. One participant remarked: *"This is the responsibility of the municipality. I don't think we as GPs should play an active role in this…"* [BRX_nl].

Discussion

The aim of this study was to explore and evaluate GPs' perceptions of the most appropriate professionals to support them in managing daily tasks within their practices, as well as the necessary conditions for effective implementation.

GPs expressed a preference for integrating nurses and receptionists into the practice. However, the integration of other professionals varied depending on the practice

context, with openness towards practice assistants, social workers, physiotherapists, and psychologists.

Participants were concerned about whether there was sufficient workload to justify integrating certain professionals, noting that their roles depend on the prevalence of specific health issues. While working with larger patient lists could support this integration, smaller practices with limited staff were generally preferred.

There is a risk that when professionals determine practice size and design, team composition may prioritise organisational needs instead of the population's healthcare needs.

Multidisciplinary group practices are already common to varying degrees in many contexts, such as Portugal and Estonia. In various combinations, these include GPs, family nurses and administrative staff. Professionals are grouped together in the same physical structure and look after the same population [16].

The integration of professionals in a team-based organisation enables better care continuity, and responsiveness to population and community problems [17]. Larger practices offer opportunities in sharing staffing and training, as well as sharing back-office services with joint investments. These examples could lead to economies of scale, but there is little evidence to support this statement, and it could be outweighed by non-economic factors due to more complex governance and management [18].

GPs in the focus groups expressed mixed views on small versus larger practices. Larger practices were seen as potentially more efficient but raised concerns about reduced personal relationships with patients and logistical challenges, especially in urban areas with limited space. The ideal practice size is difficult to define, as it depends on the services offered, and there is no clear evidence linking practice size to performance [18].

Another limitation highlighted is patients' perceived loss of freedom in choosing their healthcare professionals. The Belgian health system is based on the freedom of choice for both providers and patients, which makes the shift towards multidisciplinary practices around the same patient population a significant paradigm shift.

Current practices with GPs have no mandatory limits on list size or practice design, except in specific cases. In contrast, some countries set list sizes for GPs, typically between 1,200 and 2,000 patients, with assistant doctors hired when the patient list is exceeded [16].

However, natural limits to this freedom were also pointed out, including the availability of specialists, caregiver shortages, and geographical constraints.

Nurses act at individual and population levels for triage, technical acts and prevention. In Belgium there is certainly room for improvement due to inappropriate training, an inadequate legal framework, and the payment system [19].

Receptionists perform both administrative and secretarial functions and serve as the initial point of contact for patients visiting the practice. A triage role within the practice is often mentioned, sometimes in connection with the nurse. There are various examples of triage in the healthcare system in general, such as during general practice on-call, or at the entrance to hospital emergency departments [20].

The place of practice assistants is unclear in the Belgian context, as their tasks could be shared between the receptionists and nurses, with either an administrative role or a more technical support. Implementation of this function must be carefully evaluated to prevent drifts such as those observed in the United Kingdom National Health Service (NHS) alliance concerning physician associates. Initially introduced to help the GP in diagnostic and patient management, it finally led to an increase in workload for GPs [21].

GPs in Belgium are mainly self-employed, and in a new organisational model, they would remain the keystone with patients and in managing organisational aspects of the practice. For teams to be manageable, the size of the practice must be reasonable in terms of the number of GPs working together.

The relative difficulty doctors have in implementing task shifting is partly linked to the method of payment (fewer procedures leading to lower incomes in the fee-for-service financial scheme), the lack of understanding of the principle of skill mix, the means to achieve it as effectively as possible, and the fear of losing meaning in their profession [22].

The literature indicates that GPs express a strong desire to maintain their established practices and technical skills, as they fear losing patient trust [19]. These elements are fundamental to the essence of their profession and, as such, are difficult to dissociate from their role. It also reflects a very mono-professional vision in which individual losses outweigh collective gains.

The Conditions needed for integration are tools supporting teamwork and practice organisation such as triage, clear protocols, appropriate and specific training, regular meetings and a common EHR which is shared between all the practice's providers.

Sharing information between healthcare providers is extremely important and should be encouraged by regular team meetings. Multidisciplinary meetings are all the more important for chronic care and facilitated in smaller practices, with patient list size being negatively associated to GPs participating in such meetings [23].

Trust between the different workers is an essential prerequisite for a better division of tasks and task-sharing

within the practice [24]. The presence of a doctor is desirable in practice when procedures are delegated, or to be able to respond quickly to an emergency, or to take a telephone call if necessary. Task delegation has already been implemented in several countries close to the Belgian context, to improve collaboration between nurses and GPs. Initiatives have been tested locally in the Belgian context but have not yet been widely promoted [19].

These conditions can also be related to a framework developed by Reeves et al. on interprofessional teamwork for health and social care, which indicates that relational, processual, contextual and organisational aspects are the four domains that form the cornerstones of collaboration [25].

Recommendations

This study highlights that Belgian GPs express cautious openness towards evolving their organisational models while maintaining professional autonomy. They perceive small-scale teams composed primarily of GPs, nurses, and receptionists.

GPs in our study identified key elements that could facilitate this integration, including co-location, clear task allocation, shared EHR, and structured care coordination. However, the perceived benefits of these tools remain largely theoretical from the perspective of GPs and require further exploration to validate their effectiveness.

While interdisciplinary collaboration models have been linked to improved care coordination and workforce sustainability in other healthcare systems (e.g., OECD recommendations on primary care restructuring), their direct applicability to the Belgian context requires further investigation.

Some evidence gathered in the Belgian context already shows association between integrating nurse and secretary in primary care practice (and common financing, system-capitation fee) and better process indicators in chronic diseases (e.g. diabetes) [26].

To ensure effective integration, financial models should be refined, and task-shifting should be supported by appropriate training and medico-legal frameworks. Future research should not only evaluate these conditions but also involve a broader range of healthcare professionals to ensure a more comprehensive understanding of interprofessional collaboration in primary care.

Strengths

This work was organised at a national level by a research team composed of native speakers, allowing participants to express themselves in their own language. The exchanges and group dynamics were facilitated by the fact that these groups pre-existed before the research (LQEGs).

The sample of participants (Table 2) is large and representative of the diversity of the existing organisational models, in different practice contexts, with a slight over-representation of the capitation fee model due to selection criteria (at least one participant from the capitation-fee model in groups of 11 GPs on average).

By the end of the process, data saturation was achieved, as no fundamentally new themes or insights emerged from the final two focus groups. While participants expressed slight variations in wording and emphasis, these nuances did not introduce any new concepts, reinforcing the robustness and comprehensiveness of the collected data.

The same researchers drew up the interview guide, organised and led the focus groups and carried out all the steps of the analysis. Three concrete cases, describing situations that GPs may encounter in their practice, were used to support the discussions in the focus groups. This method was chosen to facilitate the active participation of GPs in the discussion of sometimes abstract concepts, based on their day-to-day practice.

Cross-checking the coding improved the reliability of the analysis, with only a few verbatims left to be discussed with another researcher to reach agreement on their categorisation.

Adherence to SRQR's recommendations for the presentation of qualitative studies has resulted in a sound methodology.

Limitations

The three practical situations proposed for discussion were comprehensive and representative of the main tasks to face challenges in primary care at the general practice level, but they may not have reflected all the complexity and nuance of daily GP work.

The research team had to deal with the timeline of the New-Deal working group as this research was also expected to provide input for the working group's discussions. A qualitative research approach was selected for its pragmatic and convenient nature, involving pre-existing groups through focus group interviews.

The pre-existing relationships among the GPs in the focus groups likely fostered cohesion and trust, encouraging open discussion. However, these established dynamics also present methodological limitations. Social desirability bias may have influenced responses, leading to conformity rather than broader perspectives. Additionally, both formal and informal hierarchies—notably the role and opinions of the GP in charge of the LQEG in

organising the meetings—could have inhibited some participants from expressing dissenting views.

Furthermore, as these GPs work in the same region and maintain professional collaborations, concerns about potential repercussions may have led to self-censorship in order to preserve good relationships. The recruitment via an advert on the NHIDI website undoubtedly favoured the participation of the more pro-active LQEGs and left out certain groups. Nevertheless, the research team successfully constructed a sufficiently diverse sample based on the initial selection criteria.

As detailed in the results, some participants expressed initial disagreements towards government reforms and, by extension, the study process. This scepticism may have influenced the early group dynamics and data collection. However, starting with the practical cases and thanks to the openness of the moderators, the commitment and participation of participants developed positively over the course of the session in all the groups.

Both French-speaking moderators are GPs working in capitation-fee general practices. This may have introduced participation bias among fee-for-service participants as the two models are often presented as competing with one another. A desirability bias could have been present, since both moderators knew some of the participants in advance.

DT, a researcher with a background in physiotherapy, may not have fully explored certain group discussions due to limited expertise in general practice.

Conclusions

This study provides insights into Belgian GPs' perspectives on the integration of healthcare professionals within their practices. GPs favour the inclusion of nurses and receptionists, while their interest in additional roles (e.g., practice assistants, social workers, psychologists) depends on the practice's size, workload, and local healthcare ecosystem needs.

The findings suggest that small, multidisciplinary teams are perceived by GPs as a potential way to improve practice organisation and patient management, but further research is needed to assess their impact and feasibility in the Belgian context. It is important to recognize that this study focuses on GP perceptions and does not capture the perspectives of other healthcare professionals or patients. Thus, the recommendations made here reflect the preferences and anticipated needs of GPs rather than definitive evidence of improved effectiveness. Additional research is needed to determine the specific benefits and challenges of implementing such models in Belgium.

Financial support will be crucial to ensure the success of these initiatives, enabling practices to adopt necessary resources and training. Future research should explore financial arrangements and integration tools that facilitate.

collaboration, ensuring that the diverse needs of both healthcare providers and patients are met in a rapidly evolving healthcare landscape.

At the conclusion of the New-Deal process, a proposed model was introduced in the first quarter of 2024. By April, the NIHDI had received 134 applications from GPs, including 122 from group practices and 12 from solo practices, seeking to transition to the new model.

A structured monitoring process is currently being implemented to assess these practices from both qualitative and quantitative perspectives. Periodic reports will be published to track and analyse the evolution of healthcare practices, in collaboration with the KCE.

Abbreviations

GP	General Practitioner
COVID	Coronaro Virus Disease
OECD	Organisation for Economic Co-operation and Development
KCE	Belgian Health Care Knowledge Centre
WG	Working Group
EHR	Electronic Health Record
SRQR	Standards for Reporting Qualitative Research
LQEG	Local Quality Evaluation Groups
NIHDI	National Institute for Health and Disability Insurance
ECG	Electrocardiogram
IT	Information technology
NHS	National Health Service

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s12875-025-02783-4.

Supplementary Material 1.

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Authors' contributions

The research team comprised HJ, AVdB, JLB, who are GPs, HJ is also PhD student; DT, a physiotherapist; and DK, a PhD holder and associate professor in health systems and services research at Amsterdam UMC, University of Amsterdam; AC & AT, respectively student and PhD student; IH,a GP and researcher.

HJ, DT, AVdB, and JLB designed the study, while HJ, DT, and JLB moderated the focus groups in their native languages. IH, AC & AT helped in collecting data in several focus groups. HJ and DT performed the data analysis. IH helped in elaborating code-book and resolving disagreements after HJ & DTs cross-check. DK and JLB provided guidance on the writing process. JLB and AVdB also led the WG of GP representatives from September 2022 to March 2023.

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Data availability
The datasets generated and/or analysed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate
The study protocol was submitted and approved by the Ethics Committee of the University Hospital of Liège (Ref 2022/244). The committee stated that the study did not fall within the scope of the Law of May 7, 2004 on human experimentation and raised no ethical objections to the study. This study was conducted in accordance with the principles of the Declaration of Helsinki and all participants provided informed consent prior to participation.

Consent for publication
Not applicable.

Competing interests
The authors declare no competing interests.

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