

How to Create Relational Capital in Hospital-In-The-Home Units¹

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Abstract: The Spanish healthcare system has undergone important changes, particularly with respect to the development of new hospital services. Today, more than ever, the factors that define the nature and structure of the Spanish healthcare environment (e.g. demand, costs, system deregulation) are undergoing rapid change thus obliging hospital administrators to develop and implement flexible and adaptive strategies in order to survive in an increasingly challenging environment facing hospital management. This work examines how the existence of some learning practices is linked to knowledge transfer and how this component is linked to relational capital. These relationships are examined through an empirical investigation of 54 doctors and 62 nurses belonging to 44 Hospital-in-the-Home Units. In an applied sense, the findings provide homecare practitioners with identifiable factors, which enable two learning models (conceptual and operational) and address the relevant issues by changing strategies at both the individual and organisational levels.

Keywords: hospital-in-the-home units, conceptual learning, operational learning

1. Introduction

The Hospital-in-the-Home Unit (HHU) is an innovation which delivers acute hospital services to appropriate patients in their own homes (Montalto, 1996). Health care resources are limited, and therefore the identification of the true expense generators are necessary to be able to optimise resource use. The World Health Organization stresses that strategies should be drawn up for providing support to patients and carers at community level in order to avoid costly institutional care (e.g., Montalto, 1996; Drake *et al.*, 2006). In this regard, the key benefits of HHUs are clear. If the patient stays at home, hospital admissions decrease, and more importantly, infections are avoided (Planas-Miret *et al.*, 2005). It has also been recognised that home health care increases patients' quality of life considerably as it eases their care in the family and prevents risks associated with hospital admissions (Montalto, 1996; Gideon, *et al.*, 1999). A number of factors may explain the greater satisfaction with treatment at home: In their own homes, patients are in their familiar environment, their privacy is protected, their sleep less interrupted, and they can eat their usual food (Cruse and Foord, 1980).

The concept of relational capital concerns the relationships that an organisation develops with its external agents. Furthermore, the value of an organisation's relational capital may be considered to be the value of these relationships. These relationships enable organisations to gain knowledge of customers, enabling them to develop new products, services or processes which may significantly increase "what customers gain from the organisation's products, processes or services" (Chang and Tseng, 2005). In this study we have considered that relational capital involves the value of the relations that a HHU maintains with the different agents of its environment (e.g. patients and other practitioners). Traditionally, relational capital needs to become a stable resource if it is to be translated into greater satisfaction with home treatment (Brown, 1993). However, there is a growing rate of turnover among doctors, nurses, and/or knowledge workers who accumulate organisation-specific knowledge that is ultimately lost to the healthcare system. Therefore, relational capital would have a relatively short half-life due to employee turnover and the passage of time.

The above provides an illustration that, in order to create relational capital, strengthen patient relationships and thus positively influence patient satisfaction, a HHU must be flexible in configuring

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(combining) knowledge and knowledge structures in a way that is appropriate for delivering value to the patient (Dixon, 1994). Thus, as Szulanski (1996) noted, in order to overcome the internal barriers of knowledge transfer, it might be fruitful "to devote resources and managerial attention to develop the learning capacities of organizational units, foster close relationships between organizational units, and systematically understand and communicate practices". In doing so, Jansen *et al.* (2005) define "absorptive capacity" as a set of learning processes which are the overall outcome of developments in the knowledge environment as well as of managerial agency. Kim (1993) further proposes that learning can be classified as conceptual or operational. While 'conceptual learning' concerns thinking about why things are how they are or why they are done in the first place, 'operational learning' basically refers to learning how to do something. The purpose of this paper is to highlight the links among the extent to which a HHU possesses some conceptual and operational practices and the strengths of its relational capital from the practitioners' point of view. The key factors that characterise conceptual learning, operational learning and relational capital are introduced and discussed in the next section.

2. Contextual framework

About former studies in Relational Capital, the revision of relative literature on intellectual capital allows us identify multiple researches which refer to this question. One of the first models of measurement and management that is going beyond of financial indicators, it is the Scorecard Balance (Kaplan and Norton, 1992), that considers, in a perspective much more closed the relationships of the organizations with customers (in our case patients or carers) in what they named a perspective of clients, in this block some aims are marked to get them. In this way, focus in clients is referred by Edvinsson and Malone (1997) in 'Navigator of Skandia' as indicators to representative the actual situation of the company. Bontis (1996) speaks of clients capital and defines it as "the knowledge of distributions channels and relationships with clients". Brooking (1996) is another author interested in the relationships of the company with clients, but with vision beyond them, this consultant named market assets as "those which are derived from a beneficial relationship of the company with market and customers", including product brands, prestige, distribution channels, image and name of the company, and other types of contracts that give competitive advantage to the company. In the same line that Brooking (1996), Roos and Roos (1997) extend the study of company relationships with clients, and this category of intellectual capital is designated as clients and relationships capital, including in this block at the same time other intellectual capital as: relationships with suppliers, relationships with partners and relationships with investors. It must be mentioned Sveiby (1997) contributions, who in his "external structure" included relationships with clients and suppliers, commercial brands and reputation or image of the company, using for this, three types of indicators: Growing and innovation, efficiency and stability indicators. About former considerations, "Relational Capital" is defined as the value of relationships that an organisation maintains with the environment (Euroforum, 1998). However, among all the agents which a company has relationships, the most important are customers (patients), because of the direct relation with financial performance and survival in a long term (Euroforum, 1998). To get Relational Capital, it is necessary the knowledge of clients. For this reason, in the following epigraph, a relational learning model will be presented, which every level of learning (individual, group, and organizational) will be studied, changing information and beginning by explicit knowledge of customer, distributed and used to create Relational Capital.

Transitioning from care services being provided in a hospital setting to their provision in a homecare setting creates many important challenges (Sanchez & Cegarra, 2008). In a hospital setting the practitioner mainly focuses on applying physical and psychological assessment skills to the patient in the structured hospital environment. However, when care services are provided in a homecare setting the practitioner not only conducts a complete physical and psychological assessment, but also assesses social, economic, environmental, home safety, and factors relating to the familial situation that may affect the patient's care (Humphrey & Milone-Nuzzo, 1996). Clearly another difference between providing care in a hospital setting and a homecare setting relates the work environment. While in the hospital setting the patient is always present and everything is familiar and convenient for the practitioner, in the homecare setting the practitioner is responsible for identifying what has to be done to assure an appropriate level of care and ensuring that the patient and family are aware of what might be helpful. Often the family are required to participate in providing care and therefore they have to be actively involved in the development of a care plan for the patient. This means that the practitioner who provides care services in a homecare setting must, over time, develop knowledge of the community resources available both inside and outside the hospital (Cegarra & Cepeda, 2010).

The essence of identifying and sharing efficient practices is to learn from others and to reuse knowledge and avoid waste. In doing so, the learning process within the organisational context, is a topic which has

been studied mainly within a framework of strict psychology and has not received due attention from healthcare literature. Thus, Kim (1998) understands absorptive capacity as skills relating to the ability to learn and solve problems that enable a firm to assimilate and create new knowledge. Zahra and George (2002) have suggested four dimensions of absorptive capacity, each playing different but complementary roles in explaining how absorptive capacity can influence innovation performance. The first two dimensions (i.e. acquisition and assimilation) are in effect what Zahra and George (2002) label potential absorptive capacity (PACAP) and the other two dimensions (i.e. transformation and exploitation) constitute realised absorptive capacity (RACAP). Whereas PACAP implies personal internal processes such as reflection, intuition and interpretation, RACAP reflects the efficiency of leveraging externally absorbed knowledge.

Literature has not used the same number and nomenclature of absorptive capacity processes. PACAP and RACAP have also been labelled by other authors as ‘conceptual and operational learning processes’ e.g., Kim (1992; 1993). Kim (1992) begins with a discussion of the two levels of organizational learning—operational and conceptual (which he also correlates to Argyris & Schön’s (1978) single and double loop learning). Next, Kim outlines how operational learning focuses on resolving procedural issues; while conceptual learning is most capable of addressing issues that cross functional-areas of process. In Kim’s terms (1993), operational learning is procedural and rule based, while conceptual learning facilitates causal reasoning. Kim (1992) also shows how the processes involving the effective and efficient allocation of resources into valuable and competitive business platforms based on existing knowledge are ideally suited for operational learning; and that formal or informal meetings, or creating external communities, as outlined by Jansen *et al.* (2005), are perfectly designed to conceptual learning.

The above provides an illustration that, although there are many overlaps between conceptual learning and operational learning, the two constructs are not identical. Conceptual learning starts with activities involving searching, variation, risk-taking, experimentation and innovation (Kim, 1992; 1993). These activities lead to the introduction of novel practices by HHU_s. In addition, knowledge obtained as a result of operational activities can be internalized by doctors and nurses who materialize it in the form of relational trust, common language and confidence (Bontis *et al.*, 2002). The existence of these sub-processes and the extent to which they are implemented testify to the intensity of efforts made toward the development of HHU_s’ internal capabilities and for accessing knowledge from external sources. While conceptual learning pursues new knowledge and develops new services for patients, operational learning builds upon current knowledge to meet the needs of existing patients.

The framework shown in Figure 1 integrates the key factors that influence the nature and effectiveness of the learning context.

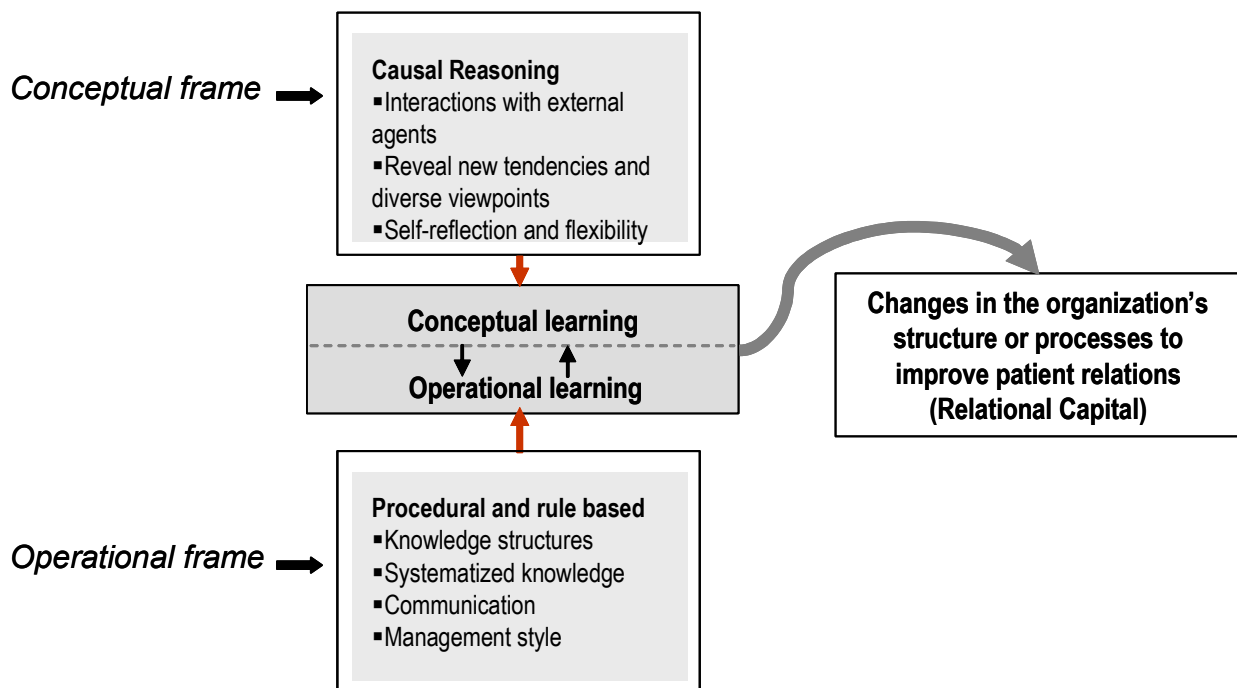


Figure 1: A framework for development of relational by hospital-in-the-home units

As shown in Figure 1, conceptual learning is facilitated through organizational structures and factors that facilitate the exploring of new understandings (e.g. new opportunities to serve patients). Operational learning, in contrast, is facilitated by organizational structures and factors that provide for the utilization of experiences and lessons learned (e.g. beliefs, norms, values, procedures, and routines).

Relational capital arises as a result of interaction between a HHU and its external agents (e.g. patients and carers). Since patients' expectations and demands are dynamic, it is necessary that practitioners pay close attention to track patient and career demands in products and services and develop their capabilities to meet those demands quickly (Cegarra and Cepeda, 2010). In this regard, conceptual processes can be used to respond more quickly to patients demands since information about new homecare services can be disseminated more quickly (Drake and Bethan, 2006). Equally, patient relations will benefit from access to the new knowledge necessary to resolve healthcare problems (Montalto, 1996). The effective utilisation of knowledge further allows appropriate responses to be made to changes in, for example, carers' technology structures, or to changes in patient expectations (Planas-Miret *et al.*, 2005). In addition, relational capital can also be supported by operational processes, for instance organizational design features (e.g. teamwork or cross-department specialist teams) may help the avoidance of entrenched behaviours and result in the enactment of more appropriate behaviours (Sanchez and Cegarra, 2008). These issues are explored by testing the following hypotheses:

H1: Conceptual learning practices are positively associated with relational capital

H2: Operational learning practices are positively associated with relational capital

3. Methodology

In order to compare the above hypotheses, HHU_s in Spain were considered. The Hospital-in-the-Home domain was chosen for two main reasons. On one hand, despite patient satisfaction being reported as being high in Hospital-in-the-Home (Carr-Hill, 1992), evaluation of the causes of high levels of satisfaction have been underdeveloped. On the other hand, the HHU is an ideal platform to learn, because two or more individuals (e.g. patients, carers, doctors and nurses) are working together with different resources and complementary capacities, which are learning facilitator factors (Fenwick, 2007). In practical terms, this has sown the seed for knowledge to be made available and for HHU members to be actively directed towards the patient in the form of strategic competence mapping, development and utilisation.

Therefore, the Hospital-in-the-Home sector is an appropriate setting for an investigation of learning practices and its impact on relational capital. This is mainly because these units provide 'face-to-face' interaction, allowing the exchange of information to be inserted into the social context of the patients, which by its tacit character is more difficult to imitate. This means constantly searching for new ways to improve homecare services, developing new offerings and introducing improved working methods, but they will only occur if practitioners, carers and patients are engaged to share individual expertise and create organisational knowledge (Montalto, 1996). Consequently, HHU are highly motivated to introduce relationships with carers and patients to create relational capital and try to systematise the 'learning' process.

We used a list of home care units (65 HHU) provided by the Spanish Homecare Society (SHS) in Spain. Those units were contacted and asked by the SHS to participate in the study, and 44 agreed. They were also informed by telephone of the work objectives and they were assured of its strictly scientific and confidential character as well as the global and anonymous treatment of the data. Finally, prior to the telephone interviews, a presentation of the study was given in the 8th National Conference on Internal Medicine held on 18th-21st November 2009 in Valencia, Spain. Surveying took place over a period of two months, from December 2009 to January 2010. Participants were divided into two categories: HHU members with nursing backgrounds and HHU members with medical backgrounds. In total, 63 nurse managers and 63 medical managers were telephoned and invited to participate in the study, and a total of 119 questionnaires were collected, of which 3 were found to be without an overall satisfaction rating. Therefore, data analysis was based on 116 valid questionnaires (54 doctors and 62 nurses). The great majority of respondents were female (62.1 percent) and had medical backgrounds (34.7 percent).

The existence of conditions necessary to support conceptual learning or (CL) were measured using an adapted version of a scale by Jansen *et al.* (2005) to measure the construct of 'potential absorptive capacity'. This construct focuses on the generation of new insights, developing the competencies necessary for doing one's job, having a sense of pride and ownership in one's work and being aware of

the critical issues that affect one’s work. The initial measures relating to the existence of operational learning (OL) initiatives consisted of 4 items adapted from a scale designed by Jansen *et al.* (2005) to measure the construct of ‘realised absorptive capacity’. Consistent with Jansen *et al.*, items that tapped the operational learning initiatives were interwoven with issues focused on recognising opportunities and consequences of existing operations, structures, and strategies. The items had 7-point scales ranging from 1 (high disagreement) to 7 (high agreement). Among the indicators of relational capital or (RC), factors relating to the existence of satisfied patients (e.g. quick health services, relationship, and collaboration) are most often used (Chang and Tseng, 2005). In this research, respondents were asked to indicate the degree in which his(her) reached four objectives (1= strong down and 7= strong up). A principal factor analysis (with varimax rotation) was carried out on all independent and dependent variables yielding three factors explaining 71.296 percent of the variance, with factor 1 accounting for just 26.7 percent of the variance. Exploratory factor analysis also allows for an examination of the unidimensionality and validity of the items. Three distinct factors, reflecting each of the dependent and independent variables, emerged, as shown in Table 1. This provides good support for the construct validity of the scales.

In order to assure the research can be generalised, it is important to add control variables to the regression model in order to ensure that the effects of CL and OL on RC are independent of the Hospital-in-the-Home Units’s focus on RC. In this regard, RC could be strengthened in those situations where HHU employ relatively young employees in those areas dealing with decision making about the adoption of new ideas and practices (Nystrom *et al.*, 2002). Younger employees are more likely to adopt innovations (Brancheau and Wetherbe, 1990), whereas older people may become so rooted in past practices that a substantial degree of inertia accumulates over time (Becker, 2005). Under this framework, the date on which each practitioner started in his/her current position might have a different impact on RC (e.g., older people may have lower levels of uncertainty). Furthermore, Becker (2008) argues that those with a breadth of knowledge are more likely to be open to forget and change, however, those with a depth of expertise, particularly in the area requiring change, are more likely to resist changing. Thus, although doctors and nurses are two natural partners in the HHU team, they also have very different jobs, very different responsibilities and different school and training requirements. Therefore, it seems that they may have different perceptions about how to respond to conflicting patient demands. Thus, in this paper we have included two control variables.

- The number of years spent developing the same position. This dimension was measured by a continuous variable with a minimum value of a few months and a maximum value of seventy-eight years.
- The practitioner’s background may also impact the level of utilisation of each HHU initiative. In our study, we considered whether (1), the person who answered was a doctor or (2), the person who answered was a nurse.

Table 1: Rotation factor matrix ^a

Survey items	Factors		
	Conceptual learning	Relational capital	Operational learning
Our unit has frequent interactions with corporate headquarters to acquire new knowledge	0.753	0.047	0.155
New opportunities to serve our patients are quickly understood	0.862	0.186	0.298
We quickly analyse and interpret changing new tendencies in our environment	0.920	0.164	0.152
We quickly analyse and interpret changing market demands	0.857	0.212	0.172
Employees record and store newly acquired knowledge for future reference	0.230	0.205	0.687
Our unit quickly recognises the usefulness of new external knowledge to existing knowledge	0.114	0.055	0.869
Its clearly known how activities within our unit should be performed	0.245	0.044	0.803
Employees have a common language regarding our products and services	0.122	0.303	0.749
Quality of services	0.021	0.865	0.130
A more efficient use of resources	0.067	0.853	0.188
Satisfaction of patients	0.354	0.627	0.072
Speed of services to patients	0.205	0.748	0.143

Notes: Extraction method: principal factor analysis; rotation method: varimax with Kaiser normalization; ^a rotation converged in five interactions

4. Results

Before analysing the effects of *CL* and *OL* on *RC*, the relationship between the independent questionnaire variables needs to be investigated (Peterson, 1994). In doing so, multicollinearity tests give satisfactory results with no VIF over 2 ($FIV=1.271$) and no tolerance value over 1 (tolerance=0.968). We can see in Table 2 that the tolerances of all the predictors are higher than the evaluation criteria of 0.01, and VIF values are not higher than the evaluation criteria of 10 (Stevens, 2002). Therefore, the tolerance and VIF values are well within normal bounds, suggesting that multicollinearity is not present among these independent variables. Table 2 also provides an overview of the construct's means, standard deviations and correlations.

Table 2: Assessment of the measures

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Eigenvalue		μ	SD	CA	Correlation matrix analysed					Collinearity statistics	
					1	2	3	4	5	Tolerance	VIF
4.575	1. Age (range 0–28)	10.583	7.532		1.000					0.968	1.033
0.314	2. Background (Doctor–2:Nurse)	1.534	0.501		-0.175 ^c	1.000				0.949	1.053
0.072	3. CL (range 1–7)	5.252	1.179	0.899	-0.049	0.128	1.000			0.786	1.273
0.024	4. OL (range 1–7)	5.435	1.014	0.818	-0.024	0.133	0.457 ^a	1.000		0.787	1.271
0.016	5. RC (range 2.50–7)	5.851	0.870	0.822	-0.111	0.064	0.371 ^a	0.392 ^a	1.000	---	---

Notes:

^a<0.01; ^b<0.05; ^c<0.1

μ = the average score for all of the items included in this measure; S.D. = Standard Deviation; C.A. = Cronbach's alpha ?

Age: Years in the same position; CL= Conceptual learning; OL= Operational learning; RC= Relational capital

As shown in Table 3, we adopt Baron and Kenny's (1986) three-step hierarchical regression analysis procedure in this study. In the first model, which we refer to as the control model, only the control variables are entered into the regression equation (i.e. the number of years spent developing the same position and the practitioner's background). In the second model, which we refer to as the *CL*-model, we added *CL* into the regression equation. Finally, in the third model, which we refer to as the *OL*-model, the *OL*-variable is added. A comparison among the three models permits the conclusion that the third model fits better to the observable data than the first two models shown (the fit statistics for the third model were $R^2=0.204$; $Adj R^2=0.175$; $F = 7.066$). Table 3 shows that the least supported model (the control model) implies that the number of years spent developing the same position and the practitioner's background have insignificant effect on *RC*. The addition of the mediation term (Step 2) significantly improved the results from the control model ($p<0.001$), and importantly, the previously insignificant relationships between 'the control variables' and *RC* (control model) became insignificant. In addition, as shown in the *CL*-model, '*CL*' has a significant impact on *RC* (the dependent variable) ($\beta=0.367$, $p<0.01$). Table 3 also shows that the addition of the mediation term (Step 3) significantly improved the results from Step 2 ($p<0.001$), and importantly, the previously significant relationship between *CL* and *RC* became insignificant ($\beta=0.246$, $p<0.05$), while the previously significant relationships the control variables' and *RC* became insignificant. Furthermore, Table 3 indicates that the second mediating variable, *OL*, also has a significant positive effect on *RC* ($\beta=0.271$, $p<0.01$). This analysis provides full support for H_1 : ($CL \rightarrow RC$), and H_2 : ($OL \rightarrow RC$). The theoretical and managerial implications of the relationships observed across those constructs are discussed in further detail in the following section.

Table 3: Regression analysis performed for HHU (N=116)

	Control model	Conceptual learning model	Operational learning model
Step 1			
Years in the same position	-0.106 (t= -1.110)	-0.096 (t= -1.075)	-0.098 (t= -1.136)
Backgrounds	0.035 (t= 0.371)	-0.010 (t= -0.010)	-0.028 (t= -0.324)
Step 2			
Conceptual Learning	----	0.367 ^a (t= 4.153)	0.246 ^b (t= 2.560)
Step 3			
Operational Learning	----	----	0.271 ^a (t= 2.832)
R ² =	0.014	0.146	0.204
Adj R ² =	-0.004	0.123	0.175
F =	0.782	6.346 ^a	7.066 ^a
Change in R ² =	0.014	0.133	0.058
Change in F =	0.782	17.248 ^a	8.020 ^a

Notes:

^a<0.01; ^b<0.05

5. Discussion

The first contribution of this research derives from the presented framework. As shown in Figure 1, the context in which practitioners are able to learn from patient needs is customised and based on two frameworks: (1) conceptual; and (2) operational. While conceptual triggers to solve the needs of patients and carers are the main drivers for learning new critical norms and routines, operational processes such as norms, procedures and routines are the main enablers to complete a particular task. Developing these key qualities has strategic importance for any HHU, and offers clear benefits when the right knowledge is applied to homecare problems with speed and efficiency. The key benefits of the use of this framework for HHUs are clear; it enables healthcare professionals to identify and replace poor practices and also avoids the reinvention of the wheel (e.g. by minimising unnecessary work caused by the use of ineffective methods), reduces costs through better productivity and efficiency (improving services to patients) and increases profitability (Stefl, 2002; Brakensiek, 2002).

The second contribution of this research derives from the results of the empirical test in the hypotheses. In this study we have considered three models (one control model and two learning models) to test *CL* and *OL* effects on '*RC*' within HHUs. The two learning models tested the '*CL*-model' with *CL* treated as an intermediate variable between control variables and *RC*, and against the '*OL*-model', including *CL* and *OL* as intermediate variables between control variables and *RC*.

The least supported model (the control model) implies that the number of years spent developing the same position and the practitioner's background do not have any significant effect on the creation of *RC*. These results do not confirm the position adopted by Wilson (1988) when he argues that people who have spent time in the same job are more likely to lose the ability to see the market signals stemming from patient demands, and they may decide to go solely by their own ways of doing and interpreting things. A possible explanation would be the fact that HHU members share their tasks in a collaborative environment. When that happens, older people are more motivated and more willing to make an effort towards patient demands and they do not confuse experience with believing that they always know better than anybody how a patient should be helped.

However, as shown in the *CL*-model and the *OL*-model, relational capital arises as a result of interaction between conceptual and operational processes. These results support the suggestion of (Pavia, 2001), that healthcare organisations need to be effective at collecting and analysing clinical and market information, screening and organising these information into knowledge useful to decision making. Therefore, by combining operational structures with personal input from experienced patients and carers via conceptual processes, the HHU can improve the care for their patients and create *RC*. A possible explanation would be the fact that conceptual and operational processes will facilitate healthcare professionals' understanding of the content of their medical records and the options for future care.

The best supported model (the *OL*-model) provides support for *CL* practices and *OL* processes being full mediators of the relationship between control variables (i.e. the number of years spent developing the same position and the practitioner's background) and *RC*. One conclusion that might be drawn from this result is that *CL* programmes have to be designed around '*OL* practices' to attain any benefit from the knowledge provided by operational processes such as relational trust, common language and confidence. Considering this, we suggest that maintaining an appropriate balance between conceptual and operational processes is critical for *RC*. HHUs require healthcare providers to cooperate and communicate with one another. This includes managers, clinicians and all other staff that provide services to the patient. Through cooperation and communication, the most comprehensive care for the patients will become more achievable. This view is shared by some authors (e.g. Stefl, 2002; Brakensiek, 2002), who assert that the newest medical and scientific knowledge will be created by clinicians sharing their knowledge with others both within and across organisations. Thus, we argue that the hospital should offer tangible rewards to those HHU members who reinforce both the culture and the behaviours needed for effective knowledge transfer. Otherwise, individuals can become insufficiently motivated and are liable to act spontaneously, without the support of their superiors.

The third contribution of this research is aimed at documenting the essential features of conceptual and operational processes, giving pointers to relevant experts in that practice, deducing general guidelines, diffusing basic information, and using subject matter experts to apply and adapt the practices in a Hospital-in-the-Home setting. Our findings support that conceptual and operational processes require to be actively promoted, otherwise, we may end up with technologies and people that are under-used and

not fulfilling their potential. As Gold et al. (2001) noted, technologies cannot predefine and predict who is the right person, what is the right time or what constitutes the right information; only individuals can apply their own experience and contextual understanding to interpret the details and implications of a particular situation, subsequently determining the appropriate action to take. Therefore, Hospital-in-the-Home leaders need to reinforce the environment in which practitioners, patients and carers operate and provide them with the means to survive in the context of the competitive knowledge-based economy. As noted above, both processes (conceptual and operational) play a key role in identifying services that have been particularly innovative or effective in meeting specific patient needs. Therefore, they can also encourage HHU members to share their experience so that others can benefit by using or adapting original ideas to suit their own circumstances.

The study has some limitations. Any healthcare organisation wishing to implement a learning context must understand what the patient values about home based care services. Nevertheless, the response to this issue is complex, since the differential values that patients have can be intangible and heterogeneous in nature. Furthermore, the management of these elements will be different, depending on the type of speciality, its structure and the strategy of the unit. Therefore, other factors which have not been included in this study are also likely to affect conceptual and operational processes. Furthermore, conducting this type of single case study (an interview-based case study approach) should be understood foremost as a prelude to further study, i.e. as an exploratory device or a pilot case where issues are identified rather than hypotheses tested. Taking into account its limitations, a possible research direction could extend the range of indicators and measures by identifying common measures for patients, clinicians, staff, managers and board members. Another possible research direction could examine how patients and clinicians can contribute to conceptual and operational processes. For instance, the patients can provide information about technologies and standardisation issues. Practitioners can disclose the problems that they have experienced by using technologies, as well as their countermeasures. Finally, future quantitative studies including common measures for patients, clinicians, staff, managers and board members may help improve the rigor of the findings.

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