

# Facilitators and barriers affecting general practitioners' choice to work in primary care units in Austria

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## Research Article

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# Abstract

## Background

General practitioner (GP) workforce shortages are a global threat to primary health care systems. In Austria, nearly 75 % of qualified GPs are not working as contracted GPs within the social health insurance system. This study aims to explore the facilitators and barriers for non-contracted GPs to work in a primary care unit (PCU).

## Methods

We conducted twelve semi-structured, problem-focused interviews among purposively sampled non-contracted GPs. To extract categories of facilitators and barriers for working in a PCU, transcribed interviews were inductively coded using qualitative content analysis. These subcategories were then grouped into categories of thematic criteria and mapped on the macro-, meso-, micro-, and individual levels.

## Results

We identified 36 factors, including 18 facilitators and 18 barriers. Most facilitators were located on the micro-level, while most barriers were located on the macro-level. Teamwork, which allows focus on professional medical work, shared responsibilities, flexibility in working time and work-life balance, mainly make PCUs attractive as workplaces and correspond with individual demands. By contrast, the absence of a clear vision for reform and insufficient implementation produce general ignorance and resistance. The conditions of contracts with social health insurance providers, including the remuneration system, requirements for PCUs and high workload with little time for individual patient care, are seen as inflexible and discouraging. Combined with insufficient vocational training and the low perceived status of GPs and PHC generally, GPs voiced concerns about being an entrepreneur and businessperson.

## Conclusions

Targeted and proactive measures are necessary to attract non-contracted GPs to leave their current individual work-life arrangement and consider working in a PCU, especially considering the higher perceived risks. Multi-faceted efforts are needed to approach factors on all levels. Addressing system barriers should include a reform strategy with a clearly stated mission, defined PHC role, and tangible stakeholder commitment, as well as a modernized remuneration system and supportive measures to equip GPs with essential competences and skills. Proactive communication and exchange could promote the already existing attractive working conditions in PCUs and attract non-contracted GPs into the public sector.

# Introduction

Primary care is the cornerstone of every health care system, but is threatened by an increasing general practitioner (GP) workforce crisis, whether in low-, middle-, or high-income countries (1–3). Recent primary care reform efforts in Austria have focused on establishing team-based care within multiprofessional primary care units (PCUs) (4, 5). The purpose is to better meet the demands of patients as well as those of primary care professionals in order to recruit and retain more GPs for the public sector (2, 3, 5–7). Nevertheless, progress in primary health care (PHC) reform implementation is slow. Only 25 of the planned 75 PCUs had been established in Austria at the beginning of 2021 (8, 9). The number of patients per contracted GP within the social health insurance system increased from 2,063 in 2005 to 2,289 in 2020 (10, 11). Only around 25 % of the physicians that have trained as GPs decide to work as contracted GPs in a single or group practice and nearly 75 % work primarily as hospitalists, locum GPs, or in private practice (12). Although the number of qualified GPs working outside the public primary care sector (non-contracted GPs) is growing (13), little focus has been put on recruiting this group for PCUs so far.

Several studies assessed the influencing factors of students and doctors in vocational training as well as already practicing GPs working in primary care including PCU regarding occupational attractiveness and work satisfaction. In both aspects, discouraging conditions against working in public primary care are ubiquitous (1, 3, 14–31). Factors like high workload, high intensity of work, lack of flexibility, and restricted autonomy affect the supply and demands on GPs in public primary care (32, 33), as well as the recruitment and retention of GPs in the public sector (28). Vocational training in the primary care setting to acquire the necessary competences in management, interprofessional cooperation, and communication as well as work-life balance and remuneration is a crucial factor when choosing to work in PCUs (3, 15, 16, 19, 20, 23–25, 28, 33–35). Nevertheless, some studies have examined primary care policy reforms and organizational aspects regarding GP attractiveness, mostly focusing on interprofessional collaboration (14, 15, 24, 36–44). Political commitment and clear vision as well as sufficient stakeholder involvement on all levels are crucial for a successful reform implementation (37). The workforce change in primary care requires task sharing between GPs and other professions and affects their inter- and intraprofessional status (45). Therefore, appropriate qualifications and competencies as well as clear definition and acknowledgement of roles, functions, and responsibilities of the team members are seen as prerequisites to facilitate GPs' acceptance of this kind of teamwork (34, 46–48). However, the specific question about recruiting primary care workers from the private sector back into public primary care has received surprisingly little attention.

Until now, most studies on facilitators and barriers in Austria have focused on trainees or already established GPs in relation to working in the public primary care system and founding PCUs, but lack the perspective of non-contracted GPs (16, 20, 49). Considering the increasing demand for GPs within the public primary care system, it is necessary to plan and establish successful policy measures and attract this target group to work in PCUs. The aim of the current study was to explore the attitude of qualified non-contracted GPs outside the public primary care system in Austria to consider PCUs as a workplace and to identify the main facilitators and barriers affecting their motivation.

# Methods

## Design

We chose a qualitative approach to identify the factors that may influence the decision of non-contracted GPs to work in a PCU. We conducted semi-structured interviews using a problem-focused approach to obtain insights into GPs' subjective perceptions and perspectives (50).

## Sample and participant selection

We selected a sample of non-contracted GPs. Since this is a heterogeneous study population, we used a combination of stratified purposive sampling and snowball sampling (51), which is a recommended approach for identifying facilitators of and barriers to reform implementation (52).

To meet a variety of target group characteristics, participants were selected using the following criteria:

- completion of vocational training for general practice between 2010 and 2020
- slight preponderance of female GPs corresponding to distribution in the population of Austrian GPs
- nearly balanced ratio of employed to self-employed GPs
- representation of different GPs workplaces (e.g. independently managed private practices, clinics and universities)
- representation of different federal states in Austria

Using these criteria, potential participants were identified via the affiliated research practice network of the Institute for General Medicine and Evidence-based Health Services Research at the Medical University of Graz and the Institute for General Practice, Family Medicine and Preventive Medicine at the Paracelsus Medical University Salzburg. The interviewer contacted candidates directly and recruited additional candidates by asking participants to nominate further GPs.

## Interview guide and procedure

The interview guide was discussed and piloted within the study group and revised afterwards. During the first part of the interviews, the general knowledge, and attitudes towards primary health care as well as the recent primary care reform process was explored. Where necessary, the interviewer provided information on key aspects of these topics guided by a prepared factsheet during the interview (see Additional file 2). In the second part, the questions addressed wishes and visions as well as requirements and barriers regarding job prospects and the attractiveness of working in a PCU. Other topics addressed were experiences during GP training and their career to-date, as well as the interviewees' personal and professional setting. Where statements were superficial, unclear, or matched phrases frequently used in

public discussion or by stakeholders, the interviewer encouraged further reflection and probed for more detail to uncover the reasons and attitudes underlying those statements.

## Data collection

All participants signed an informed consent declaration on participation including information on the purpose of the study, recording, confidentiality, and publication of anonymized results. They also completed short questionnaires on personal information (e.g. family status, employment conditions, advanced training) before the interviews (see Additional file 3). At the beginning of each interview, oral informed consent was re-affirmed.

One researcher (SB) conducted twelve interviews in German between March and April 2020, ranging from 28 to 66 minutes (median: 46 minutes). One interview was conducted as a face-to-face interview. Because of the COVID-19 pandemic, further interviews were conducted via phone or video calls depending on the interviewee's preference. All interviews were recorded after interviewees gave consent to do so.

Recorded interviews were transcribed verbatim and pseudonymized. Names and locations were anonymized. Transcripts and short questionnaires on personal information of the interviewees were used as material for data analysis.

Interviews were conducted successively until no new information occurred during the interviews (data saturation).

## Data analysis

In accordance with the method of qualitative content analysis (53, 54), all transcripts were analysed and coded using the software "f4analyse 2.5.4 EDUCATION".

The definition of the coding guide was done by using "QCAmapp" (55). Regarding the procedural model of qualitative content analysis, inductive categorization (53) was chosen. Following the predetermined steps ensured transparency and intersubjective verifiability.

The researcher coded words, phrases, sentences, and paragraphs (level of abstraction) mentioning aspects associated with or influencing the attractiveness of PCUs as workplaces (selection criteria). A clear semantic component was set as the coding unit – the smallest section that can be coded and which defines the sensitivity. The whole interview transcript was defined as a context unit giving basic background information for the coding decision. Inductive categories were formed directly out of the transcription material. The categories were reduced to the essential content and expressed as new categories or subsumed into existing ones (later called "subcategories") to develop a category system.

After coding three transcripts, the coding guide and category system were revised. In addition, the main categories were established by summarizing detailed subcategories.

In a second step contextual structuring was carried out using deductive category assignment (54). Two researchers matched the categories with the macro-, meso-, micro-, and individual levels, which are defined in the following chapter “Theoretical framework”. They subsumed the categories on thematic criteria into factors (53) to get an overview of the most important categories (56). They also refined the wording and allocation of categories to the levels for final illustration. The calculation of frequencies of factors and categories as well as the number of respondents mentioning them gave weight to their meaning and importance (54, 56). Factors which occurred in less than one third of all interviews (minimum four out of twelve) were excluded from this analysis.

## Theoretical framework

We used an adapted version of the macro-, meso-, micro-, and individual model of Smith, McNeil (57), Caldwell and Mays (36), Mulvale, Embrett (43), which is a popular model in health service research as well as policy innovation and organizational studies, to understand the multidimensional factors affecting attraction of PCU. Macro-level categories concern structural, legal, regulatory, and economic conditions within the health system, policy and society, being external to influences of individual organisations or persons. The meso-level comprises associations and institutions, populations as well as the community. Conditions and influences of day-to-day practice within PCUs and their teams as well as their external effects count as micro-level categories. Individual categories concern personal characteristics and experiences as well as the expectations and demands of individuals (36, 43, 57). The taxonomy of factors is intended to identify anchor points for decision-makers at different levels to attract qualified GPs working outside the public primary care system to PCUs as workplaces (43, 44, 46, 57-59).

## Results

### Descriptive statistics

The key characteristics of the twelve interviewed GPs are displayed in Table 1. The qualitative analysis, clustering, and weighting of categories revealed 42 factors from 175 categories, 175 subcategories and 1003 codes. Using the cut-off level of one third, as mentioned above, this results in 36 factors, 93 categories and 25 subcategories from 979 codes. We classified 18 factors as facilitators and 18 as barriers. Table 2 shows the factors structured among the macro-, meso-, micro-, and individual levels.

Table 1 Key characteristics of the study population

Sex		Age	
Female	7	Range	31-41 years
Male	5	Median	40
Children		Family status	
Yes	6	Unmarried	6
No	6	Married	5
Federal state (living)		Federal state (working) ( <i>multiple answers</i> )	
Burgenland	1	Burgenland	3
Salzburg	2	Salzburg	2
Styria	6	Styria	5
Vienna	3	Vienna	3
Final year of vocational training		Vocational training in a GP practice	
Range	2012-2019	Yes	6
Median	2016	No	6
Current vocation ( <i>multiple answers</i> )		Diploma	
Hospital doctor	6	Emergency physician	9
Locum GP	4	Manual medicine	2
Private practice	5	School physician	2
School doctor	3	Occupational medicine	2
Occupational medicine	1	Traditional Chinese Medicine	1
Public health officer	1	Acupuncture	1
University lecturer	1	Sports medicine	1
Preventive medicine	1	Sexual medicine	1
Employment status ( <i>multiple answers</i> )		Opioid replacement therapy	1
Employed	10	Wound management	1
Self employed	9	Others (e.g. Botox, environmental medicine)	5

Table 2: Facilitators and barriers to work in a primary care unit as perceived by non-contracted GPs, mapped to the four levels adapted from Caldwell and Mays (36), Mulvale, Embrett (43), Smith, McNeil

(57)

## Facilitators

Level	Factor	Total <sup>1</sup>	Interviews <sup>2</sup>
Macro	Awareness for reform implementation	21	9
	Generational change among GPs	17	7
Meso	-		
Micro	Benefits for patients	49	12
	Organizational culture in a multi-professional team	73	12
	Attractive conditions for professional medical work	89	12
	Flexibility of working time	35	11
	Professional interaction between GPs	20	9
	Sharing of medical responsibility	11	8
	Sharing a comprehensive infrastructure	14	7
	Quality and research	21	5
	Administration of the organization	17	7
	Sharing of responsibility in business management and finance with associates	7	4
	Flexibility of total weekly working hours	9	4
Individual	Work-life balance and flexibility in working time	36	10
	Employment status	13	9
	Strong doctor-patient relationships	15	7
	Training practice: Preparation and motivation for primary care	12	7
	Compatibility of family and work	0	0

## Barriers

Level	Factor	Total <sup>1</sup>	Interviews <sup>2</sup>
Macro	Strategy	54	12
	Remuneration	75	11
	Contract-system with social health insurance system	14	5
	Little available information on PCUs	54	10
	Insufficient training for primary care (university and	27	10

	postgraduate)		
	regulations concerning PCUs	26	8
	Low perceived status of GPs	19	7
	Lack of clear role definition	11	5
Meso	Resistance among medical community and tendency to keep up established structures	22	7
	Population	18	6
	Missing exchange of experiences (national/international)	8	5
Micro	High workload	43	11
	Too little time for individual patient	25	9
	group and team dynamics	9	4
Individual	Concerns regarding running an enterprise	60	11
	Concerns regarding starting an enterprise	14	7
	Flexibility and autonomy	28	8
	Satisfaction with individual working arrangements	12	6

<sup>1</sup> Total number of occurrences over all interviews

<sup>2</sup> Number of interviews in which each category occurred at least once

## Macro-facilitators

The interviewees perceived a positive mindset and will to develop new models in primary care in general. The GPs praised conducive regulatory conditions in the last years like the amendment of medical practice legislation, which allows employment of doctors by public doctors on the one hand, as well as general growing open mindset for multiprofessional work models in primary care on the other hand (n = 9). According to the interviewees, the new generation of GPs is interested in teamwork and uses motivation and creativity in the implementation of innovative PCUs. The demand for a good work-life balance requires shared working conditions by contrast with single practices (n = 7).

*“And the open mindset, really working as a multiprofessional team. Really as partners on equal terms – doctors, nurses, physiotherapists, psychotherapists, social worker working as a team, really together, so to say with the patient in the centre, this would be fascinating. And I have a sense, that our generation is able to do that.” (A01)*

# Macro-barriers

All GPs (n = 12) missed elements of a policy strategy comprising rigid structures within the primary health care system and its stakeholders. The GPs were aware of the potential benefits resulting from an increasing number of multiprofessional PCUs, especially considering the growing GP workforce shortage and increased demand for secondary and tertiary care structures. Slow adaptation of the legal, economic, and political framework for the development of PCUs as well as of the professional mindset were seen as major problems, leading to the fact that further promotion of PCUs depends mostly on political will and individual champions. This led to the perception of an unclear vision and missing strategy.

*"That was eleven years ago now. And since then NOTHING at all has happened. Eleven years. I'm young, but I've already experienced this long-lasting period. So, I'm a bit sceptical. [...] People from the field must be involved in the decision-making process and tell them - listen, it doesn't work like that. I don't understand, why does this work in other countries. What is the problem in Austria?" (A01)*

Most GPs (n = 10) report little available information for the general public but also for themselves and did not feel addressed as a target group.

*"At the moment, in my position, where I am now, I don't get anything at all. So, I don't get any information actively from somewhere else that someone would approach me." (D04)*

Further categories that arose are insufficient vocational training (n = 10), a low perceived status of GPs (n = 7), and lack of a clear role definition (n = 5).

The remuneration system in primary care (n = 11) was mentioned as the main barrier to choosing the job. The GPs complained about insufficient remuneration in comparison to the huge workload. The current fee-for-service system does not cover the broad spectrum of services needed for the demands of the patients. Some federal states even limit selected services. There was the perception that this system supports high frequency in daily curative care instead of an orientation towards patient-centeredness and a holistic care approach.

*"I was interested in offering a diverse spectrum of services in general practice. But also, to take enough consultation time and accordingly to get the money for this time. [...] It must be financially interesting, and it must become more flexible. [...] It has to be possible, to really do it together as a team. And we also need a new form of remuneration. Because I can't continue with the same billing system. [...]" (A01)*

The GPs noted that there are more comprehensive and complex requirements for PCUs as much bigger multiprofessional organizations compared to the existing regulations for single practices. Consequently, they requested support (n = 8) in business management (accounting, regulations, law) as well as financial funding.

*"Economically, as a business leader, from an entrepreneurship view. I see myself as being able to do that, so to speak. But I lack the real expertise or experience in business management or in founding a*

*company. So, I would like to have some support, maybe even guidance in the first few months, both in the start-up phase and in the operating phase. [...] In principle, it would be more pleasant to have a consulting institution or an authority that you can turn to, there will probably also be people on the free market who can advise you in this regard.” (C03)*

Five interviewees complained about the contract system within the public health insurance system (n = 5) because of its perceived complexity.

*“Well, I would have decided to work as GP straight away. But I just knew that the bureaucratic effort and the current system regarding the accounting of services with the social health insurance group [...] means either 70 hours a week or nothing at all. [...] And that’s why it wasn’t an issue for me to take this step. Although from a thematic point of view I would do it immediately. [...] It gets stressful when I need an approval of the chief physician [...] Then they make a call. Then they write the fax. They spend an hour there and get zero money for it.” (A01)*

## **Meso-barriers**

The GPs reported resistance within their medical profession (n = 7), with the majority of senior GPs adhering to traditional primary care structures and thereby impeding the spread of innovation.

*“The main reason for this, I think, is surely because so many GPs are now close to retirement age. And those who are just not creative and young enough, they say, I won’t do it now in the last five years or, yep, five years, to change my way of working so much.” (B02)*

Six GPs complained about increasing demands of the population (n = 6), like 24/7 availability or using GPs as “self-service shops”. GPs feel that lack of health literacy leads to over-utilization of primary care as well as the general health system. Five GPs mentioned the lack of exchange of experiences on both the national and international levels (n = 5).

## **Micro-facilitators**

All interviewees mentioned benefits for patients of PCUs as a positive factor (n = 12). Providing comprehensive primary health care by a multiprofessional team with expanded opening hours fosters their intrinsic motivation. The interviewees liked the idea of referring patients easily to other professions within their organization.

*“You can offer longer opening hours, you can also offer off-peak hours. [...] For the patient, this is really a low-threshold, qualitative and also scientifically sound care. [...] And I think that is the attractive thing. Because I am not isolated somewhere, but I am immediately in a system where I have several possibilities at my disposal.” (A01)*

*“So, I definitely believe that we can care for the patients more than we do at the moment. In terms of guidance on nutrition, exercise, proper exercise for the underlying diseases. [...] Well, I think that we can improve the quality of health care with it.” (C03)*

Beside the short ways of referrals, all GPs highlighted the low threshold for easy interaction between the team members. The GPs anticipated that the organizational culture in a multiprofessional team of a PCU effects general job enjoyment because of teamwork within flat hierarchical structures and cohesion between the team members in contrast to lone fighters in single practices (n = 12).

*“I think that working with colleagues and several contact persons [professionals] is more attractive because you can also exchange ideas.” (E05)*

*“Also, the community [in the team] and so on. [...] That is really one of the most important things, I have to say, in this, in the whole thing [PCU].” (F06)*

The expectation of attractive conditions for professional medical work (n = 12) was a main facilitator for working in a PCU. Interviewees highlighted the opportunity for GPs to engage in diverse activities because of the broad spectrum of services provided in a multiprofessional PCU. Another factor relating to attractiveness is the interaction with different health and social professionals. These conditions allow GPs to focus on their core competences and medical care. Task sharing with assistants also relieves the burden of day-to-day care.

*“That we always have immediate options if we are not totally sure on a concern, regarding legal, care matters or care facilities, the social work expertise. Yes, well. I say that if we enter into the discussion with respect for the other professional groups, we can certainly learn and benefit from it ourselves.” (C03)*

*“I think a good chance is that the other professionals are working there, [...] can take a lot of work from the doctor. Services that don't have to be performed by a medical doctor.” (L12)*

Alongside multiprofessional exchange, the interviewees highlighted the professional interaction between the GPs within PCUs (n = 8). This allows them to share responsibility both in medical professional demands (n = 9) and in aspects of business management and finance (accounting, management) (n = 4).

*“And also to have the feeling that you are not solely responsible for it yourself. That might sound a bit strange. [...] He comes with his worries, with his pain, with his illnesses, with everything around him. You don't carry that alone as a doctor. You can split it up a bit. That's something that would calm me down inside. It would simply take the stress away.” (D04)*

*“The inhibition threshold may also be lower to ask questions in case of uncertainty, which I, as a young doctor, still have to say, that I am not one hundred percent sure that some decisions should or must be made in exactly the same way. So, I would rather need more check-up or diagnostics in form of a*

*safeguard medicine. And if, for example, an experienced colleague could dispel certain uncertainties.”* (C03)

*“[...] I am still a bit afraid of self-employment, because I am not yet ready for it myself, but that is also a bit the reason why I have not yet done it, [...] I would really prefer to work in a practice with shared responsibilities.”* (F06)

Sharing a comprehensive infrastructure (n = 7) containing rooms and equipment as well as the documentation system, knowledge and information was another facilitator of PCUs' attractiveness.

*“So that synergy effects are used, such as therapy facilities, rooms, laboratory equipment and more. [...] It is the availability of additional capacities, be it dietary or physiotherapeutic or psychological. That we have direct contact with the professional group. In part, we can actually make a consultation without delay.”* (C03)

High quality of care because of the potential of performing health service research in primary care (n = 5) as well as well-organized structures and care processes within the workflow (n = 7) met the expectations of some interviewees in primary care and increased the attractiveness of PCUs.

*“The exchange with colleagues, which you can't do in a single practice. The fact that you can discuss cases [...] I would say that everything is in one place and they don't have to go somewhere else. [...] of course, I get more feedback and can refer more sensibly if I am in exchange with the colleagues, so it would already have an advantage for me.”* (K11)

The flexibility of working time (n = 11) played an integral role in the interviews regarding the occupation as a general practitioner. GPs expect flexibility in schedule of their working hours for private issues and praise having a substitute. Flexibility in working hours – more specifically reduction – (n = 4) also functions as a facilitating factor for PCUs.

*“I was in Sweden and Norway for a longer period of time and also in England, [...] I was able to experience it in general practice. And there were ten general practitioners and I found it great when you work in a large team. Flexibility of working hours. I can have children and reduce my hours. I can still accompany my patients longitudinally and of course I have a much higher quality when I have to work together with other colleagues in a team. [...] That is not given at all at the moment. And that is why it is very uninteresting.”* (A01)

*“I would like it to be flexible, as I said. That it's possible to make arrangements with colleagues in case of postponements, if something spontaneously comes up. That you can take care leave without any problems.”* (E05)

## Micro-barriers

The most dominant discouraging factor on micro-level was the high workload (n = 11) in primary care. The reasons for this are seen in a combination of increased needs originating from demographic change, overutilization, the service-driven remuneration system and the lack of coordination of care, resulting in high patient turnover.

*“In Austria, it’s [primary care] marked because it’s very stressful. Very, very overloaded. Mostly in general medicine, it is simply a job that really runs at the limit. And that’s not necessary. Because the job is at the limit. Because you must deal with very seriously ill people. Because you must delve very deep into the psychosocial structures and that is very stressful. Thematically, it’s consistent. But not also because of the number of patients and the whole workload. It becomes too much and often you [GPs] are not able to bear this with a normal physical and mental state. And I think that is simply unattractive. Why should I expose myself to that if I have a nicer working option?” (A01)*

Consequently, this cumulation of factors leads to the impression that there are insufficient time resources for individual patient care (n = 9).

*“And I think everyone deserves the respect to get the time he or she needs. Because in crowded practices it is not possible to do things the way I would like to do them myself.” (C03)*

*“But I think you should still take enough time, if you can, to treat the patients well. But of course that is difficult with a full waiting room and with a limited office [...] and you still have so many house visits [...] Of course, you also have to make sure that you get patients through. But I still think that’s not the kind of medicine I want to do. I think every patient needs enough time.” (F06)*

Four GPs voiced concerns regarding a higher risk of potential dissonances within the associates and the team (n = 4) in a PCU compared to a single practice.

## Individual facilitators

A good work-life-balance associated with flexible working time was the most frequently postulated facilitator (n = 10) for the job option of being a GP in a PCU. The GPs partially mentioned flexible working time and hours combined with the compatibility of family and work (n = 4).

*“What put me off was the workload and the little flexibility you have, because you’re just out there on your own. If I say my daughter is seven months old and I have to work less now, it just doesn’t work. And that’s a huge drawback. I find it very difficult to reconcile this with my family. If I had the option of a PCU in [place], five, six GPs who share this working load. Where [...] I can work 20 hours in a PCU. I would jump right in there.” (A01)*

*“If you are self-employed and take on a health insurance contract, you have obligations that are harder to avoid when you have a child. [...] But as I said, a single practice is no option for me because of the family situation. [...] That’s too much for me now. I wouldn’t have any more time for the family.” (B02)*

Seven interviewees assessed the option working as an employee in a PCU as more attractive (n = 7). The personal positive experience during training practice in a primary care practice was also mentioned as an important motivating factor for working as a GP (n = 7). The strong relationship with patients in primary care, based on free choice of the doctor and trust, as well as the gratitude received from them was also a possible facilitator for PCUs as a job option (n = 7).

*“Such an employment relationship, working in a team. This is more attractive for me than being a lone fighter or a sole trader.” (L12)*

*“I certainly didn’t want to do general practice before the practical vocational training in general practice. She [GP trainer] was a very good doctor with a lot of experience. And it really helped me, I think it certainly helped me more than the internship in the hospital. So, I can only rate it positively. [...] Well, simply because the way of working is completely different in general practice than in a hospital. You are not prepared for working as a GP through work in a hospital. [...] So, I took a certain experience with me and also that I like working like that. With the patients and with the contact, with long-term contact.” (K11)*

## Individual barriers

Eleven interviewees mentioned concerns regarding business management (n = 11). These comprised employer costs and employee rights, organization of a PCU, and leadership of the team as well as budgeting and other economic functions as entrepreneurs (e.g. data protection). They voiced fears about the responsibility and insecurity including cases of their own absence. Continued remuneration during sickness or parental leave were considerable counterarguments. Entrepreneurial spirit – also mentioned as “braveness” – combined with economic knowledge and having the start-up capital also unsettled (n = 7) the GPs.

*“Because I don’t want to carry this enormous economic risk. So, I would prefer to work in a PCU, so you are not alone, and you remain flexible. [...] Well, in any case, that you are employed and in any case that you don’t have all the responsibility, economically and also organisationally, you are just not a company boss alone, I would say. You can also work part-time. If you have an office. It’s easier to reconcile that with family life.” (K11)*

*“Economically, [...] entrepreneurship. I see myself as being able to do that, so to speak. But I lack the real expertise or experience in business management or in founding a company. So, I would like to have some support, maybe even guidance in the first few months, both in the start-up phase and in the operating phase. [...] Economic aspects, personnel planning, personnel management. In the end, you never learnt that. And it’s not the purpose of the university to teach business management as a doctor. But you are still an entrepreneur. And you have certain duties.” (C03)*

As mentioned before, the contract with the public health insurance group entails a fixed spectrum of services as well as further regulations. The interviewed GPs who do not have this contract consequently

feel restricted by this prospect in terms of flexibility and autonomy (n = 8). The wish to provide “care as they see fit” included having enough time for a holistic care approach as well as alternative medicine. Restrictions in freedom to increase income and take decisions as the “chief” were further barriers to working as a GP in a PCU.

*“Cooperation is great, but I want to decide for myself what I want to do in my practice.” (H08)*

*“I just wanted to go into private practice because [...] I was quite interested in offering broad-based general medicine. But also, to make the time available and accordingly to get the money for this time. [...] If I need a bit more money, then I do more hours, if I need a bit less money, then I do more hiking and less hours.” (A01)*

Half of the GPs mentioned that they had individual arrangements (n = 6) perfectly tailored to their professional and private lives. Since they are satisfied with their current situation, it would be hard or too late to convince them to dismantle what they perceive as their perfect individual solution.

*“That I actually have two jobs, the ones that I like and that are compatible with the family.” (E05)*

*“[...] I have actually built up a network. And that, that just fits me and how I see medicine. And that’s why I decided to go this way. [...] And how I like to have my people treated. [...] I can’t imagine doing it any other way now.” (J10)*

## Discussion

Following the commonly used model of macro-, meso-, micro-, and individual levels, this qualitative study was the first that explored facilitating and inhibiting factors concerning the attractiveness of PCUs as workplace for non-contracted GPs. Facilitating factors include the prospect of teamwork, a good work-life balance, inter- and intra-professional collaboration that allows the sharing of responsibilities, fruitful exchange, diversity of tasks, and a focus on medical core competencies including patient-centred care. Barriers concern the conditions around the PCU founding process, remuneration models, public discussion of the primary care reform, and high resistance within the GP profession. There is the perception of a lack of political will to establish PCUs and to tackle core issues like high workload and short consultation time per patient.

The barriers identified in this study – perceived or expected – which act as preventive factors for working in a PCU correspond with reported challenges of Austrian PCU founders (16). Like ours, these results indicate that existing structures for founding and running a PCU, as well as in the health system, are rigid and impeding innovation in Austria. A focus on fee-for-service remuneration and the missing gatekeeper function discourage qualified GPs from a job change into the public system. Macro-level barriers, as mentioned, inhibit policy innovation and the strong interdependence of factors is consistent with general international experience (43, 57).

The lack of political commitment on reform goals and measures and insufficient involvement of associated and affected stakeholders like the GPs themselves can be significant barriers in a PHC reform process (Espinosa-González and Normand 2019). A systems thinking approach in planning and implementing further steps of the PHC reform could be a valuable tool to promote policy design and evaluation to meet the dynamic interrelationships, perspectives, and boundaries among actors and system factors (37). Accordingly, Hudson, Hunter (40) postulated a “close liaison with, and an understanding of, the position for the implementation agencies” as crucial (40) (p.7).

In line with international and national study results, entrepreneurship and management competencies are essential, but rare among GPs (3, 49). Adequate basic education and vocational training seems to play a crucial role in getting GPs ready for entering primary care. Referring to experiences in Portugal, a leadership training program for managers of health care centres could be one of various support measures but would need to be combined with other additional capacity building measures (60).

As found in other studies, the low status of GPs demotivates qualified GPs working in primary care (2, 14, 49). Espinosa-Gonzalez and Normand (37) confirm that the expansion of acquired competences during the specialty training for family medicine and the increase of training quality attracts medical students, contributes to public recognition as a scientific discipline, and improves professional status within this population and in general. And secondly the rising quality of primary health care, the proactive promotion of PHC structures to increase population awareness, and GP involvement in policymaking processes, which represents trust of government in the profession, contributes to population acknowledgment of GPs' increased role. Stakeholder involvement of GPs in the policy reform process and resulting population awareness of the increased role could facilitate physicians' self-confidence and lead to further reforms.

In line with our findings, El Koussa, Atun (15) revealed inadequate remuneration as a major factor for GPs leaving the public health system. Studies from Turkey as well as from other countries confirm the GPs' wish for remuneration that is appropriate to the role and workload (3, 28, 61). Since a payment scheme focused on function and competence instead of profession is recommended for multiprofessional cooperation in teams (47), this would also be relevant in the context of the Austrian PCUs.

Teamwork could also facilitate the improvement of the identified factor of high workload, which is an universal barrier to working in primary care, as other studies have noted (1, 2, 15, 24, 28, 29). As these studies found, the perceived or actual high demand of patients and the public discourages GPs from working in primary care (14, 24, 47). These factors result in high pressure on GPs and are reported as the dominant factors for leaving the setting (24). Our results confirm that it is also an important reason for qualified GPs to decide against entering the public system.

Corresponding with the results of other studies, work-life balance, flexibility, and autonomy in the organization of work play a crucial role in the attractiveness of working in primary care (1-3, 15, 24, 28, 49). It is confirmed that infrastructure and staffing of PCUs could make it possible to have sufficient time for individual patient consultations (3, 14, 15, 24). As anticipated by the interviewed GPs, Simon, Forde

(28) report that a supportive team could mitigate the burden and result in a more enjoyable working environment. Mentioned positively by the interviewed GPs and corroborated by several studies, inter- and intra-professional collaboration and information exchange act as driving factors for the attractiveness of PCUs (3, 48).

Nevertheless, our target group shows a high appreciation for individual flexibility and self-actualization that could be seen as conflicting with a regulated set of services in primary care, low hierarchical structures, and interprofessional collaboration as the core element and facilitator of PHC. The workforce change in primary care requires task sharing between GPs and other professions. As described by Currie, Lockett (45) this may threaten GPs' inter- and intra-professional status and, as mentioned, is met by resistance within the profession. It is thus crucial for the PHC reform to address the relationship between the professions. Several studies recommend a clear definition and acknowledgement of roles, functions, and responsibilities of the team members as the foundation for efficient teamwork. Investing time to build awareness of the benefits for patients and set shared goals and values strengthen professional relationships and trust between the team members (34, 46-48). While formalised structures for collaboration promote efficient multiprofessional interaction and care, interprofessional case discussions and team meetings in PCUs allow the growth of interprofessional collaboration (34, 48).

In contrast to other studies, the possibility of pursuing parallel careers (e.g. in academia) and having time for education and training were not prominently mentioned (24), neither was the requirement of interprofessional and collaborative skills, especially for efficient communication (3).

## Implications

As concerns the identified facilitators and barriers, there are several possibilities to make work in PCUs more attractive for non-contracted GPs:

1. Those system barriers which are mainly responsible for the lack of attractiveness of PCUs should be addressed. To achieve this, a strategy with strong leadership and clear goals is required. This must involve the relevant stakeholders and ensure their commitment.
2. A targeted information campaign with a focus on relevant facilitators (e.g. teamwork) could inform non-contracted GPs and raise their interest in PCUs in general. Pioneers from PCUs could act as advocates and share their experiences to reduce barriers for new start-ups.
3. A modernized remuneration system that addresses the issues of multiprofessional teamwork and increasing population demands could enable team-based, holistic, and patient-oriented care on the one hand and reduce unattractive workload and intensity on the other.
4. Support structures to equip qualified GPs with essential skills (e.g. entrepreneurship-by-leadership centres based on the model of the National Health Service in England and team-based care) and business management resources (e.g. budgeting, regulations) could reduce the risk and burden of founding a PCU.

5. Clear definition of the role of primary care in general and of GPs in particular could increase their status within the health system. The core function of being the first contact for most health issues could further strengthen related facilitators, such as benefits for patients and the continuity of patient-doctor relationships.
6. In the long run, it could be sustainable to attract students to PCUs early and prepare them adequately for work in primary care, before they leave the system and lose connection.

## Study Strengths And Limitations

One limitation of this study is that the study sample is specific to Austria and there may be limited transferability to other health systems. The purposeful sampling method resulted in a small and selective sample, which may not be representative of Austria's non-contracted GPs. Therefore, it does not allow analysis of subgroups. Nevertheless, the private sector in health care is gaining momentum internationally, so this research approach could provide ideas for further research both in Austria and abroad. Since the specific question about recruiting the primary care workforce from other sectors, e.g. from hospitals and private practices, back into public primary care has received surprisingly little attention, this study makes a relevant contribution to further workforce planning in primary care.

A strength of the study is that we interviewed GPs from different federal states and different settings. The qualitative design enabled openness toward unexplored facilitators and barriers of the heterogeneous population of non-contracted GPs. Semi-structured interviews with a problem-focused approach allowed flexibility during in-depth exploration of the GPs attitudes. Following Mayring's methodical process of qualitative analysis ensured high transparency and reliability for other researchers.

Compared to previous studies on facilitators and barriers as well as motivators, this study innovatively provides a broader perspective following a multi-level model combined with innovation implementation and policy reform approaches.

## Conclusions

Overall, the facilitators and barriers to attracting non-contracted GPs to work in PCUs are consistent with factors that are known to be relevant for students, trainees, and contracted GPs. An additional complicating factor seems to be the established working arrangement of many non-contracted GPs, which meets their demands in terms of their private and professional lives. Targeted and proactive additional information and recruiting strategies will be necessary to attract non-contracted GPs to leave their current arrangement and consider working in a PCU.

Facilitators are mostly found on the micro level and thus within the sphere of influence of regional actors, while most of the barriers are located at the macro level. The anticipated increase in demand for GPs could make this a worthwhile enterprise to sustain the workforce required to maintain a well-functioning

public primary care system. Efforts should be multi-faceted, replace system barriers with supportive conditions and promote existing attractive working conditions in PCUs.

## **Abbreviations**

GP: General practitioner

GPs: General practitioners

PCU: primary care unit

PCUs: primary care units

PHC: primary health care

## **Declarations**

### **Ethics approval and consent to participate**

All procedures performed in this study were in accordance with the 1964 Helsinki declaration and its later amendments. Written informed consent was obtained from all participating GPs before their inclusion.

The Ethics Committee of the Medical University of Graz granted an ethics waiver since no applied medical research is performed on human individuals. The trial was not registered as the intervention and outcomes assigned health care providers rather than patients. No individual patient data were collected or processed.

### **Consent for publication**

Not applicable.

### **Availability of data and materials**

The datasets used and analysed during the current study are available from the corresponding author on reasonable request.

### **Competing interests**

The authors declare that they have no competing interests.

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## Authors' contributions

SB designed the study as well as the interview guide in accordance with MA, HM and AS. SB conducted the interviews, transcribed them verbatim and performed qualitative content analysis in collaboration with HM. SB clustered and matched the categories on levels, SB and SH discursively matched the categories, clustered them, refined the wording and allocation of categories to the levels for final illustration. SH created the tables and translated the questionnaire, factsheet and interview guide. SH, MA, HM made substantial contributions to the interpretation of data. SB prepared the manuscript. All authors revised and approved the manuscript.

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