# RESEARCH

# **Open Access**

# Integrating prevention into primary care organizations: a case study in France



Estelle Clet<sup>1,2,3\*</sup>, Anais Essilini<sup>1,2,3</sup>, Céleste Cornet<sup>1,2,3</sup>, Jean-Philippe Joseph<sup>4</sup>, Christine Cohidon<sup>5†</sup> and François Alla<sup>1,2,3†</sup>

# Abstract

**Background** Although primary care providers have a major role to play in combating risk factors, preventive practices can still be improved. The development of coordinated practice is considered as an opportunity to integrate prevention into primary care. What are the conditions, obstacles and facilitators involved in such a process?

**Objectives** To explore and describe the conditions under which prevention is integrated into 'communautés professionnelles territoriales de santé' (CPTS = territorial professional health communities) in France, a new type of primary care organization being generalized in France.

**Method** A case study was conducted in two regions of France. We conducted interviews with: (i) healthcare professionals and coordinators, and (ii) local healthcare authorities and territorial officers for the CPTS. Data were collected through individual and semi-structured group interviews, observations and a documentary analysis. They were then coded by two investigators according to two coding trees depending on the population involved. A thematic analysis was then carried out.

**Results** This case study was composed of 18 interviews, two observations and three documents. They showed that healthcare professionals and healthcare authorities do not share the same vision, issues and expectations regarding prevention. For the former, prevention should be integrated into care as in preventive clinical practices, while the latter are more focused on the healthcare system with a vision based on prevention programs.

**Conclusion** This study identified the obstacles and facilitators to integrating prevention into coordinated practices in primary care.

Keywords Primary health care, Prevention, Partnership, Health system

<sup>†</sup>Christine Cohidon and François Alla contributed to the manuscript equally.

#### \*Correspondence:

Estelle Clet estelle.clet@chu-bordeaux.fr <sup>1</sup>Department of Preventive Medicine, University Hospital of Bordeaux, Bordeaux F-33000, France <sup>2</sup>University of Bordeaux, INSERM, BPH, U1219, I-Prev/PHARES, CIC 1401, Bordeaux F-33000, France <sup>3</sup>University of Bordeaux, ISPED, Chaire Prévention, Bordeaux F-33000, France <sup>4</sup>Department of General Practice, University of Bordeaux, Bordeaux F-33000, France <sup>5</sup>Center for Primary Care and Public Health, Department of Family Medicine, Unisanté, Lausanne, Switzerland

# Introduction

Noncommunicable diseases accounted for more than half of the global burden of morbidity in 2013 [1]. Cardiovascular diseases, cancers, chronic respiratory diseases and diabetes are the main ones [2]. They can be prevented by addressing risk factors such as smoking, alcohol consumption, diet and physical activity [3]. Combating risk factors is an integral part of the mission of primary care providers [4]. Primary care refers to the first level of care and services for common ailments and injuries [5]. However, in practice, risk factor management is still not optimal. A study of healthcare systems showed that



© The Author(s) 2025. **Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by-nc-nd/4.0/.

among 59% of women diagnosed with high blood pressure worldwide, 47% are treated and only 23% have their blood pressure controlled [6].

To explain this situation, a recent literature review highlighted the significant number and heterogeneity of barriers and facilitators affecting the practice of prevention in primary care settings [7, 8]. These factors varied depending on their source (the patient, the healthcare professional, or the healthcare system) and their level of influence (individual, organizational, or contextual). Most of these barriers and facilitators were organizational. They were related to the structure of primary care (e.g., the lack of available infrastructures for professionals wishing to develop prevention strategies (barrier)), the interventions themselves (e.g., low-cost interventions integrated into routine activities, systematically implemented and tailored to the needs of patients (facilitator)), or accessibility (e.g., the lack of financial support for patients (barrier)) [7].

In parallel, the primary care system has recently undergone organizational changes in many western countries, with the main aim of improving coordination between healthcare professionals [9]. Some systems have been introduced in other countries, such as the *Centres Intégrés de Santé et de Services Sociaux* in Quebec, which ensure the accessibility, continuity and quality of services for users of the healthcare system [10], or the *Integrated Care Systems* in the United Kingdom [11]. In France, the *Communautés Professionnelles Territoriales de Santé* (CPTS) were created for healthcare providers in the same geographical area to work together on a joint health project to improve patient care [12] (more details in the Methods section).

The development of prevention through the CPTS is a stated objective of healthcare authorities [13]. Consistent with the results of the literature review, the CPTS aim to remove the main barriers to the development of prevention in primary care [7]. The ways in which prevention is integrated into the CPTS remain largely unexplored. What type of prevention is involved? What do professionals understand by the term 'prevention'? The objective of this study was therefore to investigate the conditions under which prevention is integrated into the CPTS in France.

# Methods

#### The organization of primary care in France

In France, primary care is provided by general practitioners (GP) and other professionals such as dentists, midwives, pharmacists, nurses and physiotherapists [5]. Most healthcare professionals are free to settle in any location they wish [5]. In 2018, 6% of the French population lived in areas with a shortage of GPs [14]. To respond to this issue and address other challenges in primary care (e.g., organizing unscheduled care, coordinating primary care and hospital settings and improving the medical attractiveness of the area, the cooperation between doctors and nurses for home care, and the patient care pathway), the organization has evolved in recent years from a historically individual practice to a coordinated practice [5]. Two main types of organization have thus emerged: (i) multidisciplinary group practices (Maisons de Santé *Pluriprofessionnelles* = *MSP*) (since 2007 [15], which bring together independent primary care medical and paramedical professionals in the same geographical area to work on a joint health project, and (ii) the CPTS since 2016 [16], a flexible system for freelance or, hospital professionals and medico-social or social professionals in the same area who wish to cooperate to address the specific healthcare needs of the local population [13].

In this article, we focus on the CPTS, which are currently promoted and deployed nationwide by the government. Initially, their development is organized by healthcare professionals who wish to address one or more identified health issues in a specific region and to set up a shared health project. To be operational, a CPTS must be formally contracted by a CPTS committee (i.e., the healthcare professionals governing the CPTS), then validated by the Regional Health Agency and the National Health Insurance agency. A CPTS project includes four mandatory missions: (i) to improve access to care, (ii) to organize multidisciplinary care pathways for patients, (iii) to develop territorial prevention initiatives, and (iv) to participate in responses to public health crises. For each of these missions and for its general functioning, the CPTS receive funding from the Regional Health Agencies and the National Health Insurance agency, with funding depending on the attainment of the objectives set out in the contract. In addition to their usual funding, CPTS members involved in certain missions receive specific funding for their work. Each healthcare professional can freely determine the level of their commitment to the CPTS they are involved in. To meet these coordination and project management objectives, a new profile is emerging: CPTS coordinators. Part of the funding is dedicated to their work.

#### Study design

We conducted a multiple case study, a method that yields more substantial results than single case studies and allows a topic to be analyzed from various angles [17]. This case study used both individual and collective semi-structured face-to-face interviews, observations and document analyses in two regions of France. Each case represents one CPTS, which is composed of healthcare professionals, the Regional Health Agency, the local National Health Insurance agency and the CPTS coordinator. It also covers internal interactions between these professionals and external interactions with other healthcare structures, patients, the urban environment, etc. COREQ guidelines were followed for this research [18] (see Supplementary File 1).

#### Recruitment

#### **CPTS** recruitment

The CPTS were chosen through a selection process which involved conducting individual semi-structured exploratory interviews with healthcare professionals working in CPTS, meetings with occupational healthcare professionals and the National Health Insurance agency and the Regional Health agency, as well as a review of grey literature. This first step was conducted by a Masters student in public health. The results helped the investigators to define the eligibility criteria for this study. Two inclusion criteria were retained: (i) having signed the 'Interprofessional Agreement' between healthcare professionals, the National Health Insurance agency and the Regional Health agency, and (ii) having implemented or currently implementing preventive actions. Therefore, the CPTS had received specific funding for organizational development and had undertaken preventive actions.

In the second step, the first CPTS meeting the two inclusion criteria and with a long history of experience in prevention was included. Another region was chosen owing to the large number of CPTS being created and their varying levels of development (ranging from the informal preparation of a new CPTS to operational CPTS and even CPTS in the process of being dissolved). To select the CPTS in this second region, a questionnaire was sent to all those meeting the inclusion criteria. To ensure anonymity, only necessary information is provided in this article.

#### Recruitment of participants

Participants had to belong to one of the following two categories: (i) healthcare professionals and members of the CPTS, or (ii) health authority representatives: Regional Health Agency, National Health Insurance agency or territorial support and development officers (TO) for the CPTS. For all interviews, participants were recruited by e-mail or telephone with the help of the three CPTS coordinators. For the sake of profile variability, participants may or may not have been involved in prevention activities or sat on the CPTS decision-making committee.

#### Non-participant observations

We also noted any observations concerning interpersonal dynamics, meeting contents, decision-making processes, and participation. Field notes were taken during events. Transcriptions of observations consisted of detailed field notes taken during or immediately after each event, structured by theme for later coding. There were two such observations. The first was the general assembly of a CPTS, where we sought to better understand the internal functioning of the CPTS, internal relationships (both formal and informal), and the ongoing challenges and issues. The second one was a regional prevention coordination day organized by the Regional Health Agency, with the goal of understanding the regional prevention context, the ongoing and upcoming strategies, and their impact on the rollout of preventive actions within the local CPTS.

#### Selection of internal documents

We chose to include all internal documents that we considered relevant. They could include meeting reports, the CPTS health project, and specific projects related to preventive actions. Our aim was to gain a better understanding of the environment in which the CPTS operate, as well as the issues underlying their development.

#### Data collection

Two interview guides (one for healthcare professionals, and one for the healthcare authorities and the TO) were developed by a team of researchers composed of three public health specialists (one junior: EC, and two seniors: FA and CC) (see Supplementary File 2). They were based on the results of a systematic literature review [7] and on the work of Senn et al. "Consolidated framework for evaluating the organization and performance of PCs" [19]. These two guides were then tested in four interviews (phase 1). They explored prevention practices, the conditions for integrating them, and how the participants understood them with regard to the organization of CPTS. Prior to the interviews, participants were introduced to the overall objectives of the study, and to the researcher conducting it. They also received written information detailing the aims and conduct of the research, and were informed of their rights, confidentiality, data retention and contact details.

After receiving oral agreement from the participants, the interviews were audio-recorded to avoid incorrect or missing data during transcription and data analysis. Individual and collective semi-structured interviews were conducted by EC (a female pharmacist and public health specialist trained in qualitative research) at the participants' place of work, or using videoconferencing software when appropriate. Participation was voluntary and not remunerated. Non-participant observations were made by EC during events (prevention coordination day and general assembly). Internal documents were provided by interviewees or CPTS coordinators and collected by EC.

#### Data analysis

We used an inductive analysis approach, as our aim was to grasp the manner in which specific situations were experienced [20]. All interviews were transcribed and anonymized. Thematic data analysis was carried out using NVivo software version 1.6.1. Two coding trees (one for healthcare professionals and coordinators, one for the healthcare authorities and the TO) were designed by EC and AE(a public health specialist trained in qualitative research) after independently analyzing a subset (15%) of the transcripts to ensure thematic consensus (see Supplementary Files 3 and 4). Each theme and subtheme were discussed until consensus was reached. EC and AE then independently coded another sample of 15% of the transcripts, in order to test the coding tree and check whether any new theme or sub-theme had emerged. Once the coding tree had been validated, each interview was coded by EC according to the corresponding coding tree. Only the themes and subthemes that met the objectives of the study are presented in the results. Transcribed observations and documents were also coded according to the coding tree. The analyses of the three modes of data collection (interview, observation and analysis of internal documents) are therefore presented together in the results section.

#### Results

Three CPTS were recruited (one in the first region, two in the second region). Out of the 14 eligible CPTS in the second region, 11 completed the inclusion questionnaire, six met the inclusion criteria and two were selected for the study. Their characteristics are presented in Table 1.

In total, 31 professionals were contacted: 11 did not respond, two refused for lack of time and 18 agreed to take part. Four interviews were conducted with representatives of the healthcare authorities and two with TO. Characteristics of participants are presented in Table 2. The interviews took place between October 2022 and January 2023 and varied in duration between 28 and 62 min.

Two observations lasting approximately five hours in total were made: one at a prevention network meeting of the healthcare authorities, i.e., the Regional Health Agency and the National Health Insurance agency, and the other during the general assembly of a CPTS. Three

#### Table 1 Characteristics of CPTS

CPTS	Year of creation	Number of professional members	Size of CPTS <sup>1</sup>
CPTS 1	2020	Between 100 and 200	Size 2
CPTS 2	2020	Less than 100	Size 1
CPTS 3	2018	More than 200	Size 4

<sup>1</sup>Size 1: <40,000 residents; size 2: 40,000 to 80,000 residents; size 3: 80,000 to 175,000 residents; size 4: > 175,000 residents

documents totaling approximately 35 pages were provided by the participants during or at the end of the interviews. One concerned a healthcare project, another was an activity report, and the third was a document presenting a CPTS.

Three main themes emerged from the analysis: (1) vision of prevention, (2) organization of prevention, and (3) reasons for CPTS involvement.

# Theme 1: vision of prevention

# Vision of healthcare professionals

For all healthcare professionals surveyed, regardless of their profession, prevention was considered an integral part of their mission and daily practice. Examples of actions that were described as preventive included vaccination, lifestyle advice, smoking cessation and management of treatment. Prevention was perceived by healthcare professionals as something they were already doing daily and found motivating. The main motivation for healthcare professionals to implement prevention was to meet the needs and demands of healthcare system users.

"Prevention is practically a midwife's day-to-day job [...] we do a lot of it [...] it's really the core of our practice" (CPTS 3 - Interview 3). "We try to incorporate it [prevention] into our visits" (CPTS 3 - Interview 4).

#### Vision of healthcare authorities

When the healthcare authorities were asked about their vision of prevention, they always brought the discussion back to access to care, which they considered a priority issue over prevention:

"Today, most of the assistance we provide to MSPs and CPTS concerns the issue of access to care, clearly, so over the next few years we're going to move on to programmed care, the link with the platform for emergency visits in primary care, etc., so these are really issues that occupy, let's say, 80% of our concerns" (Healthcare authorities - Interview 2).

The healthcare authorities pointed out that, from their point of view, healthcare professionals were not spontaneously committed to prevention. During CPTS meetings, they felt compelled to trigger discussion on the theme of prevention, as GP did not spontaneously bring the subject up. They also highlighted the interest shown by healthcare professionals in working on issues pertaining to prevention once the subject had been mentioned.

Healthcare authorities considered GP to be the primary agents of care in matters of prevention. In the interviews,

### Table 2 Characteristics of participants

Interview number	Gender	Type of interview	Profession
Healthcare professionals a	nd coordinators working in CPTS		
CPTS 1	Female	Individual	Pharmacist
Interview 1			
CPTS 1	Female	Individual	Physical activity professional
Interview 2			
CPTS 1	Female	Individual	Coordinator
Interview 3			
CPTS 1	4 Female	Collective	Speech-language pathologist
Interview 4	1 Male		Pharmacist
			General practitioner Coordinator
CPTS 1	Formula	المريان والمراجع	Pharmacist
Interview 5	Female	Individual	Pharmacist
CPTS 2	Male	Individual	General practitioner
Interview 1	Male	maniada	General practitioner
CPTS 2	Male	Individual	Pharmacist
Interview 2			
CPTS 3	Male	Individual	General practitioner
Interview 1			
CPTS 3	Female	Individual	Specialist nurse <sup>a</sup>
Interview 2			
CPTS 3	Female	Individual	Midwife
Interview 3			
CPTS 3	Male	Individual	General practitioner
Interview 4			
CPTS 3	Female	Individual	Pharmacist tobaccologist
Interview 5			
	s and territorial officers for CPTS		
HAs <sup>b</sup>	Female	Individual	National Health Insurance
Interview 1			
HAs <sup>b</sup>	Male	Individual	National Health Insurance
Interview 2 HAs <sup>b</sup>			
HAs <sup>o</sup> Interview 3	3 Female	Collective	National Health Insurance
HAs <sup>b</sup>	N 4 - 1 -	the effect of the set	
HAS <sup>o</sup> Interview 4	Male	Individual	Regional Health agency
TO <sup>c</sup>	Female	Individual	TO for CPTS
Interview 5	rendle	mumuua	
TO <sup>c</sup>	Female	Individual	TO for CPTS
Interview 6	i cittaic	manada	

<sup>a</sup>Specialist in management of chronic diseases through cooperation between nurses and general practitioners [21]

<sup>b</sup>Healthcare authorities

<sup>c</sup>Territorial support and development officer for the CPTS

the interest of healthcare professionals in prevention programs was assessed mainly by the level of involvement of local GP.

"It's true that public health prevention depends on a number of things. First of all, it depends on the interest of the GP involved" (Healthcare authorities - Interview 2).

"Frankly, we have to get them involved in public health prevention initiatives [...] But I don't think they see themselves much as being involved in [...] prevention" (Healthcare authorities - Interview 2).

#### Viewpoint of coordinators and territorial officers

The coordinators and TO described prevention as a unifying theme for healthcare professionals within the CPTS. During the interviews, the TO cited prevention as an example of how to foster communication and coordination between professionals.

"It's really a resource, and I think prevention is an attractive way of conducting multidisciplinary teamwork". (TO - Interview 6)

#### Theme 2: organization of prevention

In addition to individual practice with patients, two types of organized prevention were described during the interviews. On the one hand, the healthcare authorities talked about prevention in the form of programs, generally national and publicly funded (e.g., organized cancer screening). On the other hand, healthcare professionals talked about prevention projects, built locally on the basis of a territorial diagnosis (e.g., territorial action to identify untreated diabetic patients) or preventive clinical practices.

#### **Prevention programs**

The prevention programs developed by the healthcare authorities are to be implemented at the national and/ or regional level through healthcare professionals, in all types of healthcare structures. Healthcare professionals described them as not always adapted to the local context or to individual professional practices. Some were even considered to be inadequate, e.g., when the means allocated are not adapted to the program's ambitions. The verbatim below illustrates a healthcare professional's views on a national program to prevent and combat obesity and overweight:

"You can't treat a child with just one psychologist consultation, or just one dietetic consultation. To really get proper preventive care, you need several consultations. Finally, a real follow-up of the child over several months. So we said, "No, we won't be involved because..." In fact, very few MSPs are involved because it's not feasible [...] There are things that are proposed... At least that have been proposed by the National Health Insurance up to now... [that are] Not adapted to the [need of the] territories." (CPTS 1 - Interview 4).

#### **Prevention projects**

Some prevention projects are designed by the healthcare professionals involved in CPTS according to the local needs and submitted to the National Health Insurance and the Regional Health Agency for funding and validation. Although these prevention projects are much more complex to implement and therefore more costly, they receive much less funding than those devoted to obtaining access to care. They are also subject to negotiations with the healthcare authorities regarding the participation of healthcare professionals in other national programs.

"Preventive actions are the missions that I really find the most time-consuming and which demand the most commitment on my part as coordinator. Even though access to care is the main mission emphasized by the National Health Insurance in the agreement, for which there is the most funding, in the end it's not the one that costs us the most because we're well staffed" (CPTS 1 - Interview 3).

#### Deployment by healthcare professionals

The healthcare professionals who were interviewed declared they were willing to participate in prevention projects and programs, but only under certain conditions. Lack of medical time was described as a major obstacle to their participation, caused by high demand from patients in a context of a shortage of healthcare professionals. This inevitably required available professionals to increase their number of visits to meet the medical needs of the local population, leaving little time for organized prevention. Healthcare professionals therefore expressed the wish to work on clinical missions that are integrated into their practice and easy to implement, without spending time on the administrative aspects of prevention projects: project management, funding applications or protocol drafting. The preparatory stages in developing preventive projects usually involve designing, writing or responding to calls for proposals, which is perceived as a waste of time:

"Prevention takes time, a lot of time, which objectively we don't have." (CPTS 3 - Interview 4). "Mainly a lack of time, I used to work 80 hours a week, [...] the meetings are scheduled in the evening, or outside [the visits], we do them at lunchtime, eating a sandwich in a hurry to get an hour's work done". (CPTS 2 - Interview 1)

#### Viewpoint of territorial officers and healthcare authorities

In charge of supporting the development of CPTSs, the TO had a more protocol-based vision of prevention. During the interviews, they described prevention as having to be based on precise methodologies, using specific indicators and protocols, so that results and experiences could be compared and shared:

"For me, prevention is necessarily bilateral, of course, but it is always incorporated into a prevention system, it is always part of a project with global collective objectives, it is not B2B" (TO - Interview 6).

The TO and healthcare authorities also highlighted the lack of commitment to prevention on the part of healthcare professionals. They declared that healthcare professionals needed support to implement prevention, and deplored their resistance to improving practices and their lack of global vision. "This expected decompartmentalization [cooperation of healthcare professionals] is really very frustrating in practice" (TO - Interview 6).

# Theme 3: reasons for participants' involvement in CPTS Viewpoint of healthcare professionals

Some of the professionals interviewed feared that the CPTS would just be another administrative layer. They did not see the clinical or public health benefits of getting involved in a CPTS (e.g., attending meetings, responding to requests). Some even described their involvement as motivated more by sympathy for their colleagues than by any real personal conviction. Some reported joining a CPTS without really knowing how it worked, its objectives or its possible value.

"It will work for a while because of network sympathy. » (CPTS 3 - Interview 4). "I think I'm a bit unfamiliar with how the CPTS works" (CPTS 1 - Interview 5).

Others believed that the CPTS were able to devote time to prevention by hiring trained dedicated employees. The SARS-COV 2 health crisis was also described as an excellent example of how, in an emergency, the healthcare professionals and partners involved in CPTS were able to coordinate their efforts to respond effectively and rapidly to the needs of the population and the healthcare authorities (e.g., provision of premises by local authorities, simplification of on-call schedules for vaccination, etc.).

"Only the CPTS can do this. There's no point in arguing about it. A general practitioner alone can't do it. You can't provide therapeutic education, you can't provide screening. But with a CPTS, which establishes a protocol, there's obviously something... [which makes it easier]" (CPTS 1 - Interview 4).

#### Viewpoint of healthcare authorities

The healthcare authorities described the CPTS as a tool for meeting their healthcare objectives (e.g., vaccination coverage), deploying their prevention programs (e.g., organized cancer screening) and responding to local difficulties in accessing care.

"In this toolbox, I have a number of resources that can help to address the problems faced by healthcare professionals, and the CPTS are one of them" (Healthcare authorities - Interview 4).

"We'll help them if they organize screening events [...] we inform the CPTS of what we're doing, and see how they can help us. The CPTS can often connect us... support our actions and connect us with healthcare professionals, a kind of third-party healthcare provider, which is very important, enabling us to implement our policies" (Healthcare authorities -Interview 2).

# Discussion

#### Summary

The results of this study show that prevention is integrated into French primary care practices in three different ways: individual acts integrated into practice described by healthcare professionals (such as preventive clinical practices), national prevention programs and local prevention projects. Healthcare professionals are motivated by a desire to meet the needs of the local population, while healthcare authorities describe a more population-based vision of prevention via national programs. They report how the CPTS represent an opportunity to develop prevention locally, although priority is given to access to care. There is thus a discrepancy between the vision and expectations of healthcare professionals and those of healthcare authorities in terms of integrating prevention into this type of organization.

Despite these divergent viewpoints, the CPTS may improve the integration of prevention into primary care under certain conditions. First, there is a need for a conceptual and operational alignment of prevention between healthcare professionals and the healthcare authorities. Second, dedicated human resources are needed to coordinate and manage CPTS projects. These are key to establishing a functional multidisciplinary organization.

#### Comparison with existing literature

The results of this case study show that the involvement of primary care healthcare professionals in CPTS helped to overcome some of the obstacles to the rollout of prevention identified in a literature review (e.g., dedicated organizational funding, reliance on territorial diagnosis to develop prevention projects, development of multidisciplinary collaborations between healthcare professionals) [7]. Thanks to the CPTS, specific funding is dedicated to prevention projects. Although sometimes considered as insufficient, this funding still made it possible to appoint CPTS coordinators, who are responsible for their administrative management. This helps to ensure that healthcare professionals are not overburdened by administrative tasks and that they can focus on their medical activities. The organization of CPTS in France is consistent with that of other international primary care systems. In the province of Quebec, Canada, the interministerial vision of prevention, including all professionals with preventive missions, is fully reflected in the integrated health and social services centers. They coordinate all health and social services in the province [22]. Sweden has chosen to structure its healthcare system in accordance with the needs of the 21 counties that compose the country, with collaboration across six medical regions.

Each primary care organization adapts to the resources and needs of the territory in which it is located [23]. These examples confirm that such organizations can help improve the integration of prevention into primary care practices by making it explicit (as in Quebec) and/or by providing the appropriate conditions (as in Sweden). However, the current analysis of the CPTS shows that they are not sufficient to fully meet their objectives in terms of prevention and to change professional practices.

This study highlights the major obstacles to achieving functional CPTS. Healthcare professionals are motivated by the idea of taking part in one-off local prevention initiatives (e.g., involvement in the SARS-COV2 health crisis) [24]. Although common obstacles to their participation in these initiatives have been well identified in the literature (e.g., lack of time) [8, 25, 26], the healthcare professionals encountered in this case study also expressed the wish to remain focused on their medical activities without getting involved in the other aspects of prevention projects (e.g., administrative, logistic). In this context of tension (burn-out, medical deserts, emerging health crises) [27, 28] and over-solicitation [29], healthcare professionals wish to commit to and stay focused on addressing the demands and needs of the local population. Their involvement in prevention programs is therefore closely linked to their financial and logistic feasibility and to perceived value for the local population. Standardized programs (e.g., childhood obesity prevention programs) are generally rolled out at the national level by the healthcare authorities. In 2022, 56.8% of French people aged over 65 were vaccinated against seasonal flu. This result was well below that of other countries such as Canada (64.7%) or the United Kingdom (80.9%) [30] despite the promotion of the annual prevention program [31].

To meet the challenges of primary care, most Western countries are restructuring their efforts around coordinated practice [32] and inter-professional collaboration to help promote the development of prevention [33, 34, 35]. The CPTS are currently struggling to achieve their theoretical objective (e.g., to bring together the expertise of healthcare professionals and that of medico-social and social professionals in the same geographical area) [13]. They focus on health issues and access to care, and they are organized around general practitioners. The requirement for setting up a CPTS is to draft a joint health project. However, there is no requirement in terms of interprofessional collaboration or distribution of tasks. Professionals work together to achieve the objectives of their shared health project (e.g., general practitioners will organize themselves to set up an emergency hotline). While the level of collaboration depends on the involvement of each professional in the CPTS, this study shows that some professionals are more active than others, who may have joined the system out of sympathy or without any real conviction. This lack of collaborative unity may explain the failure of some CPTS in carrying out their mission and extending the scope for prevention. In the context of a national policy to continue to develop CPTS [36] in France, these results question the future of such structures.

Finally, two different visions of prevention seemed to stand out in the participants' discussions. The first vision shared by the health professionals, is a vision of prevention integrated into primary care, reminiscent of preventive clinical practices and consistent with the primary care mission defined by the Alma Ata declaration. As preventive clinical practices, it is not recognized in France by the healthcare authorities, unlike in other countries. In the USA, preventive clinical practices are promoted by the healthcare authorities and guides are published to encourage healthcare professionals to implement them in their practice [37]. The second vision is that of healthcare authorities representatives, implemented through national prevention programs of which healthcare professionals are the executors. This may be explained by the historical development of prevention in France, as care and prevention were previously the responsibility of healthcare professionals and the government, respectively. Prevention was a mission of public interest, mainly as part of the fight against epidemics. This separation of mandates proved detrimental to the relationship between healthcare authorities and healthcare professionals and hindered the integration of prevention into primary care. In this study, the healthcare authorities representatives were critical of the vision of prevention held by the healthcare professionals, and were skeptical about how the CPTS could be beneficial for them.

#### Strengths and limitations

This study has a number of limitations. Although only three CPTS were investigated, they were located in two different regions of France and they had different levels of maturity (very old, in development and in the process of being dissolved). A possible selection bias cannot be ruled out, as those who agreed to participate were probably more interested in integrating prevention than those who refused. In addition, some interviews were conducted remotely using a videoconferencing software. This may have influenced the results, although one study showed that interviews conducted remotely had little influence on the results collected [38].

Additionally, observational and documentary data supported and triangulated findings from the interviews, especially regarding organizational functioning and discourse alignment between professionals and institutions. Finally, although this case study complements a systematic review of the international literature on the obstacles and facilitators to integrating prevention into primary care [7], it is specific to the French system.

#### Implications for research and practice

This case study shows that the CPTS could be a vehicle for integrating prevention. Although prevention can be a source of inter-professional collaboration, some improvements can still be made. The functioning of the CPTS is based on the involvement of healthcare professionals and their ability to work together. This study highlights the major risk that the CPTS may be no more than geographical units and not structures that promote coordinated practice. In a context in which the aim of the healthcare authorities is to cover the whole country with CPTS by 2023, it is essential to guide professionals as they move from independent to collaborative practice.

Prevention was identified as a unifying lever for many healthcare professionals. A patient's care trajectory may involve a variety of healthcare professionals. For example, many of them are involved in smoking cessation, such as dieticians, dentists, pharmacists, nurses, midwives, gynecologists, social workers, etc. Implementing cross-disciplinary prevention projects is therefore an opportunity to improve communication and coordination between the various stakeholders involved in primary care. However, this requires effective, common, and easy-to-use structuring tools (e.g., a common information system, available facilities) [37, 38, 39]. This multi-professional approach is a powerful lever for the overall care of the local population.

To perpetuate the commitment of healthcare professionals to prevention programs, the latter need to be adapted locally according to the resources available. A major lever for healthcare professionals is the interest and feasibility of prevention actions. While a shared vision of prevention between the healthcare authorities and the healthcare professionals seems unlikely in the near future, an official recognition of preventive clinical practices could be conducive to the involvement of professionals with their local population.

#### Supplementary Information

The online version contains supplementary material available at https://doi.or g/10.1186/s12875-025-02849-3.

Supplementary Material 1

#### Acknowledgements

The authors would like to thank all those who took part in the interviews as part of this research, as well as the managers of each CPTS included and HAs. We would also like to thank the Région Nouvelle-Aquitaine for their support.

#### Author contributions

Conceptualization: EC, JPJ, CC and FAData collection and analysis: EC, CC and AEWriting of original draft: EC and AEWriting, reviewing and editing: EC, AE, CC and FA Supervision: CC and FA. Funding acquisition: EC and FA.

#### Funding

PREVA'NA (Prévention et Actions en Région Nouvelle-Aquitaine), Région Nouvelle-Aquitaine, 2021.

#### Data availability

The data supporting the results (transcripts of individual interviews) are not available to the public, as this would constitute a violation of the rules of the French ethics review authority. Data supporting the results of this study are available from the corresponding author on reasonable request.

#### Declarations

#### Ethics approval and consent to participate

This study was submitted and received a favorable recommendation from the local Research Ethics Committee of the University Hospital of Bordeaux. This recommendation has the reference CER-BDX 2023–158. Verbal informed consent was obtained from all subjects participating in the study. All methods were applied in accordance with current national guidelines and regulations.

#### **Consent for publication**

Not applicable.

#### **Competing interests**

The authors declare no competing interests.

Received: 3 April 2024 / Accepted: 22 April 2025 Published online: 10 May 2025

#### References

- Benziger CP, Roth GA, Moran AE. The global burden of disease study and the preventable burden of NCD. 2016;11(4):393. https://doi.org/10.1016/j.gheart. 2016.10.024
- World Health Organization. Noncommunicable diseases. 2022. Accessed December 7, 2022. https://www.who.int/news-room/fact-sheets/detail/nonc ommunicable-diseases
- World Health Organization. Global Action Plan for the Prevention and Control of Noncommunicable Diseases for 2013–2020. 2013. Accessed August 29, 2023. https://apps.who.int/gb/ebwha/pdf\_files/WHA66/A66\_R10-en.pdf?ua =1
- Organisation Mondiale de la Santé. Déclaration d'Alma-Ata sur les soins de santé primaires. World Health Organization. 1978. Accessed March 22, 2021. h ttps://www.who.int/topics/primary\_health\_care/alma\_ata\_declaration/fr/
- France: Health System Review 2023. European Observatory on Health Systems and Policies; 2023:276. Accessed July 18, 2023. https://eurohealthobservatory. who.int/publications/i/france-health-system-review-2023
- NCD Risk Factor Collaboration (NCD-RisC). Worldwide trends in hypertension prevalence and progress in treatment and control from 1990 to 2019: a pooled analysis of 1201 population-representative studies with 104 million participants. Lancet Lond Engl. 2021;398(10304):957–80. https://doi.org/10.1 016/S0140-6736(21)01330-1.
- Clet E, Leblanc P, Alla F, Cohidon C. Factors for the integration of prevention in primary care: an overview of reviews. BJGP Open Published Online April. 2024;5. https://doi.org/10.3399/BJGPO.2023.0141.
- Moreno-Peral P, Conejo-Cerón S, Fernández A, et al. Primary care patients' perspectives of barriers and enablers of primary prevention and health promotion-a meta-ethnographic synthesis. PLoS ONE. 2015;10(5):e0125004. https://doi.org/10.1371/journal.pone.0125004.
- Kringos DS, Boerma WGW, Hutchinson A, Saltman RB. Building Primary Care in a Changing Europe.; 2015. Accessed April 16, 2021. http://www.euro.who.int/e n/about-us/partners/observatory/publications/studies/building-primary-car e-in-a-changing-europe
- Institut national de la santé publique du Québec. CISSS et CIUSSS, Accessed. September 12, 2023. https://www.inspq.qc.ca/qualite-de-l-air-et-salubrite-int

ervenir-ensemble-dans-l-habitation-au-quebec/acteurs-et-partenaires/secteur-de-la-sante/cisss-et-ciusss

- 11. NHS England. What are integrated care systems? Accessed July 28. 2023. http s://www.england.nhs.uk/integratedcare/what-is-integrated-care/
- Ministère de la santé et de la prévention. L'exercice coordonné entre professionnels de santé. August 4. 2023. https://sante.gouv.fr/professionnels/se-for mer-s-installer-exercer/l-exercice-coordonne-entre-professionnels-de-sante/
- Ministère de la santé et de la prévention. Les communautés professionnelles territoriales de santé (CPTS). July 28. 2023. Accessed July 28, 2023. https://san te.gouv.fr/systeme-de-sante/structures-de-soins/les-communautes-professio nnelles-territoriales-de-sante-cpts/
- Babinet O, Isnard Bagnis C. 1. Qu'est-ce qu'un désert médical géographique? In: Les déserts médicaux en question(s). Débats Santé Social. Presses de l'EHESP; 2021:7–23. Accessed July 19, 2023. https://www.cairn.info/les-deserts-medica ux-en-questions--9782810907595-p-7.htm
- LOI N° 2007–1786 Du 19 Décembre 2007 de Financement de La Sécurité Sociale Pour 2008.; 2007.
- LOI N° 2016-41 Du 26 Janvier 2016 de Modernisation de Notre Système de Santé.; 2016.
- 17. Yin RK. Case study research and applications: design and methods. Sage; 2017.
- Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care J Int Soc Qual Health Care. 2007;19(6):349–57. https://doi.or g/10.1093/intqhc/mzm042.
- Senn N, Breton M, Ebert ST, Lamoureux-Lamarche C, Lévesque JF. Assessing primary care organization and performance: literature synthesis and proposition of a consolidated framework. Health Policy. Published online 2021:8.
- Kivits J, Balard F, Fournier C, Winance M. Les recherches qualitatives en santé– 2e éd. Published online 2023. Accessed March 4, 2025. https://stm.cair n.info/les-recherches-qualitatives-en-sante--9782200631970
- Agence Régionale de Santé Provence-Alpes Côte d'Azur. Protocole de coopération Asalée. August 5. 2021. Accessed July 28, 2023. https://www.paca.ar s.sante.fr/protocole-de-cooperation-asalee-3
- 22. Arpin E, Smith RW, Cheung A, et al. Profils des systèmes de Santé publique Au Canada: Québec. Centre de collaboration nationale sur les politiques publiques et la santé.; 2022. p. 45.
- Hasvold T. Sweden. In: Building Primary Care in a Changing Europe: Case Studies [Internet]. European Observatory on Health Systems and Policies; 2015. Accessed September 25, 2023. https://www.ncbi.nlm.nih.gov/books/NBK459 032/
- Bourgueil Y, Breton M, Cohidon C, et al. Les Soins primaires face à La Covid-19: Une comparaison Belgique, France, Québec et Suisse. Santé Publique. 2022;Pr-publication(0):g1–15. https://doi.org/10.3917/spub.pr1.0007.
- Eisner D, Zoller M, Rosemann T, Huber CA, Badertscher N, Tandjung R. Screening and prevention in Swiss primary care: a systematic review. Int J Gen Med. 2011;4:853–70. https://doi.org/10.2147/IJGM.S26562.
- 26. Deehan A, Marshall EJ, Strang J. Tackling alcohol misuse: opportunities and Obstacles in primary care. Br J Gen Pract J R Coll Gen Pract. 1998;48(436):1779–82.

- Apaydin EA, Rose DE, Yano EM, et al. Burnout among primary care healthcare workers during the COVID-19 pandemic. J Occup Environ Med. 2021;63(8):642–5. https://doi.org/10.1097/JOM.00000000002263.
- Chevillard G, Lucas-Gabrielli V, Mousques J. « déserts médicaux » En France: état des Lieux et perspectives de recherches. L'Espace Géographique. 2018;47(4):362–80. https://doi.org/10.3917/eg.474.0362.
- Yarnall KSH, Pollak KI, Østbye T, Krause KM, Michener JL. Primary care: is there enough time for prevention?? Am J Public Health. 2003;93(4):635–41. https:// doi.org/10.2105/AJPH.93.4.635.
- 30. OECD. Influenza vaccination rates (indicator). 2023. Accessed September 25, 2023. http://data.oecd.org/healthcare/influenza-vaccination-rates.htm
- Ministère du travail. de la Santé, des Solidarités et des familles, Santé Publique France. Grippe. March 5, 2025. Accessed March 11, 2025. https://vaccination-i nfo-service.fr/Les-maladies-et-leurs-vaccins/Grippe
- 32. Sinsky CA, Bodenheimer T. Powering-Up primary care teams: advanced team care with In-Room support. Ann Fam Med. 2019;17(4):367–71. https://doi.org /10.1370/afm.2422.
- Saint-Pierre C, Herskovic V, Sepúlveda M. Multidisciplinary collaboration in primary care: a systematic review. Fam Pract. 2018;35(2):132–41. https://doi.or g/10.1093/fampra/cmx085.
- Norful AA, Swords K, Marichal M, Cho H, Poghosyan L. Nurse practitionerphysician comanagement of primary care patients: the promise of a new delivery care model to improve quality of care. Health Care Manage Rev. 2019;44(3):235–45. https://doi.org/10.1097/HMR.000000000000161.
- Wei H, Horns P, Sears SF, Huang K, Smith CM, Wei TL. A systematic metareview of systematic reviews about interprofessional collaboration: facilitators, barriers, and outcomes. J Interprof Care. 2022;36(5):735–49. https://doi.or g/10.1080/13561820.2021.1973975.
- Ministère chargé de l'organisation territoriale et des professions de santé. *Plan 100% CPTS.*;:11. Accessed September 27, 2023. https://www.fcpts.org/wp -content/uploads/2023/09/PLAN-CPTS.pdf
- Kay E, Vascott D, Hocking A, Nield H, Dorr C, Barrett H. A review of approaches for dental practice teams for promoting oral health. Community Dent Oral Epidemiol. 2016;44(4):313–30. https://doi.org/10.1111/cdoe.12220.
- de Oliveira N, Peduzzi M, Agreli H, Matsumoto K. Implementation of evidence-based nutritional management in primary health care settings: a systematic scoping review. Aust J Prim Health. 2021;28. https://doi.org/10.107 1/PY20280.
- Wändell PE, de Waard AKM, Holzmann MJ, et al. Barriers and facilitators among health professionals in primary care to prevention of cardiometabolic diseases: A systematic review. Fam Pract. 2018;35(4):383–98. https://doi.org/1 0.1093/fampra/cmx137.

# Publisher's note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.