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Coopetition in healthcare: Heresy or reality? An exploration of felt outcomes at an intra-organizational level

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Abstract

This paper deals with coopetition in the healthcare sector, where in developed countries providers are experiencing a growing paradox between cooperation, as encouraged by authorities, and competition, in terms of resources or market share. Via comprehensive research methodology, we carry out a case study on a French Cancer Control Unit that simultaneously competes and cooperates with other local cancer treatment providers. We focus on different professional groups and their perceptions of coopetitive outcomes. Firstly, we show that different generic coopetitive situations exist and can be distinguished according to their degree of spontaneity, complementarity and value creation. Depending on these situations, felt outcomes differ from one professional group to another, highlighting that coopetition is a very complex reality and experienced differently by different individuals. Secondly, harmony created by coopetition is generally under-estimated, whereas it could be used as a catalyst to help managers implement coopetition.

Keywords: Coopetition; coopetitive outcomes; perceptions; feelings; professional groups; tension; harmony; France

1. Introduction

Over the last three decades in developed countries, healthcare providers have been subject to major changes in their environment. Reforms have mixed public health objectives (such as the well-being of the general public and the provision of quality healthcare) with a managerialist cost-controlling approach aimed at achieving extra economic effectiveness (Barretta, 2008; Büchner *et al.*, 2015; Mascia *et al.*, 2012).

In healthcare, cooperation seems to occur naturally; firstly, because of fundamental care values (e.g. equal access to quality care for all); and secondly, due to the current public policies that encourage cooperation, for example through care pathways or medical and organizational innovations (Büchner et al., 2015). Consequently, cooperation has become a priority in the sector (Roehrich et al., 2014), with providers mutually reinforcing each other through the delivery of a full range of healthcare services at their regional healthcare area level, giving patients the guarantee of a continuum of healthcare between different providers. Nonetheless, healthcare organizations are rather specific structures, above all because they have many stakeholders with powerful professional groups and regulatory systems, which affects decisionmaking and the implementation of innovations (Radnor et al., 2012). Hospitals are also characterized by bureaucracy and inertia (van den Broek et al., 2018). In addition, the healthcare sector could be defined as a network of inter-organizational networks (Lega and De Pietro, 2005; Westra et al., 2017), making it difficult to understand as a whole. Furthermore, the numerous studies on cooperation in healthcare have shown that several sources of ambivalence exist (Roehrich et al., 2014). Adopting a cooperative strategy often happens in response to vulnerability, such as difficulties in forming medical teams or the need to ensure economic and financial sustainability.

Speaking of rivalry among healthcare providers would appear to be heresy. Indeed, the use of the term "competition" has been historically restricted to private firms. If at first sight the

healthcare sector appeared to have been safeguarded from competition, it has now become a reality due to various reforms (Gee, 2000, Mascia *et al.*, 2012). Among other things, rivalry in this industry emerges from the regional attribution of equipment or permits, or the pre-emption and the retention of specialized human resources (Westra *et al.*, 2017). It also stems from just how appealing services actually are for patients and General Practitioners (GPs), and how they manage to generate market share.

With healthcare institutions experimenting simultaneously with cooperation and competition, coopetition is at work (Bengtsson and Raza-Ullah, 2016). Scholars have been investigating this field for several years, making it sufficiently rigorous and relevant to be now considered as a theory in its own right (Fernandez *et al.*, 2018; Gnyawali and Ryan Charleton, 2018). However, beyond being just a definition of simultaneously cooperative and competitive relationships between organizations, coopetition is a complex and paradoxical phenomenon (Bengtsson *et al.*, 2016), whose outcomes could be joint value creation for all parties, value creation for individual firms or indeed destruction of value (Gnyawali and Ryan Charleton, 2018). Coopetition clearly generates tensions (Bengtsson *et al.*, 2016; Tidström, 2014) at both interand intra-organizational levels (Fernandez *et al.*, 2014), but it can also create harmony (Chou and Zolkiewski, 2018). Although the literature has already focused on coopetition in healthcare (*e.g.* Gee, 2000; Barretta, 2008; Mascia *et al.*, 2012), much remains to be done to strengthen our knowledge and understanding of the challenging and complex phenomenon of coopetition (Gnyawali and Ryan Charleton, 2018) in the specific and equally complex healthcare environment (Radnor *et al.*, 2012; Westra *et al.*, 2017).

Our research has therefore a twofold objective. Firstly, at the theoretical level it aims to contribute to the emerging theory of coopetition by focusing on the perception of outcomes within an organization engaged in coopetitive relationships, as experienced by employees, and not just by top management. Indeed, employees are those who experience first-hand the benefits

or tensions generated by coopetition. A better understanding of their feelings should make it possible to better manage any coopetitive tensions. Secondly, our work has an empirical orientation, since we choose to focus on the healthcare sector, which has so far been relatively little explored through the prism of coopetition, even if it is a reality of the environment and activities of healthcare institutions.

Our work is based on a single exploratory case study of a French healthcare establishment specialized in the field of cancer treatment, which has developed coopetitive relationships with other local institutions. Firstly, we show that perceptions differ according to the nature of the coopetitive situations, which may be imposed, spontaneous, vertical or legitimate. Depending on the perceived outcomes (value creation for all, organization value creation or destruction of value), feelings could either be negative (causing tensions) or positive (creating harmony). However, the link between the main perceived outcome and the global feeling arising from coopetition is not as simple as we might first think. These feelings also depend on the professional group concerned, illustrating that coopetition generates complex managerial situations at the intra-organizational level.

This paper is divided into four parts. Firstly, we present the theoretical background, beginning with a short summary of the state of the art regarding coopetition and spelling out our theoretical gap, continuing with the specificities of coopetition in the healthcare sector. In part two, we present the research design and analytical process, followed by the case and its context. In part three, the findings detail the four existing types of generic coopetitive situation and the associated outcomes and feelings. Finally, we discuss our theoretical and managerial contributions.

2. Theory

2.1. Coopetition: an increasingly rigorous and relevant theoretical framework

A vast literature on coopetition has appeared over the last twenty years. Research initially focused on the rapprochement of the interests of actors who are otherwise competitors (Nalebuff and Brandenburger, 1997), with a view to specifically improving skill-sets and developing innovation, thus creating a paradoxical dyadic situation (Bengtsson and Kock, 1999). Literature on dynamic competition, the resource-based view and the network theory are the most important theoretical roots of coopetition (Bengtsson and Raza-Ullah, 2016; Dorn *et al.*, 2016). Beyond just a new concept created from a neologism, coopetition is now considered sufficiently robust to have graduated to a theory in its own right (Fernandez *et al.*, 2018; Gnyawali and Ryan Charleton, 2018).

At the same time, recent research has both widened and made more specific the literature on coopetition, which can be seen as either horizontal or vertical, but also as part of a networked approach (Chiambaretto and Dumez, 2016; Dahl *et al.*, 2016). Due to this broad range of work, levels, methods and founding theories, and also because it is a dynamic multilevel phenomenon, it is difficult to find a consensus on a single definition of coopetition (Bengtsson and Raza-Ullah, 2016) even if the recurring features appear to be simultaneity (of competition and cooperation) and value creation intent (Gnyawali and Ryan Charleton, 2018). Current research into coopetition is vast, covering five main areas: the nature of the relationship, actor characteristics, environmental characteristics, governance and management, and finally outputs and outcomes (Dorn *et al.*, 2016), the latter being the area we focus on in our research.

In any case, coopetition is not simply a trade-off between competition and cooperation, but could be considered as a real paradox "that juxtaposes the contradicting dualities of cooperation and competition" (Bengtsson *et al.*, 2016, p.20). This paradox therefore engenders tensions, which have to be managed (Fernandez *et al.*, 2014; Gnyawali *et al.*, 2016: Tidström, 2014), but also creates harmony (Chou and Zolkiewski, 2018). If coopetition is most often studied at an

inter-organizational level, *i.e.* between coopetitors, it also has consequences at the intraorganizational level, between business units competing for internal resources or external markets (Chiambaretto *et al.*, 2019). Scholars have therefore investigated several dimensions and levels of coopetition, but very little has been discussed about the feelings of individuals inside organizations that engage in coopetition.

Even if the idea of felt tension, *i.e.* "the actual or experienced state of cognitive and emotional stress inside an organization due to its engagement in coopetition" (Gnyawali *et al.*, 2016, p.10), has already been studied, leading to a paradoxical management capability concept requiring both analytical and executional capabilities, this occurs at a focal-firm level. The first ever attempt to take into account the individual perception of coopetition as an integral part of its management, is the concept of coopetition capability (Bengtsson *et al.*, 2016), involving only top management teams (Bengtsson *et al.*, 2018) responsible for the strategy of the organization. Another attempt concerns the behavioral antecedents of coopetition (Czakon *et al.*, 2019), but as suggested, it deals with managerial perceptions explaining why some firms engage in coopetition while others do not, and is not focused on outcomes.

At the theoretical level, our research therefore aims to fill the gap in knowledge of the perception of outcomes within an organization engaged in coopetitive relationships, as experienced by employees, and not only by top management. Indeed, employees are those individuals in an organization who experience first-hand the benefits - or tensions - generated by coopetition. We suggest that this tension or harmony (benefits) is felt differently by various categories of staff, depending on their job and their hierarchical level. We believe it is important to understand this phenomenon, which necessarily has an impact on how these tensions could be managed. However, as far as we know, no research has yet focused on *the perception of coopetitive outcomes by employees within the organization, and on the feelings that they give rise to*. This question seems crucial to us because, in line with the work of Prahalad and Hamel

(1989), whilst the strategic intent of leaders certainly sets the organization in motion, sharing this vision with employees and its appropriation is essential. Thus, in coopetitive strategies, the question of the positive or negative feelings of employees appears to be a key issue. Our paper therefore asks the following research question: *What are the feelings of the employees within an organization towards the outcomes of its coopetitive relationships with different partners?* In answering this question, we believe it would be an important step towards achieving an appropriate management of coopetitive tensions.

2.2. Speaking of coopetition in healthcare: what is different?

For several years, coopetition has become an increasingly relevant topic in healthcare research (Barretta, 2008; Gee, 2000; Mascia *et al.*, 2012; Peng and Bourne, 2009), even if there is still much to be done to understand the ins and outs of coopetition in healthcare (Westra *et al.*, 2017). The majority of recent studies are based on the Dutch (van den Broek *et al.*, 2018; Westra *et al.*, 2017) or Italian healthcare systems (Mascia *et al.*, 2012). They show that in terms of coopetition, two distinguishing features characterize the sector. On the one hand, the role played by the regulatory authorities encourages coopetition but also keeps a check on the balance between competition and cooperation (Barretta, 2008). On the other hand, the place of healthcare professionals – particularly doctors – is central: they are one of the pillars of providers' success, and their innovative practices are essential to the issues of market appeal and customer retention (van den Broek *et al.*, 2018; Westra *et al.*, 2017). Specialists can be driving forces behind coopetition if they buy into it, however they can also be fiercely opposed and derail the project (Barretta, 2008), especially when they perceive a gap between the objectives initially announced ("win-win" partnership) and the actual strategy (unequal partnership between competitors). In addition, competition seems to stimulate cooperative

innovation, depending on the focus of the different stakeholders concerned by the project (Dorn *et al.*, 2016; van den Broek *et al.*, 2018).

According to the typology on organizational configurations (Mintzberg, 1980), hospitals are usually the example chosen to illustrate what a professional bureaucracy is, through their central focus on doctors (Lega and De Pietro, 2005). Under the influence of different environmental changes, the role of nursing staff in coordinating activities has greatly increased in importance, as has the role of top management in defining objectives and allocating resources (Lega and De Pietro, 2005), thus highlighting the differences between professional groups in healthcare institutions. LeTourneau (2004), analyzing physician-executive relations, points out that they differ in their social and personal characteristics, each believing that quality of care is most important, but being sure that the other is primarily interested in performance and money. As they clearly do not speak the same language nor share the same values, it seems difficult to consider them as a whole. Healthcare is therefore a very specific sector due to the existence of these professional groups and regulatory systems, complicating the transfer of management concepts or techniques successfully developed in other industries (Radnor *et al.*, 2012).

Regarding coopetition in healthcare, it seems therefore difficult to be satisfied by only studying coopetition as inter-organizational relationships. The intra-organizational level appears to be crucial, given the variety of stakeholders and the variety of social worlds among employees. In our study, we initially focus on employees, even if we are aware that many other stakeholders play a role in this industry, especially patients or regulatory bodies.

At the same time, the healthcare sector could be defined as a network of inter-organizational networks, *i.e.* different "types of temporary or long-lasting inter-organizational relations through which resources are transferred between organizations, underpinned by various organizational motives" (Westra *et al.*, 2017, p.43), based on formal or informal agreements (Lega and De Pietro, 2005). As a result, it does not seem relevant to study just one institution.

It is necessary to study coopetition in the healthcare sector by taking into account interdependences between and amongst partners, these dynamic interactions making the phenomenon even more complex (Peng and Bourne, 2009).

Therefore, studying coopetition in healthcare seems relevant by both making a contribution to coopetition theory by analyzing perceptions of coopetitive outcomes through employees' eyes, and also to healthcare management by going further into the understanding of coopetition management within healthcare organizations. Our proposal is that perceptions of coopetitive outcomes depend on the professional groups, which are essential components in healthcare.

3. Methods

We focus our research on a French regional Cancer Control Unit (CCU), in order to explore the feelings of employees regarding the coopetition engaged in by their organization. In this part, we first explain our research design and the analytical process we applied. We then present the general context of the research, the specific field of cancer treatment in France and, finally, elements concerning the CCU and its local coopetitors.

3.1. Research design

In order to achieve our double objective, and because we carried out exploratory research, we decided to use a comprehensive research method by "taking into account what [the actors] say of what they do and the fact that they are knowledgeable agents" (Dana and Dumez, 2015, p.157). This method helps us to understand a phenomenon that has not yet been studied from the perspective of the perception of coopetitive outcomes by employees within an organization. In this context, we use an abductive approach, involving a constant back-and-forth between theory and practice (Flick *et al.*, 2004). The case study is therefore not used for illustrative purposes, but allows us to contribute to an existing theory (Dumez, 2015; Yin, 1999).

Our case study is made up of one single case, selected as a result of pre-interviews. It concerns a French regional Cancer Control Unit, which has developed coopetitive relationships with other local cancer treatment providers. We collected the empirical material between September 2016 and November 2017 with desk research from the CCU – 28 internal documents were analyzed – and from external sources (see Table 1), and 25 semi-structured interviews.

Table 1. Desk resear	rch
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Internal documents	External documents
 Institutional project 2007-2012 Institutional project 2014-2018 Multi-year agreement on objectives and means 2013-2017 Review of the action plan for the continuous improvement of the quality and 	External documents - Unicancer medical-scientific project - Unicancer Charter - Unicancer annual reports - Cancer Plan 2014-2019 - Multi-year contract of objectives and resources of the Regional Health Agency
 safety of care at the CCU 2014-2017 Conclusions of the KPMG audit at the request of the CHSCT and the works council (2013) HAS Certification Report 2014 Statement of estimates of revenue and expenditure 2015 Minutes of the Health and Safety Committee on working conditions Minutes of the works council Minutes of departmental meetings Patient welcome booklet Draft of creation of a clinical research center for nuclear medicine & radiopharmacy 	 2016-2018 Strategic planning of the regional Cancer Cluster Newspaper articles Websites of various organizations

The sampling of these interviews was carried out to illustrate the social groups represented (based on the four professional groups identified: doctors, nursing staff, support services and top management) and the institutions operating locally in the field of cancer care (see Table 2). Indeed, even if the CCU was our starting point (the first series of interviews focused exclusively on the CCU), it quickly became clear that it was essential to supplement these interviews with

a second series of interviews concentrating on the CCU's coopetitive partners. In this regard, we follow the recommendations of Bengtsson and Raza-Ullah (2016), who note that it is necessary to study coopetition not just at a focal-firm level but to extend the study to the different partners of the organization. Respondents were identified according to their availability and their role as 'gatekeepers' (Flick et al., 2004), i.e. firstly the top management team at the CCU, then, by concentric circles, the people whose names or functions appeared to be central to the interviewees' discourse. The final number of interviews to be conducted was given by saturation, *i.e.* when the data collected and their analysis no longer provide new information. Indeed, in qualitative research sample size is not the main criterion as "a large sample does not result per se in a higher validity of results" (Flick et al., 2004, p.282). In order to remain as neutral as possible in our interviews and because we wanted to capture feelings, which are by their very nature subjective, we chose to use an open interview guide structured around two main themes, namely, cooperation and competition. For both themes, the questions were identical: What examples can you cite regarding [cooperation or competition], and how do you feel about it? Each interview lasted between 45 and 90 minutes. They were recorded, transcribed, and then exploited through vertical and horizontal thematic analysis.

	Professional group				
Healthcare Provider	Doctor [Reference]	Nursing care [Reference]	Support [Reference]	Top managers [Reference]	Number of interviews
CCU	4 [D1] [D2] [D3] [D4]	4 [N1] [N2] [N3] [N4]	5 [S1] [S2] [S3]	2 [T1] [T2]	13
Coopetitors					
Home care providers	1 [D5]	3 [N5] [N6] [N7]		1 [T3]	5
Regional Cancer Research & Care Network	1 [D6]				1
Clinic 1		2			2

Table 2. Interviews

		[N8] [N9]			
Clinic 2	1	1			n
	[D7]	[N10]			2
Other exports	1			1	2
Other experts	[D8]			[T4]	2
TOTAL	8	10	3	4	25

The validity of our data collection is provided by two types of triangulation (Flick *et al.*, 2004): a) data triangulation between documentary sources and face-to-face interviews on the one hand and face-to-face interviews on the other; b) investigator triangulation, since both authors of this research took part in the interviews and desk review, allowing points of view and interpretations to be compared.

3.2. Analytical process

Our research question deals with the feelings of individuals regarding the perceived outcomes of the coopetition they experience as employees of an organization; at first sight, one might assume that the more strongly value creation is perceived by employees, the more positive their feelings will be. Our main contribution is firstly to verify this statement, and then to distinguish it according to the replies from different professional groups, given that groups are important in healthcare. We therefore analyze our empirical material with a 4-stage coding process.

Firstly, by cross-checking desk research with interview material, we highlighted different coopetitive situations. As to be expected, the situations mentioned by employees were not always exactly the same, but the examples they gave could easily be connected to generic situations, identified progressively as the research progressed. Secondly, for each generic situation we identified the outcomes perceived by employees: value for all, organization value creation, value destruction (Gnyawali and Ryan Charleton, 2018). Thirdly, we categorized the perceptions spelled out by each interviewee into either negative feelings of 'tension' or positive

feelings of 'harmony' (Chou and Zokiewski, 2018). Finally, we attempted to note similarities or differences in responses according to the professional group interviewees belonged to. We therefore divided the employees into the following four categories: doctors, nursing staff, support services and top management. To a certain extent, the top management category can be considered to be a part of support services but according to us is too specific to be treated in the same way.

3.3. Context: The French healthcare system

The French healthcare system is considered by the World Health Organization to be one of the best in the world, thanks to the high level of protection it provides. At the same time, it is wide-reaching, offering universal coverage, and has depth thanks to high levels of reimbursement. To start with, the major transformations of the French system through the New Public Management approach (Pollitt and Bouckaert, 2004) need to be understood. It is also important to explain how France has been faced with the paradox of simultaneous competition and collaboration just as in other developed countries (Mascia *et al.*, 2012).

An initial reform package in 1996 deeply transformed the French healthcare sector: the introduction of the T2A, the activity-based payment model, has led to new catchment areas for institutions, which were previously seen as a geographical given. As in other countries, hospitals have been forced to operate as competing healthcare providers (Mascia *et al.*, 2012), offering a high level of service in order to be well-known, recognized and recommended. The for-profit private sector has also become more competitive over the last few years. Clinics have restructured their activities and improved efficiency by focusing on the most profitable services, such as surgery, while the process of concentration via mergers and acquisitions accelerates around them.

The 2016 law for the modernization of the healthcare system led to the creation of Regional Hospital Consortiums, designed to strengthen cooperation between public institutions by developing reciprocal arrangements and collaboration on medical projects between providers. They also aim to build a "group strategy" based upon a shared regional medical project lasting five years, enabling the joint and gradual care of patients (through a full range of services including specialist care) over a large population catchment area. Whilst public institutions and home care services are legally obliged to belong to a regional consortium, private healthcare providers are also allowed to be partners. Among them, private clinics are not to be outdone either, often using this networking strategy via geographical reorganization to offer the widest possible and most profitable range of healthcare services to the population.

In addition, the bill on "the organization and transformation of the healthcare system", adopted in July 2019, clearly further encourages providers to cooperate with each other.

3.4. Background information on cancer

Cancer, responsible for more than 157,000 deaths per year in France, is the number one cause of mortality ahead of cardio-vascular disease. In 2017, 1.2 million people were referred to hospital for the diagnosis, treatment or monitoring of cancer, representing a 10% increase compared to 2012 (not including radiotherapy treatment in the private sector). Care for these patients required 7.3 million admissions to hospital (treatment and stays), which means cancer care accounts for nearly a quarter of overall hospital activity.

Cancer treatment involves surgery, chemotherapy, and radiotherapy. These three types of activity are performed by public healthcare providers (University Hospital Centers, CHU, or Hospital Centres, CH), by private institutions (clinics) or by Public Interest Private Healthcare Institutions, which are CCUs. According to the National Institute for Cancer Research & Care, in 2017, there were 877 healthcare providers authorized to treat cancer patients in France.

Permits are issued by the Regional Health Service to providers fulfilling the technical requirements and with the relevant permission for the activity, and who are also official members of a cancer treatment network.

In 2007, the Regional Cancer Research & Care Network was founded to coordinate regional cancer treatment, in particular by forging links between medical professionals and by encouraging the continuous improvement of medical practice.

At a national level, cancer has been the object of several government measures since 2003 through successive Cancer Plans. The 2014-2019 Cancer Plan aims to mobilize the whole range of available means of health provision, from research to treatment, in order to cope with inequalities in health and reduce avoidable cancer mortality rates. Objective n°16 of the plan involves "leveraging organizations to improve their efficiency". A sub-objective specifies that this involves "redefining the role of regional and local actors in how they support the [Regional Health Service]" requiring a review of the organization of cancer healthcare providers.

Within the context of the championing of cooperation between healthcare providers, we take a specific look at one CCU, whose activity is historically and exclusively focused on the diagnosis, treatment and care of cancer patients and is therefore obviously competing, more or less directly, with other cancer healthcare providers.

3.5. Presentation of the CCU involved in our study

Our case study focuses on a single CCU. Founded in 1973, it currently has 750 members of staff (including 180 doctors and trainee doctors). It performs 4,500 operations per year, mainly on lung, breast and thyroid cancers, in six operating blocks, and has recognized expertise in radiotherapy and nuclear medicine. The CCU is located on the site of the local University Hospital Centre (CHU), with which it shares a public service mission. Since its creation, the

CCU has had a complex relationship with its partner, marked by a persistent fear of being taken over. Locally, there are two big private clinics; one ("Clinic 1") founded in 1987 and ("Clinic 2") founded in 1974. In the region, there are also several small public and private institutions, but these four establishments control almost the entire market (see Table 3).

	Number of obstetric operations and treatment <i>(including out-patient services and cancer surgery)</i>					
	CCU	CHU	Clinic 1	Clinic 2		
Total	54 268	120 352	35 510	32 566		
	Examples of cancer treatment					
Pneumology	978	446	58	4		
Thyroid	347	228	58	3		
Mammology	1 241	358	1 043	347		
Urology	36	337	46	101		
Chemotherapy	11 985	19 494	11 399	985		
Radiotherapy	13 335	-	-	-		

 Table 3. Volume of activity of the CCU and main local healthcare providers (2016)

Note. From ATIH, ScanSanté Casemix

Over the last three years, the CCU has been confronted with a brutal change in its local environment. It had a relatively hostile relationship with the CHU; worked reasonably well with private Clinic 2, which does not have a radiotherapy service; and clashed with the other big private Clinic 1, which has oncologists and performs breast surgery. Three years ago, the Regional Hospital Consortium project reinforced the authority of the CHU in the region. Furthermore, as Clinic 1 was owned by a large national company and Clinic 2 was owned by a separate one, both were taken over in 2017 by the leading French clinic group. These events have significantly altered the local context, since one sole stakeholder now owns the two major private clinics in the area.

19 institutions (including the CCU) are currently authorized to perform cancer surgery and/or radiotherapy and chemotherapy in the administrative region, and in total 35 are able to provide treatment for cancer patients (*e.g.* home care or small hospitals).

4. Findings

To demonstrate our findings, we present them via the different generic coopetitive situations. For each one, we identified perceptions regarding the type of outcome generated: a) value creation for all, *i.e.* "the total pie generated by all partners from their mutual efforts" (Gnyawali and Ryan Charleton, 2018, p.2523); b) organization value creation, that is "additional benefits generated by individual [organizations] in the relationship" (p.2524); c) value destruction, defined as "a net loss, whereby costs from the relationship outweigh benefits" (p.2525). Considering the specific sector of healthcare, value is primarily understood as quality of care, generated by a high level of expertise in a specific field of cancer treatment, even if market share and economic considerations are underlying. For each of the four employee categories, we then qualify the dominant feeling – is it more negative (tension, '-'), more positive (harmony, '+'), or mixed ('+/-')?

4.1. Four generic coopetitive situations

Our first step in the analytical process is to highlight four distinct coopetitive situations.

Our interviewees primarily express coopetition as complementary services between healthcare providers. Some of these partnerships are the result of authorizations delivered by the Regional Health Service, as for example with breast cancer, which is seldom treated by the CHU or by Clinic 2. In urology, while the CCU deals with the oncological activity, it doesn't have the authorization to perform surgery, which is carried out at the CHU and at Clinic 2 (see Table 3). These could be considered as "context-imposed situations".

As our literature review has already shown, healthcare institutions are embedded in networks based on alliances or informal agreements of cooperation (Lega and De Pietro, 2005). Our case offers some examples, for instance with the outsourcing agreement between the CCU and Clinic 1 in place since 2006, which allows for oncology surgery at Clinic 1 staffed by oncologists from

the CCU. These situations could be labelled "spontaneous coopetition" since they are determined by the employees themselves, most often under the impetus of doctors and/or top management.

"Vertical coopetition" is also experienced by staff as part of a supply chain between upstream and downstream care, for example between the CCU and home care or with follow-up and rehabilitation care providers.

A fourth situation concerns the clear consensus among all institutions and employee categories on the absolute priority to be given to patients and the quality of care. Providers indeed need each other to perform better on cancer diagnosis and treatment. Research is, for instance, a natural field of cooperation between competitors. We chose to name this generic situation " legitimate coopetition" since it has developed over the years into a major trend in the sector, responding to healthcare institutions' challenges and meeting healthcare value expectations for all professional groups.

With these four generic coopetitive situations in mind, we can now analyze the perceptions of the outcomes of each one and identify the main feelings of different professional groups. A summary grid analysis is presented for each generic situation. *Verbatim* are used for illustration; the number in brackets refers to the interview number with a letter indicating its professional group (see Table 2).

4.2. Generic situation 1: "Imposed" coopetition

"Imposed coopetition" could lead to organization value creation and even value destruction. Coopetition could be seen (see Table 4), firstly as positive organization value creation, generating a feeling of "harmony", mainly expressed by the nursing staff and top management. "*Each institution has its own rightful place in the patient care pathway as long as things are* well thought through together beforehand and not as competitors" [N3]. Considering doctors, even if they do not challenge the system, some tensions are clearly expressed: "We've been told that 'you must collaborate with the CHU'. But, as soon as we try to do so, it's a complete waste of energy and it becomes a problem." [D2]. As for support services, ambivalent feelings are expressed too. In a way, rationality prevails ("We have to make some very big investments. If we only use a machine at 60% of its capacity, then it makes sense to have a partnership" [S2]), but at the same time, they are aware of the challenges and risks involved: "When you think 'partnership', you think 'how can we gobble up the other?" [S1].

Top managers are careful too. For example, the CCU has the local monopoly on nuclear medicine and owns two scanners therefore saturating the market, *i.e.* it is able to perform enough examinations to cover the local needs. It would appear that a third permit is about to be issued to a private institution. *"So, we ask ourselves this question: is there any lobbying going on behind all of this?"* [T2], which is all the more a sensitive issue, given the current context of reorganization of the local private clinics. The threshold effect matters in the decisions made by the Regional Health Service to issue permits and for the viability of private doctors' businesses, who depend on the number of patients they treat on a daily or weekly basis. As a result, it can also have an impact on competition: *"[In the case of breast cancers] do we have enough critical mass for healthy competition?"* [D6], as one doctor said.

The current context also leads to questions about the public or private status of the various institutions, which sometimes carry out identical work but under very different conditions. The differences, in terms of possible future consequences, can be cause for concern: "*The CHU have also started to provide cancer treatment*. But the point is that we don't have the same status. If the CHU is in deficit, the Regional Health Service will cover this deficit, which is not the case for us. We [the CCU] battle with the public and the private sector" [D3]. Likewise,

the major legislative changes over the last twenty years have greatly contributed to encouraging this state of competition, which seems rather uncomfortable for all employee categories.

In this generic coopetitive situation, it seems that more tensions exist (of varying intensity) because value creation is less obvious than in the following three situations.

Table 4. Analysis of "imposed" coopetition site	tuations
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		Doctors	Nursing staff	Support services	Top management
	Value creation for all				
Perceived outcomes	Organization value creation	Х	Х	Х	Х
	Value destruction	Х		Х	
Dominant feelings	Tension (-) or Harmony (+)	-	+/-	-	+/-

4.3. Generic situation 2: "Spontaneous" coopetition

Given that hospital decision-making has traditionally been dominated by doctors (Lega and De Pietro, 2005), "spontaneous coopetition" is often decided by doctors and/or top management. Such agreements generally create value at the level of the organization. A good example is the Breast Institute project monitored by the CCU, which aims to create a steering structure for breast cancer patient care pathways. The CCU performs practically all the breast healthcare activities locally, and is only in competition with Clinic 1. The idea was therefore to develop a multi-partner project with the CHU, the two big clinics, home care and follow-up and rehabilitation care. Initially launched in September 2017, the project will lead to the final creation of a single medical platform that eventually houses a multi-site Breast Cancer Institute for which the CCU would be the gateway. At the present stage, "the initial platform has allowed us to improve our internal processes, the organization of day care and the satisfaction of the patients and the doctors. [...]. Cooperation between the CHU and the clinics remains to be built up" [T2]; "for the moment, the networked organization for breast cancer is still a bit amateur, we don't even have any secretaries or email service that would allow us to *communicate better with each other*" [D7]. Although getting such a project up and running might seem long in coming, "*the project makes sense for the patients with regard to getting a diagnosis and receiving personalized care*" [D6].

In such a project, doctors must play an active role in decision-making and action-planning in order to accept it and contribute to the project's development. This element matches previous literature on the subject, considering that doctors could be in turn strong supporters of the project or its worst opponents (Barretta, 2008).

Here, the creation of value concerns above all one institution (the CCU) which attempts to develop this project to its benefit. Consequently, feelings are mixed: people clearly understand the advantages and therefore express positive feelings, but they are also aware of difficulties and external challenges, also expressing negative feelings whatever professional group they belong to (see Table 5).

		Doctors	Nursing staff	Support services	Top management
	Value creation for all				
Perceived outcomes	Organization value creation	Х	Х	Х	Х
	Value destruction				
Dominant feelings	Tension (-) or Harmony (+)	+/-	+/-	+/-	+/-

Table 5. Analysis of "spontaneous" coopetition situations

4.4. Generic situation 3: "Vertical" coopetition

Vertical coopetition is obviously easier to accept than "imposed coopetition", since the complementary services already exist upstream and downstream: *we [home care] continue to be the watchful eye of the medical team that leaves the patient in our care*" [N5]. For instance, an arrangement was signed in March 2016, between the CCU and one local home care provider to make a coordinating nurse, employed by the CCU, available on a part-time basis to the home-care services: *"it makes our organization much easier; this job is strategic and essential today"*

[N5]. A project to make an oncologist available is also under consideration. This type of official partnership apparently plays a part in strengthening ties between the personnel: "[the agreement between the home-care services and the CCU], it helps us enormously and it works really well" [D1]. Because these vertical coopetition situations are created with a win-win scenario in mind, they naturally lead to value-creation outcomes, even if the "all" includes here only those involved in such an agreement, resulting in dyadic relationships; it is for this reason we put it in the 'organization value creation' category. Consequently, feelings are mainly positive whatever the professional group (see Table 6), even if some tensions could occur on a day-to-day operational basis: "Sometimes, we have the feeling that the CCU uses home care just to clear beds and that conversely. [home care] wants to oversee the patient's care and doesn't give a damn about the oncologist..." [N5].

		Doctors	Nursing staff	Support services	Top management
	Value creation for all				
Perceived outcomes	Organization value creation	Х	Х	Х	Х
	Value destruction				
Dominant feelings	Tension (-) or Harmony (+)	+/-	+/-	+	+

Table 6. Analysis of "vertical" coopetition situations

4.5. Generic situation 4: "Legitimate" coopetition

Patient care pathways, encouraged by regulatory bodies, are expected by healthcare institutions and their employees. They allow more efficiency in patient-oriented care and offer cost savings even if there is a risk of asymmetric relations developing. "*I believe that each institution has its own rightful place in the patient care pathway as long as things are well thought through beforehand together and not as competitors*" [N3]. "*There is some good to be had from each of the institutions, a mixture that would maybe enable us to create a balance around our common objective of caring properly for our patients*" [N1].

In this last generic situation, value creation for all is clearly visible, as expressed by predominantly positive feelings (see Table 7). Whatever the employee category, care values are expressed via a "patient-centered" organization. "*The objective must be to guarantee that the various actors in the patient care pathway will benefit from the development of cooperative partnerships, whilst at the same time placing the patient at the heart of their preoccupations, by making care cost savings thanks to the efficiency of the care pathway"* [D8]. Of course, it is not always as simple as that, and "*the challenge involves getting over the usual barriers to develop a win-win project that involves grouping together non-competing activities*" [T4]. Therefore, this last generic situation seems to confirm that the more value creation is perceived, the more positive feelings regarding coopetition there are.

Table 7. Analysis of "legitimate" coopetition situations

		Doctors	Nursing staff	Support services	Top management
	Value creation for all	Х	Х	Х	Х
Perceived outcomes	Organization creation value				
	Value destruction				
Dominant feelings	Tension (-) or Harmony (+)	+	+	+	+

5. Discussion

Examining the felt outcomes of intra-organizational coopetition in the healthcare sector and taking into account the different professional groups present in this sector, our study offers two types of contribution. Firstly, the theoretical contributions strengthen our knowledge of coopetition as a strategy offering different characteristics at work in organizations, which we then explain. This leads to a reading of the associated perceptions, which can involve both tension (as the literature has already shown abundantly) and harmony. Secondly, our contributions are also managerial, providing elements of understanding for stakeholders in

healthcare institutions (primarily decision-makers, but also public authorities) by focusing on professional groups and their different perceptions of coopetition.

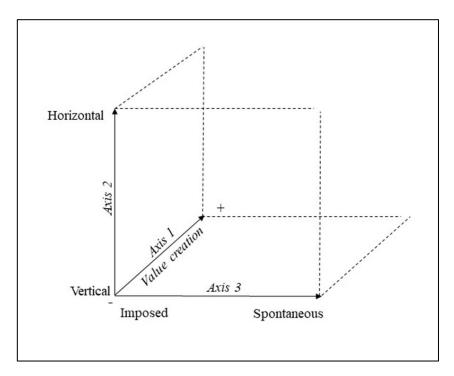
5.1. Coopetition is a reality, but a complex one

Our study provides empirical evidence that coopetition is indeed at work in healthcare, in line with previous work on the subject (Barretta, 2008, Mascia *et al.*, 2012; van den Broek *et al.*, 2018; Westra *et al.*, 2017) regarding the relevance of coopetition as a concept applied to the sector. Coopetition is therefore proving to be a reality, with which both individual and groups of actors are confronted on a daily basis.

By identifying four coopetitive situations, our analysis offers an extra aspect, which will of course require being challenged further. Here, we highlight imposed, spontaneous, vertical and legitimate coopetition, each with a different level of value creation, rivalry and spontaneity. Firstly, focusing on outcomes, we were able to evaluate the "degree of value creation", from high (value creation for all) to low (value destruction). With this in mind, we address the question of coopetitive intensity, which is a fundamental issue but still insufficiently explored in the literature (Bengtsson and Raza-Ullah, 2016; Gnyawali and Ryan Charleton, 2018). Whilst our study only outlines one more step in this direction, we believe that this is an important point that should be addressed by future work. Secondly, the "rivalry" dimension concerns the degree of horizontality (or on the contrary, verticality) of relations between coopetitors. Coopetition actually requires the existence of simultaneous competition and cooperation between actors, but complementarity of activities is also quite common (Chiambaretto and Dumez, 2016). Thirdly, the "spontaneity" dimension is partly in line with previous work on the question of more or less deliberate or emerging coopetition (Dahl *et al.*, 2016). However, it significantly enriches this previous work by adding the other two dimensions.

We are therefore able to illustrate coopetitive situations *via* a figure representing the following three dimensions: i) value creation, which may go from destruction of value ("-") to value creation for all ("+") (axis 1); ii) rivalry, qualified by a more or less pronounced horizontality or verticality of relationships, the relationship being either one of strong competition or being very complementary (axis 2); iii) spontaneity in the coopetitive relationship, the relationship being either very imposed or very spontaneous (axis 3) (see Figure 1).

Figure 1. The three dimensions of coopetitive generic situations



This graphic representation highlights how each of the three dimensions depend on the other two. It allows us to visualize the simultaneity of the three axes that characterize coopetitive situations. Nevertheless, even if our proposal is to be taken further, this level of analysis already leads to a better understanding of the nature of the different coopetitive relationships, and therefore to a better understanding of the perceptions and feelings associated with them.

5.2. Tension or harmony; it depends on who

Qualifying coopetitive situations is one thing; focusing on how the actors most concerned – the employees themselves – perceive their outcomes is another. In our work, we focused on a theoretical gap concerning how the outcomes of coopetitive relationships at the intraorganizational level are felt by employees. Since we explored the healthcare sector, we have chosen four professional groups: doctors, nursing staff, support services and top management. Our study confirms that in three generic situations (spontaneous, vertical and legitimate coopetition), each of these categories of staff has similar perceptions regarding the outcomes, which are qualified in terms of value creation for all, organization value creation or value destruction. In contrast, in the case of imposed coopetition, depending on the professional group concerned perceptions do not refer to the same category of outcome. This is therefore the most delicate situation since it is at best assimilated to value creation for the organization, and at worst to value destruction.

Regarding feelings, according to our results, doctors appear to be the most critical professional group in coopetitive situations, expressing the most ambivalent perceptions. This point confirms previous work, making doctors the key element of the success (or failure) of coopetitive projects in health institutions (Barretta, 2008). On the other hand, the nursing staff seem much more open, with positive feelings generally prevailing. While our study does not allow us to go any further into the possible explanations for various reactions, it nevertheless makes it possible to show that coopetition generates complex managerial situations, for which a single response aimed at all staff cannot be adequate. It is therefore necessary to find ways to manage tensions in order to reconcile the interests of all concerned. In other words, each professional group must be able to find a meaning for the coopetition it experiences on a daily basis.

At the same time, our research confirms the work of Chou and Zolkiewski (2018), showing that while tensions are real in coopetitive situations (already the subject of extensive literature),

harmony is also just as present. Thus far however, the literature has not really given the subject much attention. Our study therefore makes it possible to highlight this extremely positive dimension of coopetition, on which managers can then rely to promote and subsequently implement the various coopetitive projects in which their institutions are engaged.

5.3. Limitations

Our study is not without limits. Firstly, we study the specific field of cancer treatment in the French context through the case of a CCU, which has a special legal status (both public and private) and is in direct coopetition with other institutions, which can also be either public or private. This point would therefore probably require further investigation to measure the effects generated by the status of the institutions studied. In our case, there is also the question of generalizing our results based on an establishment that is relatively atypical, but which is nevertheless counter-balanced by studying the institution's relations with its local coopetitors.

In addition, from a methodological perspective, we opted for a qualitative approach, in the form of a desk study and interviews. Our sample is necessarily incomplete, even if we wanted to interview people from different professional groups within different structures. Moreover, by studying perceptions and collecting statements about feelings, we target elements that are highly subjective in nature, whose formulation by the interviewee can be delicate, even misleading, as well as the researcher's transcription and interpretation of them. However, we have sought to limit this bias by triangulating our data.

Finally, as mentioned above, while our study focuses on employees, it does not include other stakeholders whose perceptions should also be given consideration. By doing this, the feelings of patients and authorities could be explored in the future.

6. Conclusion

By studying the felt outcomes of coopetition at an intra-organizational level, this research fills a theoretical gap and points to a managerial one. The literature has already shown that coopetition generates tensions and is therefore neither easy to implement or manage. Dealing with the healthcare sector, where professional groups have an important role, we contribute to the literature in two ways. Firstly, we show that different generic coopetitive situations have to be distinguished, according to their degree of spontaneity, complementarity and value creation. Depending on these situations, felt outcomes differ from one professional group to another, highlighting that coopetition is a very complex reality and differently experienced by individuals. Secondly, we show that the role of harmony generated by coopetition is generally over-estimated, whereas it could be used as a catalyst to help managers implement coopetition as long as employees perceive it as an element of value creation. Finally, our study could help managers at healthcare institutions to understand better why coopetition is difficult to implement – generic coopetitive situations and professional groups making coopetition a complex reality to deal with.

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