

Issues in the Application of HKM to Thai Private Hospitals: The View from the Top

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Abstract

The purpose of this paper is to understand the perspectives of the application of Health related Knowledge Management (HKM) at hospitals in Bangkok in a qualitatively-oriented research inquiry. The paper examines the scope, reflections, attitudes of management to the development and application of HKM to a select number of Thai private hospitals. The paper develops a model that attempts to conceptualise the findings from a diverse range of qualitative personnel opinion into an engaged framework. Outcomes from this inquiry suggests that managers know clearly that HKM may be a logical factor in the development of business attributes in these hospitals and explores the derived themes of namely five (5) main themes, Organizational Priorities Issues; Change Management Issues; Performance Measurement Issues; Staff Priority Issues; and Communication Issues. This study also provides insights into the application and development of HKM in Thai private hospitals.

INTRODUCTION

KM has been applied to a very broad spectrum of organisational activities designed to manage, exchange and create or enhance knowledge assets within an organization (Haggie and Kingston, 2003; Mack, Ravin and Byrd 2001; O'Leary, 1998) which replicates a complex system of discursive and non-discursive practices (Giddens, 1984). Strategic developments in healthcare knowledge management (HKM) have often centered on institutional efficiency issues and given little attention to healthcare givers personal and organisational knowledge management fundamentally introduces insight into intellectual capital management (Jafari et al., 2009). This is where it is often refined from information and data and, therefore, it is seen as more valuable for management and other decision-makers (Thierauf, 2001).

Researchers have indicated that perhaps as much as 70% have not been successful in implementing established change strategies and goals (Charan and Colvin, 1999). Management leadership style (Parry and Proctor-Thomson, 2003) however, may have significant effects on HKM organizational performance implementation. The major goal of HKM appears to be to manage, record, and disseminate the accumulation of knowledge, and valuable expertise from throughout the hospital over time (Wiig 1994) - often using technology. This means that this must be top management

supported (James, 2005) and stimulated in order to lead the knowledge-creating activities of individuals in the organisation (Nonaka and Takeuchi 1995). Valued organisational knowledge (Davenport and Prusak, 2000) should be considered a valuable strategic asset, and knowledge-sharing between employees appears to be distributed in formal and informal networks of relationships (Remko and Buijsroggee 2006). Incorporating knowledge-sharing within the organizational culture is perhaps the most important factor for successful HKM system implementation (O'Donovan, Heavin and Butler, 2006); addressing the ubiquitous knowledge gaps inherent within a healthcare system (Bali and Dwivedi, 2006).

This paper takes the view that strategic HKM focuses more on the behaviour change of personnel and consequent policies rather than just be technologically focused and driven. In essence, it is seen as effectively driven my management through processes and optimized through technology use to improve the quality, efficiency, competitiveness (Powers, 2004) and efficacy of the hospital healthcare delivery system (Montani and Bellazzi, 2002) through beneficial (personal knowledge) network co-operation (Johanson and Mattsson, 1987). Knowledge flow (Gupta and Govindarajan, 2000) appears to focus on as the transfer of either expertise or external work data of personal or material strategic essence and value. However, the flow of knowledge is difficult to define explicitly (Mu, Peng, and

Love, 2008). Benefits of applying this include streamlining important progress, developing whole-facility innovation, and increasing overall competitiveness (Stefl, 2002). This brings up the first research question: What are the benefits of developing and implementing HKM in a Thai private hospital?

In terms of knowledge flow, Mu, Peng, and Love (2008) further indicated that this comprises the set of processes, events and activities through which data, information and knowledge are transferred from one entity to another – assuming personal or by group or across functional boundaries. Lönnqvist and Laihonen (2012) indicated that knowledge-sharing capabilities reflects the tension between technology, strategy and people's responses to managements visible intentions through stating objectives, goals and operational conditions. Hospital stakeholders sharing knowledge (including patients) are an integrative necessity to hospital management in ensuring appropriate elements of technology are available for use when sharing knowledge explicitly (Laihonen and Koivuaho, 2011) - although this may be mediated by privacy issues. Private healthcare organizations record an inordinate amount of patient-related data that may not be available for knowledge-sharing with appropriate professionals because of inadequate technological equipment or under-developed hospital processes (Porter and Teisberg, 2006). This requires a greater intensity of internal knowledge-sharing between hospital personnel (Orzano et al., 2009). The easier personnel can acquire the knowledge they need and the higher the value of this knowledge, the more effective is the strategic intent of the hospital (Lahai e, 2005), and utilised to further enhance their social, work and productivity interactions (Alavi and Leidner, 1999). Management's ability to encourage personnel to share valuable knowledge appears to be an important strategic issue (Bukowitz and Williams, 1999) leading to the significance of managing appropriate knowledge for efficiency and competitiveness (Halawi, Aronson and McCarthy, 2005). To develop and apply knowledge-sharing in the hospital culture is perhaps a prominent factor for successful HKM system implementation (O'Donovan, Heavin and Butler, 2006). However, HKM also involves an incorporation and consolidation of technical and social elements (Wong and Aspinwall 2004), whilst sharing-knowledge directly appears more appropriate for tacit knowledge engagement (Blodgood and Salisbury 2001). Using evidence-based strategically coherent HKM interventions, leading to a more knowledge-based organisation (Lowe, 2002) it is thus more likely to be

accepted and achieve appropriate hospital business, ethical and social outcomes (Burns, Lonsdale and Rashid, 2004). This brings up the second research question: What are some of the issues and impediments that affect the design and implementation of HKM in a Thai private hospital?

It is suggested quite widely in the literature that Knowledge Management per se, provides the frameworks and techniques to transform a hospital into a learning organization (Adams and Lamont, 2003). This requires the application and measured success of HKM. Chang, Tsai, and Chen (2009), indicate that professional, administrative and engineering knowledge, through the creation, organization, validation, dissemination, and application of its highly specialized medical knowledge would be a major outcome (Bose, 2003) for the introduction of HKM in hospitals. Where HKM has been applied it appears to be shaped by internal social practices of communities (Boland and Tenkasi 1995). Lorsch (1986) argues that promoting acceptance of changes enhances the possibility for addressing the needs and requirements surrounding the development and implementation of HKM, which indicates that knowledge management is a highly supportive environment for business process analyses (Davenport, 2006). The implementation of HKM also requires that a clear understanding of the knowledge management process by appropriate professionals and administrative staff is vital (Hernandez and Caldas, 2001). The highly dynamic hospital economy has put pressure on management to seek structured ways to manage professional and administrative knowledge and knowledge capital and do this in a systematic manner (Ulrich and Smallwood, 2004). Transforming a hospital into a knowledge hospital (learning organization) in terms its management and knowledge capital requirements isn't a simple task (Adams and Lamont, 2003). The task of measurement of the related journey of success indicates that an important element of measurement is lacking in the literature.

This brings up the third research question: In what ways can the results be qualified and can these outcomes ensure more effective HKM practices in the future?

METHODOLOGY

To develop a much broader, and deeper approach surrounding the issues generated within the hospital management context and to consider more implicitly the issues and questions raised, this empirical groundwork utilised an interpretive approach (Walsh, White and Young,

2008). This was an attempt to understand the perceptions of hospital HKM knowledge practices as there appears to be a dearth of empirical inquiries in knowledge management (Jih, Chen and Chen, 2006) that address issues in strategic hospital KM management. Hospital staff were considered specialist knowledge agents and actors (Benn et al., 2008) as their opinions and experiences influenced the effectiveness of hospital practices, and the development and application of sharing knowledge in the engineering support facility. The research used a semi-structured interview conducted with hospital engineering staff, which provided an appropriate element of context and flexibility (Cassell and Symon, 2004) and this was further aided by applying an inductive/theory building approach (Glaser and Strauss, 1967). Given the lack of appropriately focused research in this area, this methodology is seen as suitable for creating contextual data for the purpose of forming richer theory development (Cayla and Eckhardt, 2007). The population for this study was made up of eight (8) Board-level managers located in 12 private Bangkok hospitals, Thailand – chosen through applying the approach of a targeted population of interest (Carman, 1990) and this reflected the criteria of theoretical purpose, relevance and appropriateness (Glaser and Strauss, 1967). Further, using Glaser's (2004) sampling processes, a total of 10 Board-level Managers were thus determined as the resultant sample frame, which could also be considered convenience sampling according to Harrel and Fors (1992).

Each interview was audio recorded for future analysis. Interviews were conducted in English and took approximately one hour. All interviews were recorded digitally after gaining explicit permission, and were later transcribed verbatim using NVivo 11 software. The conduct of the interviews follows a similar process used by Gray and Wilcox (1995), with each individual group being asked the same set of questions – modified through ancillary questioning (probes and follow-ups) in the same way as Balshem (1991). To increase the reliability of the data, the actual transcription was returned to each respondent – via e-mail – for comment, correction, addition or deletion and return, which followed the process of validated referral (Reeves and Harper, 1981). Whole-process validity was achieved as the respondents were considered widely knowledgeable of the context and content associated with the research orientation (Tull and Hawkins, 1990). Each interview was initially manually interrogated and coded initially using the Acrobat software according to sub-themes that 'surfaced' from the interview dialogue – using a form of open-coding derived from Glaser (1992a); and Straus and

Corbin (1990). This treatment was also reinforced and extended through the use of thematic analysis conducted using the NVivo 11 – qualitative software package (Walsh, White and Young, 2008). Each interview was treated and coded independently. In this way, no portion of any interview dialogue was left uncoded and the overall outcome represented the shared respondents views and perspectives through an evolving coding-sequence (Buston, 1999). Various themes were sensed from the use of the software packages, as well as from the initial manual-coding attempts. This dual form of interrogation was an attempt to increase the validity of the choice of both key themes and sub-themes through a triangulation process. NVivo 11 was further used to explore these sub-themes by helping to pull together each of these sub-themes from all the interviews (Harwood and Garry, 2003). In this way, it was possible to capture each respondent's comments across transcripts (Riessman, 1993) on each supported sub-theme and place them together for further consideration and analysis.

THE RESEARCH FRAMEWORK

The outline of the research outcomes for this study is shown in Figure 1 below following on from Buckley and Waring (2013). The framework supported by appropriate literature, illustrated below in Table 1, consists of five (5) main themes, namely Organizational Priorities Issues; Change Management Issues; Performance Measurement Issues; Staff Priority Issues; and Communication Issues. Table 1 further shows the fifteen (15) sub-themes and subsequent issues raised from the literature forming the basis for this framework.

Figure 1
Main Themes



RESULTS

The results are presented below using the research questions as pointers and supportive evidence through indicated

factors.

Top-level Main Theme Outcomes

Organizational Priorities Issues – Board-level indications, Strategic Objectives, Application Focus

Change Management Issues – Timing, Management Approach, Application Process

Performance Measurement Issues – Performance Objectives, ICT, Performance Evaluation

Staff Priority Issues - Human Skills, Expertise and Motivation

Communication Issues – Organisational Commitment, Personal Needs, Performance Requirements

Table 1 further shows the nineteen (15) sub-themes forming the basis for this framework.

Table 1

Framework Literature References

	Research Question	Main Themes	Sub-Themes	No. Refs
Q1	<i>What are the benefits of developing and implementing HKM in a Thai private hospital?</i>	Organizational Priorities Issues	Board-level indications Strategic Objectives Application Focus	18 14 11
Q2	<i>What are some of the issues and impediments that affect the design and implementation of HKM in a Thai private hospital?</i>	Change Management Issues	Timing Management Approach Application Process	9 16 19
		Performance Measurement Issues	Performance Objectives ICT Performance Evaluation	14 11 21
		Staff Priority Issues	Personal Skills Expertise Motivation	13 11 17
Q3	<i>In what ways can the results ensure more effective HKM practices in private hospitals in the future?</i>	Communication Issues	Organisational Commitment Personal Needs Performance Requirements	9 12 14

The outcomes are stated below where the discussion focuses on the sub-theme elements within each key theme. The discussion format used in this paper reflects the respondent's voice through a streamlined and articulated approach for reporting. Consequently, the style adopted for reporting and illustrating the data is greatly influenced by Gonzalez, (2008) and also Daniels et al. (2007) and is discussed below, focusing on the raised research questions and the resultant main themes.

Results

The results are presented below using the research questions

as pointers and supportive evidence through indicated factors. The first research question - What are the benefits of developing and implementing HKM in a Thai private hospital?

Main Theme – Organizational Priorities Issues

In terms of Board-level indications, some respondents indicated that their job was to provide organisational direction. As one respondent indicated (R5) that, ...we develop and project our priorities that must be attained... Another respondent (R3) suggested that ...objectives are used to clearly show what is important to the organisation for the moment. These may change, but for now this is what we should strive for... Another respondent (R2) indicated further that ...management have a duty to provide focus, to help staff and other stakeholders of the organisation to accept management recommendations and to help steer the organisation towards operational goals developed for them to utilise...

In relation to Strategic Objectives, this was supported by one respondent (R6), who stated clearly ...the organisation is measured on our ability to assess cohesive outcomes and that means setting the tone for what we expect the hospital as a whole to accomplish... Another respondent (R9) indicated that ...everything focuses on achieving the organisational objectives... This aspect was also further commented on by one respondent (R4) who stated ...We tend to objectively apply our objectives across the board. This way we can control what our people work towards...

In relation to the Application Focus one respondent (R7) suggested that ...strategic issues of Knowledge management could be very useful to this organisation – as long as it is managed effectively... Another respondent (R3) suggested that ...oh I see, this is interesting, we've implemented programmes before, but we did not really evaluate them effectively and we did not know exactly how to proceed... This aspect was supported by another respondent (R2) ...this is what management is for – evaluating whether our style is appropriate and to see what positive effects such applications have on our culture. But to do it successfully requires a lot of effort... On this point another respondent (R10) indicated that ...our responsibility as management is to lead these implementations and to find the resources for it. But it is difficult, as we do not really know what to expect...

The second research question: What are some of the issues and impediments that affect the design and implementation

of HKM in a Thai private hospital?

Main Theme - Change Management Issues

In terms of Timing, one respondent (R1) indicated that ...unfortunately, we sometimes have to implement more than one project, and I see that my staff groan at the prospect of another hand-down from top management... Another respondent (R7) suggested that ...too many new projects at one time has a negative effect as the focus is lost and nobody wins...

In terms of the Management Approach, one respondent (R4) who intimated that ...we need to ensure that whatever HKM change programmes are implemented that we give our staff the best opportunity for success. Placing another project into the mix is something to be avoided... Another respondent (R8) suggested that ...we have to be very positive of the using HKM and this means understanding the implications – not only of the programme – but also of the affect it will have on everyday operations...

In terms of the Application Process, one respondent (R2) determined that ...change not only creates possibilities but also changes how we operate and this means being aware of the HKM change process for the hospital. We mustn't keep the process going any longer than required. This requires meticulous management energy... Another respondent (R9) supporting this determined that ...focusing on the outcomes and what KM can do for the hospital over-rides everything. But we must not forget that there is a process that we must adopt whatever the actual outcomes are... Further, in terms of a viable management approach to the implementation of HKM issues, one respondent suggested that ...a motivated workforce is required who is empowered to deliver change through appropriate and viable mechanisms...

Main Theme - Performance Measurement Issues

In terms of Performance Objectives it would appear that respondents were highly aware of setting appropriate performance objectives to measure against. As one respondent (R3) indicated ...there is a clear vision and presentation of personal/organisational objectives, and these two aspects need to match the individuals' needs... Another respondent (R7) suggested that ...a timely assessment of organisational performance outcomes to stated objectives is difficult but necessary in order to ensure that the organisation is moving in the right direction... On this topic, another respondent (R9) suggested that ...if we don't measure we won't know what's happened, so we have to do

it and that creates major problems for our staff because they aren't ready yet for this type of scrutiny...

In terms of ICT, one respondent (R6) suggested that ...our systems are too slow for this type of work. We have to invest very heavily, but we cannot really afford it. Sad really... Another respondent (R3) suggested that ...IT is very important as it connects everyone. But it is not really a focus for management here as some of them think we will lose control a bit... This aspect is somewhat supported by another respondent (R5) who suggested that ...building KM practices cost us a lot of money and time and now we see that computers will also need to be updated. It never stops, but costs a lot...

In terms of Performance Evaluation one respondent (R6) indicated that ...our first priority is to assess management, the systems and then what people do. It's that simple... However, another respondent (R8) suggested that ...crucially, management have to manage the little things like people performance – that's the big grey area... Significantly, most respondents viewed performance evaluation relating directly to people evaluation and one respondent (R4) determined that ...with all the clever devices we have, we still have no way to measure effectively how people perform – especially doctors. It will be very difficult to achieve performance outcomes that matches exactly what the hospital management requires...

To summarise, one respondent (R10) indicated that ...performance evaluations only tell a small story, it isn't something that can be relied on effectively unless we buy-in to the performance evaluation philosophy – and that won't happen anytime soon...

Main Theme - Staff Priority Issues

In terms of Personal Skills, one respondent (R2) suggested that ...it would be prudent to surmise that some staff members will have the skills to participate fully in knowledge management processes, but most will not. We therefore have to provide training for this at an additional cost and timeframe... Another respondent (R7) suggested that ...skills at developing and implementing knowledge management is not something we've done before, so we will be very weak initially. We will need some help...

In terms of Expertise, one respondent (R1) suggested that ...we recognize that some of our staff can help lead the change process because of their training, organisational knowledge and qualifications. This will be useful... Another

respondent (R5) suggested that ...experience alone won't be enough. We need people who can help others explore and motivate them to participate in knowledge management. It's the only way forward for us... Further, another respondent (R2) indicated that ...sadly, we are in the business of helping people, but we can't help ourselves because we lack the expertise to progress...

In terms of Motivation, one respondent (R6) suggested that ...we have people who are very motivated and energetic, but sometimes that isn't enough as we also need people who know what we need and can help people support that... Another respondent (R9) suggested that ...personal goal setting and the ability to achieve them are considered by management as vital to help developing knowledge management practices at this hospital... Another respondent (R3) indicated that ...management must remain motivated throughout the change process, not just at the beginning. This way, many hurdles will be overcome consistently and that management can learn throughout the process and help staff throughout...

The third research question: In what ways can the results be qualified and can these outcomes ensure more effective HKM practices in the future?

Main Theme - Communication Issues

In terms of Organisational Commitment, one respondent (R5) suggested that ...management support are absolutely critical to the venture – without it nothing will happen. There will be no resources, focus, organisational change. Nothing... Another respondent (R7) suggested that ...we need to reward our staff for jobs done well and this also means rewarding them for changing... One other respondent (R1) suggested that that ...clearly, management have a pivotal role to play, but we must communicate this to everyone. Knowledge is the game, and communication is the core of this...

In terms of Personal Needs, one respondent (R8) suggested that ...management closeness and level of trust are very important to staff. We need to be as close as they want and to trust that we are doing the right thing... Another respondent (R4) indicated that ...sometimes management must just ask instead of tell. This way staff can see we are interested in them as individuals... This is supported by another respondent (R1) who indicated that ...staff like us to talk to them about social things. They need to feel that we are there for them...

In terms of Performance Requirements, one respondent (R5) indicated that ...we must communicate what is important to us and measure that consistently. That's the key to managing change... Another respondent (R9) suggested that ...the hospital management tries to make sure staff understand where we are coming from and make what is important to us, as important to them. Otherwise we are wasting our time and effort... This is fully supported by another respondent (R6) who stated that ...performance measurement is a managerial requirement. We do it against the hospital performance objectives. It is that simple...

DISCUSSION

The outcome illustrates the conceptual development and relationships perceived to correspond to the features informing hospital policy which allows hospital management to focus on how these influence their strategic perceptions and intentions regarding sharing knowledge activities (as seen in Figure 1). The discussion follows the main themes developed above and these will be discussed below:

Organizational Priorities Issues

Management appeared to understand that Board-level indications conceivably and clearly link HKM to business performance by helping to convince board management about the need to manoeuvre HKM strategy in line with health business strategies (based Carrillo, et al., 2003). Further this would also be of use as a topical enabler to streamline HKM strategies with hospital business objectives (Carrillo et al., 2000) and should be developed with a clear structure so that it provides appropriate direction on how to conduct and implement HKM (Wong & Aspinwall, 2004).

Strategic KM objectives were also enumerated as important artefacts of the management process through appropriate evaluation mechanisms that ensured staff were kept aware of strategic developments and outcomes (Holsapple and Joshi, 2000). Knowledge has thus been recognised as a useful core-competency in the hospital, which as a result impacts on hospital structure, processes, and service/product delivery (Ellis, 2005; Salisbury, 2003). This requires a multi-disciplinary approach to achieving KM strategic objectives through the best use of situational knowledge (Gorelick, 2005). Further, it would seem that another important aspect was the public application of the KM strategy. This was also important for management as they appeared not to know what to expect and also some had prospective enabling issues with the evaluation of the KM programme

implementation, capacity and capability that recognises the complexity of knowledge within an organisational setting (Salisbury, 2003). However, nothing was discussed about basic aspects of knowledge management such as knowledge objects, which seemingly illustrates the possible lack of knowledge management engagement of board-level managers in private hospitals. This is in contrast to the many different approaches to KM as they are not mutually exclusive and no one approach is instinctively preferable to another (Newell et al., 2002).

Change Management Issues

The timing of new change programmes may have been raised as an issue that reflected the previous hospital management's attitude to their implementation (Gillingham and Roberts, 2006). It would also seem to show that previous experience affects the outcomes of present programmes (Akhavan et al., 2006). This does seem to be an imperative that is not grasped sufficiently by board-level managers in these hospitals. The management approach therefore appears to be critical to the positive outcomes required and also to the reflection of assessment processes during the programme evaluation.

Performance Measurement Issues

Of particular concern for the respondents seemed the assessment and evaluation of the performance measures appropriate to the application KM to hospitals (Apostolou and Mentzas, 1998) through a derived performance-led culture (De Long and Fahey, 2000). Performance objectives were raised as an issue in themselves, that requires a little more management thought, application and constant review (Rumizen, 2002) to ensure an effective management focus (Carrillo et al, 2000) which suggests that KM could be integrated into key performance indicators (KPIs), and other performance measurement approaches. Along with this, ICT has thus become synonymous and even central to the application of KM to business organisations in sustaining an organisational memory (Drucker, 1999).

Of greatest concern though appeared to be the raised issue of performance evaluation during and after the application of KM intervention. However, HKM performance evaluation was considered ineffective (Dlamini, 2006) and remains something that needs improvement and more research to assess its validity in operation as well as the scope (James, 2002) for using a range of methodologies in order to triangulate and verify practice outcomes.

Staff Priority Issues

More effective training was considered as a requirement for staff implementing KM (Goddard et al., 2004) but little was indicated about the training required for all staff relating to KM and in general the building of adaptive capacity (Jones et al., 2012). This issue bore on the level of expertise of staff – including management – and the present situation did little to effect a more robust response to helping staff cope with change requirements (Rumizen, 2002) introduced through the application of the Perceived Benefit model underpinning KM strategies (Thompson, Higgins and Howell, 1991). This is perhaps how to motivate staff (Stenmark and Landqvist, 2007) through communities of practice (CoPs) (Lesser and Storck, 2001) to accepting, learning and dealing with the change process and could offer hospital management a more effective engagement in KM activities through effective partnerships (Syed-Ikhsan and Rowland, 2004). On this aspect, Guptill (2005) suggests the use of relevant satisfaction measures that continually track improvements in staff attitudes to KM implementation.

Communication Issues

Organisational commitment (Uden and Naaranoja, 2007) appeared to be an issue that would need to be developed in order to provide an appropriate internal environment for success through communication, interaction, and a willingness to trust (Bhatt 2001).

This would then allow staff personal needs to be assessed positively, introduce knowledge “conscious management” (Oxbrow and Abell, 2002) and reduce negative influences through close-knit dialogue (Hsiu, 2004). Performance requirements therefore were needed to be audited (Handzic, Lagumdzija, and Celjo, 2008) - assessed, measured, made understood, and clearly stated and rigorously applied.

CONCLUSION

This research focused on the development and application of strategic health knowledge management in a number of Thai private hospitals. It is clear from the evidence that HKM may be a logical factor in the development of business attributes in these hospitals. However, HKM is shown here as reverberating the operational approach to organisational learning (Becerra-Fernandez, Gonzalez and Sabherwal, 2004) and gives the ability to combine knowledge assets with other resources needed to create enhanced organisational value (Teece, 2000).

Further conclusions that can be made is that some hospitals and their management whilst wanting to engage in HKM may not conclusively be in a position to take it forward as yet.

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