How do public hospitals respond to environmental change? Evidence from Thailand

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Abstract: Population ecology or resource dependence theories predict that successful organisations will respond to changes in their environment with changed strategies that fit the environmental changes. In contrast, managerial choice theory predicts that organisational responses to environmental changes are a function of how managers in organisations perceive the environmental change and what managers perceive to be constraints on decision making. Our study of a large public hospital, based on interviews and questionnaire responses covering a 10 year period, in Thailand finds support for managerial choice theory. The nature of the environmental change, publicness of the organisation and the influence of professional values inhibit managerial choices in professional public organisations. As a result, even though this public hospital was faced with environmental changes resulting from radical healthcare reforms, managers in the hospital did not alter its strategies. Instead they followed a gradual and incremental approach to change by responding to specific demands of regulators.

Keywords: public hospitals; strategic management; environment change; Thailand.


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Sundar Venkatesh is a teacher, trainer, consultant and writer with over 25 years of experience. He has conducted workshops, training programs and courses for managers in companies across many countries and industries. His areas of work cover financial analysis, corporate finance, planning and control systems, corporate governance and leadership development. He has authored five books and over 25 articles in leading journals.
1 Introduction

The link between a firm’s environment and its strategy has been the subject of much research in management literature (Hrebiniak and Joyce, 1985; Miller and Friesen, 1986; Venkatraman and Prescott, 1990; Sutcliffe, 1994; Audia et al., 2000; Zajac et al., 2000; Luo and Park, 2001). Organisations that have the power to adopt strategies that respond to environmental changes are expected to have superior performance compared to organisations that do not have this option. Successful strategic responses to environmental change in healthcare organisations have been the subject of many empirical studies (Zajac and Shortell, 1989; Ketchen et al., 1993; Lamont et al., 1993; Palmer et al., 1995; Marlin et al., 2004; Wilden et al., 2013).

The findings from these studies suggest considerable variation in how organisations actually respond to environmental change. Not all organisations pursue what researchers normatively view as a ‘fit’ strategy. Variations in organisational responses are found even in studies confined to a single sector such as healthcare. Often characteristics such as ownership seem to influence the nature of an organisation’s responses to environmental change.

This paper addresses the question: How do public hospitals respond to environmental change? We conducted an in-depth case study of a large regional hospital in Thailand using a mix of data from questionnaires, interviews and published reports. We used a retrospective longitudinal approach (Kober et al., 2007) to understand and explain changes in the hospital’s strategy between the pre and post change periods. The environmental change in this research refers to the introduction of a policy of universal healthcare in Thailand.

The next section reviews the relevant literature and develops our research framework. This is followed by a description of the context of our study and our methodology. The results and analysis are presented in the following section. In our final section, conclusions are drawn and directions for future research are identified.

2 Literature review and theoretical framework

2.1 Managerial choice in responding to environmental change

We use as a starting point of our framework Child’s (1972) argument that “… the analysis of an organisation and its environment must recognise the exercise of choice by organisational decision makers”. Such a position is in contrast to the deterministic view taken by both population ecology theory (Aldrich, 1979) and resource dependence theory (Pfeffer and Salancik, 1978), which suggest that managerial choice, including the freedom to choose specific strategies, makes little difference to an organisation’s performance which is pre-determined by the environment in which it operates.

Managerial choice theory, as proposed by Childs, states that managerial decisions, including operational and market options, determine the limits of an organisation’s environment. The theory also predicts that the nature of environmental change is perceived by managers in their respective organisations. Consequently, the impact of an environment (or changes therein) on an organisation’s internal elements – such as structure, strategy or systems – are mediated by a manager’s evaluations of the perceived environment, and the actions taken in response. In addition, managerial choice theory
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would predict that an organisation’s response to environmental change is limited by the degree of decision making freedom its managers perceive to have.

In the specific context of public hospitals, there are at least three sources of influence that can limit managerial choice in response to environmental change. The first is the public nature of the organisation, or its publicness. The second is the powerful influence that professionals (such as doctors) and their values have on hospital decision making. The third is the nature of the environmental changes. Each of these influences on its own or in combination with others can limit decision making by managers in public hospitals, and can potentially result in either no strategic change at all, or in very little strategic change in response to a changed environment.

2.2 Publicness of an organisation and managerial choice

Private organisations are owned by entrepreneurs or shareholders, and are controlled by market forces. Public organisations on the other hand are mainly funded by taxes, so they are controlled by political forces and various stakeholders that make critical demands on these organisations (Dahl and Lindblom, 1953; Niskanen, 1971; Clarkson, 1972; Walmsley and Zald, 1973; Rainey et al., 1976; Coursey and Bozeman, 1990; Metcalfe, 1993). Partly as a consequence of their broad-based ownership, public organisations are characterised by greater goal ambiguity (Baldwin, 1987; Coursey and Rainey, 1990; Coursey and Bozeman, 1990; Rainey et al., 1995; Bozeman and Scott, 1996; Bozeman and DeHart-Davis, 1999; Marsden et al., 1994; Boyne et al., 1999; Rainey and Bozeman, 2000; Boyne, 2002). One consequence of goal ambiguity is that the performance of public organisations is hard to define. By implication, it is conceivable that managers in public organisations do not seek to adopt any specific strategic stance beyond doing the best they can to satisfy the demands of various stakeholders.

Boyne and Walker (2004) observe that managers of public organisations tend to have less choice than their private counterparts, and be subject to more constraints in adopting strategies. Public organisations are much more likely to have strategy content imposed on them because they are more likely than private firms to be subject to pressures of coercive isomorphism (DiMaggio and Powell, 1983) that influence their strategic orientation. According to Boyne and Walker, the strategic stances (how an organisation positions itself and interacts with its environment) of public organisations are unlikely to change much in the short term. In later reviews of strategy in public organisations, the effectiveness of a prescriptive approach to strategy (based on a need for alignment between strategy and environment) in such organisations has been questioned (Boyne and Walker, 2010; Walker, 2013).

Faced with environmental change of even the most severe kind, such as healthcare reform, managers in public organisations are unlikely to respond to with significant changes in their organisations’ strategy. Managers in such organisations will see themselves as having limited choices in making changes and will be content to ‘doing their best’, i.e., responding to specific demands from the outside such as from reform implementing agencies.

Research Question 1: What is the influence of public nature of an organisation on managerial choices in public hospitals in making changes to a hospital’s strategy in response to changes in environment such as sector reforms?
2.3 Professional norms and values and managerial choice

Medical professionals compete for power with hospital CEOs and administrators (Alexander et al., 1993; Abernethy and Stoelwinder, 1995; Southon and Braithwaite, 1998). McNulty and Ferlie (2004) report on their findings from a study of a UK public hospital in which the top management’s attempts to force a transformational change through the implementation of business process reengineering was limited in impact because there was no value commitment to the idea among clinicians and managers at the operating levels. In a professional organisation, such as hospitals, the professional values and norms of doctors and other medical professionals will inhibit choices available to its managers, such as in choice of strategies in responding to environmental changes. Specifically, when the changes seek to inject principles of managerialism and efficiency in how the hospitals are run, value commitment of professionals can be hard to secure since such changes are likely to be seen as being counter to the basic professional value of saving lives.

Professionals in public organisations, such as public hospitals, enjoy a higher level of job security compared to professionals in private hospitals. They also see themselves as serving a bigger cause of serving the population at large while sacrificing the lure of higher salaries and benefits attached to jobs in private organisations (see for e.g., Buelens and Van den Broeck, 2007). The resistance of professionals to organisational changes, which they perceive as being counter to their professional values, will be very strong in public organisations. Such resistance will act to limit managerial choice such as in crafting and implementing new strategies in response to environment change. However, such managers will find it easier to implement changes to MCS imposed on the organisation from outside since professionals as a group would find it difficult to resist such changes proposed by agencies such as those implementing healthcare reforms.

Research Question 2: What is the influence of values and norms of professionals (such as doctors) on managerial choices in public hospitals in making changes to a hospital’s strategy in response to changes in environment such as sector reforms?

2.4 Nature of environmental change and managerial choice

Environmental changes can be classified into those that are legislated and others which are market driven. Market driven changes such as changes in consumer tastes and preferences, or in technology or market structure, offer an organisation and its managers a challenge to which they must respond with appropriate changes in strategy, structure and systems. Evaluations, if any, are conducted long after the event, using standard metrics such as market share, profitability or firm value.

Legislated changes are intentional, planned and wide ranging in scope. They also take more time to be implemented, allowing for frequent political interventions, and they are a source of great uncertainty (Hinings et al., 2003). Given the goal ambiguity of legislated changes as well as their long term nature and the multiplicity of objectives, public organisations are more likely to be directed from the outside to achieve measurable outcomes, than to be given a broad agenda, such being asked to “adopt a differentiated strategy”.

In the face of legislated changes, managers of public organisations, such as public hospitals, are likely to adopt a ‘wait and react’ approach to initiating incremental
organisational changes, rather than a ‘big bang’ approach. Consistent with Hinings’ observation that legislated changes are likely to be directions to achieve measurable outcomes, we posit that healthcare reforms (which we show later to be a legislated change) will restrict managerial choice from any changes in strategy while allowing for changes in MCS.

Research Question 3: What is the influence of legislated environment change (such as healthcare reforms) influence on managerial choices in public hospitals in making changes to a hospital’s strategy in response to changes in environment such as sector reforms?

Figure 1  Constraints on managerial choice in professional public organisations

Figure 1 depicts our framework for the study. The top part of the figure shows the important sources of constraint in managerial decision making in public hospitals in the specific context of environmental change, such as healthcare reform. If the environmental change is legislative, as opposed to market driven, hospital managers are likely to perceive greater constraints on their strategic decision making. Legislated changes unfold over time and managers may prefer to first wait and watch before responding rather than committing their hospitals to any specific strategic course of action. Publicness acts as another constraint when managers must take into account the multiplicity of stakeholders and a hospital’s performance measures. Consequently, managers of such hospitals may be reluctant or even unable to adopt specific strategic stances that could potentially be seen by stakeholders as serving the interests of some, while ignoring others. Another managerial constraint on strategic decision making in public hospitals is the power of professional groups, such as doctors and nurses. Such groups are usually opposed to the
idea of managerialism. Managers in public hospitals are therefore unlikely to take on the burden of selling their ideas for new strategies by getting support from these professional groups. It is more likely that these managers would let outside regulators and government agencies drive the necessary changes in public hospitals.

3 Methodology

3.1 Overall approach

Kuipers et al. (2014) reviewed change management research in the public sector and recommended more in-depth empirical studies to address its complexity. In line with this, we adopted an in-depth case study approach to a large public hospital in Thailand by conducting surveys and interviews.

Public hospitals account for 75% of all of Thailand’s 1310 hospitals and 79% of the total number of hospital beds. Almost 75% of them are run by the Ministry of Public Health (MOPH) as district hospitals. In each of the 71 provincial capitals, an MOPH run general hospital provides tertiary care services and supports referrals from district hospitals. General hospitals cover all basic specialties, such as internal medicine, obstetrics, pediatrics and surgery. There are also 25 MOPH regional hospitals that are a level above general hospitals, and there are 48 other specialised hospitals that support referrals from all hospitals in their network.

3.2 Healthcare reforms as changes in environment

Wibulpolprasert et al. (2008) identified four significant Thai healthcare reforms. One was the introduction of a Universal Healthcare Coverage System (UC), which guaranteed accessibility to essential healthcare as a fundamental right for all Thai citizens. The UC is funded by government taxation revenue and is delivered through a Primary Care Unit (PCU), which acts as a front-line service unit. Another reform was restructuring of the health security system through the establishment of the National Health Service Organization (NHSO) as the health service purchaser. MOPH’s role was limited to a health service provider. Public hospitals were under the operational control of MOPH but had to depend on NHSO for their budgets. A third reform was the establishment of a Medical Injury Compensation System to cover special types of medical risks such as accidents. Victims could access the nearest public hospital instead of having to find a PCU. The fourth significant reform aimed to improve operational efficiency by standardising reimbursement rates for UC and its sister systems – the Social Security System (SSS) and the Civil Service Benefits scheme (CSMBS). A per capita rate was fixed for out-patients and for in-patient treatment the fixed rates were based on the Diagnosis Related Groupings (DRG). This reform was intended to force public hospitals to contain the costs of both in-patient and out-patient treatment.

The UC covered over 60% of the population that was hitherto uncovered by any form of health insurance. For a nominal annual fee, people covered by UC could expect to be treated at the hospital at which they had registered, or be referred to another hospital if a specialisation were required. This meant that public hospitals suddenly had to deal with many more patients than ever before. Since the NHSO was set up as a healthcare buyer
with fixed standard rates for in-patient and out-patient treatment, public hospitals were expected to meet stringent quality standards and control their costs.

We investigated how our case hospital responded to these environmental changes.

### 3.3 Identifying pre and post reform periods

Government policies on healthcare reforms, comprising the four key elements discussed above, were published in the year 2000. Universal Coverage (UC), also known as the ‘30 baht scheme’, was introduced in 2001. DRG-based payment systems were introduced in 2004. With the introduction of both UC and DRG, public hospitals in Thailand entered a new era of budgeting and resource allocation. We consider the period from 2004 onwards as the post reform period for this study and period before 2004 as the pre reform period. Even though 2004 was chosen as the year to delineate the pre from the post reform periods, legislated environmental changes such as the introduction of UC and DRG in Thai healthcare, cannot be thought of as discrete events at a point in time. Rather, the unfolding of events that followed the passing of relevant legislation or regulations was what formed an integral part of the environment change that should be considered in assessing the responses of individual organisations. Our methodology was designed to study the responses of our case hospital to the introduction of UC and DRG and related reforms.

### 3.4 Case site

Nakhonpathom Hospital (NKPH) is a regional hospital that opened in 1957. In 2015 the hospital had 1,716 staff members and affiliates. Of these, 800 were medical practitioners, which included 91 physicians. The hospital served more than 50,000 in-patients, 670,000 out-patients, and 70,000 emergency patients and accident victims. About 50,000 additional patients were referred each year from other clinics or hospitals, mostly in its network.

The choice of NKPH as the site for this study was motivated by two factors. One was the size and importance of NKPH as a regional hospital. There were only 25 regional hospitals in Thailand at the time, each set up to serve the population of a cluster of contiguous provinces. Regional hospitals had more beds, employed more doctors and medical staff, served more patients and provided higher levels of specialised care compared to provincial hospitals, which were the next level up in the healthcare system hierarchy. A second factor was that access to NKPH was facilitated by the first author being a Deputy Director of the hospital at that time of data collection.

### 3.5 Questionnaire design

As Boyne and Walker (2004), assert, public organisations, especially public healthcare organisations are not all trying to beating competition through a choice of strategy as implied by categorisations such as of Miles and Snow (1978) or Porter (1980). Such organisations can be expected to pursue a mix of strategies and that mix could change as such organisations “confront new constraints and opportunities”. This position on strategy in public organisations has methodological implications on how strategy and changes in strategy can be mapped empirically.
It is also worth noting here the Boyne and Walker (2004) refer to the Miles and Snow classification as strategic ‘stances’ and the Porter classification as strategic ‘actions’. Mapping strategies of public healthcare organisations would require consideration of both position and actions.

We use Kober et al. (2007) and Lamont et al. (1993) studies of strategy change in public hospitals as a starting point for design of our questionnaire but do not limit ourselves to their categories of strategies. Questionnaires used by the former record manager’s perceptions about changes in strategy and those used by the latter measure changes in strategy based on public data.

We used a nine-item questionnaire. Interviews with senior administrators at the hospital preceded our administration of the questionnaire among other key staff. The first four items of our questionnaire map to the strategic ‘stances’ that are commonly found in literature. The last five items were more on strategic ‘actions’ referred to by Boyne and Walker and as identified by our interviews with senior administrators.

Responses to each item could be either ‘had’ or ‘had not’ for each of the pre and post periods. The nine items used in our questionnaire were generated using a combination of prior studies and our assessments, partly based on interviews and partly based on the insights of the first author from her work as a senior administrator at the hospital.

Appendix 1 presents the questionnaire. Items 1 to 5 were obtained from the literature and items 6 to 9 were generated based on our assessments. Questionnaires were translated to Thai and sent for review to experts in the health sector to assess the content validity. While the items remained unchanged, changes were made to the wording in response to expert inputs.

3.6 Interviews

Interviews are a key source of data collection for research based on case studies. As Creswell (2007) notes, one-to-one interviews are considered to be the most suitable for case studies because they provide richly varied viewpoints on a phenomenon. We interviewed 13 senior administrators and medical staff at the hospital. We also interviewed the hospital board as a group. The purpose of the interviews was to understand how managers in the hospital experienced constraints in crafting strategic responses to environmental change.

3.7 Data collection

We used both the questionnaire and interviews to collect data from management personnel on the change in strategy in response to the introduction of UC and DRG. We also consulted published reports about reforms in the Thai healthcare sector to supplement data collected from within the case hospital. The questionnaire was designed to elicit information about changes in hospital strategy as perceived by a wide cross-section of senior administrators and clinical staff. Interviews were also conducted with 13 senior administrators and clinical staff in the hospital and the hospital board.
3.8 Sample

A longitudinal approach would have been the ideal for our study. However, pragmatic considerations of costs and time led us to adopt Kober et al.’s (2007) retrospective longitudinal approach instead, which depended on participants’ recall and memory of events in the pre and post reform periods. Our approach also limited our choice of participants in the study to long serving employees who had experienced working in the hospital during both the pre and post periods.

Venkatraman and Grant (1986) note correctly that organisational strategy is an organisational, not an individual, construct. To get a valid representation of strategy in professional public healthcare organisations, it would be necessary to obtain data from several managers (including the hospital director and the board) as well as from doctors and clinical staff. In addition to interviews, we also obtained data on hospital strategy through questionnaires from 101 respondents who had worked at the hospital for more than 20 years. Table 1 presents a profile of the respondents to our questionnaire.

We did not expect unanimity in the responses given our large sample of respondents from different levels and functions within the hospital. We used the percentage of ‘had’ responses to rank the nine items. The highest rank was 1. By comparing the ranking of the items in the pre and post periods we assessed whether or not the hospital experienced any change in its strategy. We did not attempt to categorise the hospital’s strategic stances. Our focus was merely to determine whether there was any change in the hospital’s strategy in response to changes in its environment. Table 2 summarises respondent perceptions of pre and post reform strategies Table 3 compared the highest and lowest ranked strategies between pre and post reform periods.

Table 1 Profile of the respondents

<table>
<thead>
<tr>
<th>Status</th>
<th>Group</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>16</td>
<td>15.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>85</td>
<td>84.2</td>
</tr>
<tr>
<td>Age groups</td>
<td>25–30</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>31–40</td>
<td>16</td>
<td>15.8</td>
</tr>
<tr>
<td></td>
<td>41–50</td>
<td>58</td>
<td>57.4</td>
</tr>
<tr>
<td></td>
<td>51–60</td>
<td>26</td>
<td>25.7</td>
</tr>
<tr>
<td>Work experience</td>
<td>5–10</td>
<td>4</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>11–20</td>
<td>26</td>
<td>25.7</td>
</tr>
<tr>
<td></td>
<td>21–30</td>
<td>61</td>
<td>60.4</td>
</tr>
<tr>
<td></td>
<td>31–40</td>
<td>10</td>
<td>9.9</td>
</tr>
<tr>
<td>Educational level</td>
<td>Undergraduate</td>
<td>5</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>62</td>
<td>61.4</td>
</tr>
<tr>
<td></td>
<td>Master degree</td>
<td>31</td>
<td>30.7</td>
</tr>
<tr>
<td></td>
<td>Doctorate</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>101</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 2  Respondent perceptions of pre and post UC and DRG hospital strategies

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Pre-UC and DRG</th>
<th>Post-UC and DRG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Had not</td>
<td>Had</td>
</tr>
<tr>
<td>Had not Had answer Rank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Cost control or reduce expenses</td>
<td>38</td>
<td>56</td>
</tr>
<tr>
<td>7.6% 55.4% 6.9% 15.8% 79.2% 5.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The lowest price in the industry</td>
<td>76</td>
<td>14</td>
</tr>
<tr>
<td>75.2% 13.9% 10.9% 68.3% 19.8% 11.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The ‘best cost’ in order to maintain a competitive market position</td>
<td>68</td>
<td>22</td>
</tr>
<tr>
<td>67.3% 21.8% 10.9% 45.5% 44.6% 9.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Create unique and desirable product and service offerings that match the market and customer needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70.3% 22.8% 6.9% 28.7% 63.4% 7.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Proper customer satisfaction responsiveness</td>
<td>31</td>
<td>67</td>
</tr>
<tr>
<td>30.7% 66.3% 3.0% 11.9% 86.1% 2.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Adapting to the private hospital method/system</td>
<td>76</td>
<td>18</td>
</tr>
<tr>
<td>75.2% 17.8% 6.9% 48.5% 41.6% 9.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Shrinking the size of organisations, such as: the hospital bed number</td>
<td>88</td>
<td>4</td>
</tr>
<tr>
<td>87.1% 4.0% 8.9% 79.2% 13.9% 6.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Slimming down of the range of services, such as: get rid of ineffective/inefficient service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>63.4% 23.8% 12.9% 39.6% 51.5% 8.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Act as the ‘Hospital Networks and Partnership’ to reduce the degree of mobility barriers and rivalry in the area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>60.4% 29.7% 9.9% 29.7% 64.4% 5.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spearman’s ranking correlation 0.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source:  Adopted from Kober et al. (2007) and Lamont et al. (1993)

Table 3  Comparison of top three and bottom three pre and post UC and DRG hospital strategies

<table>
<thead>
<tr>
<th>Top 3 pre UC strategies</th>
<th>Top 3 post UC strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Cost control</td>
<td>5. Cost control</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bottom 3 pre UC strategies</th>
<th>Bottom 3 post UC strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Reduced organisational size</td>
<td>9. Reduced organisational size</td>
</tr>
<tr>
<td>8. Adapted private hospital methods/systems</td>
<td>8. The lowest price in the industry</td>
</tr>
<tr>
<td>7. The lowest price in the industry</td>
<td>7. Adapted private hospital methods/systems</td>
</tr>
</tbody>
</table>

Rank correlation between pre and post UC strategy 0.84

Source:  Adopted from Kober et al. (2007) and Lamont et al. (1993)
4 Results and analysis

The results revealed that NKPH did not make any significant changes in strategy in the decade since the introduction of UC and DRG. The Spearman rank correlation coefficient for the pre- and post period ranks of the different strategies was high and significant at 0.84.

‘Customer satisfaction’ and ‘Cost controls’ remained a high priority in both the pre and post periods. “Reduced organisational size” or “Adopted private sector hospital methods/systems” or “Offered the lowest price in the industry” remained a low priority in both periods. “Managed the service/product portfolio by adding or dropping new products or services” remained an intermediate level priority. Even though there was no change in overall strategy at NKPH, the emphasis on the top two items (‘Cost controls’ and ‘Customer satisfaction’) had become stronger in the post period.

We provide an analysis of these results below.

4.1 Publicness and managerial choice of strategy

Just before the launch of the UC scheme, the Thai government passed legislation (The Plans and Process for Decentralization to Local Administrative Organizations Act(1) of 1999) that aimed to decentralise functions, resources and staff to Local Administrative Organisations (LAO). Hospitals such as NKPH could become part of an LAO and secure greater autonomy if two conditions were satisfied. One was that the LAO should meet certain criteria that showed its readiness to manage hospitals and other health centres. The second was that at least 50% of the hospital staff (including the hospital director) should support becoming part of an LAO and be willing to be employed by the LAO. Hawkins et al. (2009) found that the second criterion was most often the barrier in going ahead with the devolution of hospitals and other health centres. The public hospital staff who were employees of the MOPH did not welcome the prospect of working for a local government because of the uncertainties they perceived would result from changed employment conditions.

A second strategic option was for public hospitals to convert to an autonomous public organisation (APO). The conditions for conversion were similar to the LAO conditions. A decade after the passing of legislation to support autonomy, there was only one example of an MOPH hospital that had converted into an APO. The APO status confers a hospital’s board with the rights to make important strategic and operational decisions and provides discretion to plan for and retain profits for future use. Hawkins et al. reported that the Commission on the Public Sector had halted the creation of any more APOs (not just in healthcare) because of the financial difficulties faced by some of the existing APOs. Since there were no clear policies in Thailand on how to handle APOs that got into a financial crisis or became bankrupt, there were legitimate concerns regarding how well APO boards and management could be trusted to manage their organisations profitably and in the best interests of the community.

As one of the interviewees at NKPH, a former Deputy Director of the hospital, observed:
“One strategy that a hospital like NKPH could follow in the post UC era was to change from being a public hospital under the government to be a Corporate, thus avoiding constricting rules and regulations. A SWOT analysis revealed that we at NKPH lacked the knowledge and knowhow to adopt modern business practices.”

We could identify at least two ways in which publicness of NKPH limited the choices available to its managers to craft their organisation’s strategies. One was the preference of the hospital staff for status quo, a position that can be attributed to a hospital’s publicness and the consequent employment security and continuity it offers employees. The other was a weak commitment of the government to the reform agenda which promised more autonomy to hospitals. Even the hospitals themselves were not keen to embrace the limited autonomy granted them.

As one of the administrators interviewed at NKPH observed: “Our hospital’s strategy is to comply with the government’s strategy”.

4.2 Legislated nature of reforms and managerial choice of strategy

4.2.1 Limits on resources

The legislated nature of reforms, specifically the new budgeting and resource allocation systems, acted as a constraint on managers’ choice of strategies. A public hospital seeking to adopt a distinctive strategic stance would require resources to implement its chosen strategy. Resources would be required if a hospital chose to expand the range of its services, such as recruiting and training staff, or investing in new facilities and equipment. A budget allocation system that is based on tightly defined standard costs and linked to patients served is unlikely to leave hospitals such as NKPH with much financial surplus to pay for extra resources. Most often it results in a ‘deficit’. Public hospitals could make separate requests to fund capital investments in special projects. Such requests were favoured if they were linked to priority areas identified by the NHSO.

A senior administrator at NKPH made the following observation about one of the significant changes brought in by the reforms: “Budget as the main source of funding changed from a system based on hospital size to one which was based on the number of registered patients”.

Budgeting involved at least three key actors: the MOPH, the NHSO and the Budget Bureau. The UC budget for a hospital was determined by the number of patients registered with the hospital times the capitation rate. The capitation rate was the same for all hospitals and was negotiated at the level of the healthcare system as a whole between the NHSO and the Budget Bureau. The rate increased from about 35 USD in 2002 to about 80 USD in 2011. The increase was based on transparent criteria such as the utilisation of hospital facilities, unit costs and fiscal capacities.

Some hospitals, such as the Thammasart teaching hospital, chose to drop out of the UC scheme because of low capitation fees (The Nation newspaper, February 24, 2006). The hospital claimed that it had gone 105 billion baht in the red since it started providing service under the UC scheme.
How do public hospitals respond to environmental change?

However, dropping out of UC was not a choice available to all hospitals. Regional hospitals such as NKPH were run (owned) by the MOPH and all MOPH hospitals were obliged to deal with the NHSO. Each hospital had to accept registrants living within its service area and provide medical services at a cost that could be covered by the capitation fees. Publicness (ownership) imposes an important constraint on the strategic choices available to hospitals such as NKPH: they were mandated to offer UC services. They had an obligation to do so. Public hospitals could not choose the price they could charge for services. They had to work with the capitation rates negotiated between the NHSO and the Budget Bureau.

The system for reimbursement for in-patients also changed in 2004. The new system was based on DRG, which classified a patient’s diagnosis into groups in order to manage expenses and to compare the efficiency of treatments. DRG considered a number of factors including the patient’s age, the severity of his/her illness, the length of hospital stay, co-morbidity, complications, and quality of care, cost and other factors. DRG classified hospital discharges based on clinical characteristics and resource consumption. DRG-based reimbursements were computed for the entire public hospital system and applied to each hospital.

NKPH’s Deputy Administration Director described the effect of the reformed budgeting and resource allocation system:

“We can’t determine the hospital service price from our real costs. Nowadays, all main purchasers use the same rules of reimbursement with their specific capitation rate and DRG systems. What we can do is to reduce our unnecessary expenses...”

Hospitals such as NKPH had incentives to bring down their operational costs to generate a surplus which they could retain to improve priority services. However, they were also accountable for absorbing the deficits when costs exceeded revenues. One factor that precluded public hospitals such as NKPH from generating surpluses was the tight standards in costing for capitation rates and DRG reimbursement rates as evidenced by hospitals that dropped out of the UC system.

Crafting a strategy to respond to changes in the environment requires organisations to have the necessary resources to implement the new strategies. Legislated reformed introduced budget systems under which public hospitals had little freedom in choosing markets and services and setting their prices. Unsurprisingly, public hospitals tend to respond to this reality by not making any fundamental changes to their strategy. They prefer to follow the direction chartered by regulators and government agencies.

4.2.2 Membership of a hospital network

The NHSO required all contracted hospitals, such as NKPH, to set up one primary care unit (PCU) for every 10,000–15,000 registered beneficiaries. The larger the number of beneficiaries registered with a hospital, the larger the number of PCUs that a hospital had to set up. The whole network was known as the “contracting unit for primary care” or CUP. UC beneficiaries were assigned to a CUP linked to their local district hospital. Though UC beneficiaries had the option to register with private hospitals, which were contracted by NHSO, there were few private hospitals available in the rural areas.
Describing the effect of the healthcare network, one of the administrators in NKPH observed,

“Firstly we had to work with other CUPs as part of a healthcare network and secondly, we had to adapt to the ministry’s payment system based on the registered patient population. We now have to provide services to a large number of patients.”

The roles of the various hospitals and healthcare facilities were re-defined as the reforms sought to keep basic care within the primary health centres and limited access to bigger hospitals at the district and regional levels for secondary and tertiary care.

A deputy director at NKPH noted:

“Since we are a regional hospital, under the reformed system, we have to provide a broader range of health services, from primary healthcare to secondary and even tertiary healthcare. We also have to develop Centers of Excellence, such as for trauma cases, since this is the mandate we have been given according to policy. This is different from the pre-UC era when we only needed to provide routine clinical services to diverse groups.”

The new system also had the effect of increasing workloads on regional and district hospitals. “We have an overload of work because this regional hospital takes responsibility for CUPs and the community hospitals in this province and the hospitals in this region”.

The requirement for NKPH to serve as part of a healthcare network under MOPH implied that the hospital had to define its role in the context of that network. Regional hospitals such as NKPH had specific roles assigned to them. Performing these roles was an obligation attached to the decision to continue to be part of MOPH and not become autonomous. Choices for crafting hospital-specific strategic stances were likely to be extremely limited under these operational conditions.

One of the clinicians we interviewed made the following observation, which suggests that different units within the network were not above ‘gaming’ the system:

“We have an overload of work because this regional hospital not only takes responsibility for our CUP and the community hospitals in this province, but for all the hospitals in this region too, even other regional hospitals. Those hospitals transfer the most seriously ill patients to us. This is very time-consuming, and they keep the low risk (and more profitable) patients for themselves.”

Being part of a hospital network affected the strategic choices of public hospitals such as NKPH in at least two ways. One was in the externally defined and mandated role that they had to play in the network. The mandate defined both what NKPH was required to do and what NKPH could not do. Another impact was through NKPH’s finances, which were put under strain due to its role as a referral centre.

If the nature of healthcare reforms place public hospitals in a network of hospitals, managers of such hospitals are unlikely to have freedom to choose the strategies that their hospitals should follow. Public hospitals have to perform roles assigned to them in the network by regulators and government agencies. The nature of such roles will differ depending on whether the public hospital performs a regional, provincial or a district role.
4.3 Professional values and norms and managerial choice

Doctors in public hospitals are seen as custodians of professional values. They form a powerful coalition, which can resist efforts by managers to make fundamental changes to a hospital’s strategies. One example of this is an argument advanced by one of the doctors interviewed at NKPH:

“It is difficult for a clinician to cope with a huge number of patients, and also meet KPIs (key performance indicators) to limit the occupied beds and reduce the length of a patient’s stay. Other KPIs make it even more difficult. It is not only a problem of resources, but also an organisational problem. We have too few resources and we do not have the right competencies for strategic planning.”

In other words, doctors did not want to share the burden of any administrative changes brought in by healthcare reforms. They expected their hospital to secure additional human resources to meet these additional demands, whether monitoring and managing KPIs or record-keeping to meet DRG system requirements.

A specialist at NKPH opined:

“We understand that record keeping for DRG is important for hospital revenue, but we can’t do all of that. Why can’t we have someone to write those documents for us? The hospital should perform these tasks for us, or reduce our workload. We don’t have enough time for self improvement.”

According to one of the managers at NKPH:

“Doctors at the hospital can be the most resistant to changes required by UC and DRG. With the increased workload due to the increasing number of patients and additional administrative work due to the DRG system, doctors are affected by the reforms, and most disapproved of them.”

One of the doctors at NKPH perceived the UC and DRG related changes as impinging on the professional values of doctors:

“Before UC, we had more professional autonomy. The changes brought in by UC, especially the financial and budgeting systems, forced us to compromise our professional values by negatively affecting the quality of patient service we could offer.”

Doctors and clinical staff did not see themselves as part of the hospital’s management.

“Why not let us just take care of the patients? The financial problems of the hospital should be the director’s responsibility. DRG requires us to fill out a lot of paper work. Why can’t the hospital hire staff for this and reduce our workload? We don’t have enough time for self-improvement or study that could benefit patients.”

Understandably, hospital managers were careful not to lead with large scale and radical changes to hospital strategies, which would put them on a collision course with doctors and other medical staff.

Public hospitals, especially larger ones, are prominent sites of confrontation between managerialism and professionalism. The conflict is especially problematic since the director and deputy directors of Thailand’s public hospitals tend to be medical
professionals themselves. Hospital administrators find themselves caught between the demands of reforms and the demands of their professions. We find that hospital administrators respond to such competing demands by not making any fundamental changes to the hospital’s strategy.

5 Discussions and conclusions

The model proposed in this paper suggested that public hospitals would not respond to changes in their environment in a deterministic way that would ensure an ideal balance between their strategies and their environment. Their responses would be the result of managerial choices exercised under several constraints. In the specific context of public hospitals we hypothesised there would be at least three constraints on managerial decision making: the publicness of the organisation, the legislated nature of the environmental change and professional norms and values. Our study finds that, as a result of such constraints, managers in professional public organisations do not respond to environmental change by making significant changes to their organisations’ strategies.

Our findings lend support to the predictions of managerial choice theory (Child, 1972). When looking from the outside in, it might seem as if Thailand’s healthcare reforms were fundamental and far reaching in nature, and that public hospitals would have to respond to them by making radical strategic changes (Pfeffer and Salancik, 1978; Aldrich, 1979). However, as predicted by managerial choice theory, organisational responses were found to be governed by how the managers perceived the choices they had to make any strategic changes.

Strategic responses of healthcare organisations to changes in environment and resulting organisational performance has been the subject of several empirical studies (Zajac and Shortell, 1989; Ketchen et al., 1993; Palmer et al., 1995; Lamont et al., 1993; Marlin et al., 2004). Results from these studies suggest that not all hospitals change their strategies in response to environment changes, such as introduction of a DRG based reimbursement system and that a majority of strategic changes are peripheral in nature. These findings are consistent with findings from our study which found no evidence of change in strategy. Unlike the prior studies we have cited here, our study identifies sources of constraints on managerial choice which explain the absence of any change in strategy.

Boyne and Walker (2004) posit that managers of public organisations may have less choice and be subject to more constraints in adopting strategies. Public organisations are much more likely to have strategy content imposed on them because they are more likely than private firms to be subject to pressures of coercive isomorphism (DiMaggio and Powell, 1983) that influence their strategic orientation. Regulatory instruments wielded by governments including performance indicators, planning systems, inspection, audit, budgetary controls, and annual reports (Ashworth et al., 2002) can constrain public organisation’s strategy by placing actual limits on strategic decisions and by inhibiting ‘entrepreneurial’ behaviour by public managers who may constantly have to consider whether new strategies will be acceptable to their regulators (Boschken, 1988).
How do public hospitals respond to environmental change?

Our findings in the context of a public hospital are consistent with the literature that has found evidence of constraints on a public organisation’s strategy making. Our research makes a contribution to this stream of literature by identifying specific sources of constraints that restrict managerial choice in professional public organisations.

The findings from our research show that professional public organisations such as public hospitals do not provide confirmatory evidence of the “strategy change to fit environment change” thesis such as has been tested but with no conclusive evidence in prior studies (Hrebiniak and Joyce, 1985; Miller and Friesen, 1986; Venkatraman and Prescott, 1990; Sutcliffe, 1994; Marlin et al., 1994; Audia et al., 2000; Luo and Park, 2001; Zajac et al., 2000) At best, professional public organisations are likely to be reactive to demands from reform implementers and other stakeholders in their environment.

At a practical level, our findings have important implications for governments and their agencies tasked with implementing reforms. Since public sector reforms often take a long time to implement and are vulnerable to political change and uncertainty, managers in professional public organisations, such as hospitals, are more likely to follow a reform trajectory than to launch radical strategic initiatives for their organisations. For reform agencies, the implication is that it would not sufficient to describe what the reforms seek to achieve. They have to detail what organisations, such as public hospitals, have to do at each step of the way. In addition, reform agencies have to put in place appropriate control systems to closely monitor the achievement of such public hospitals on specific short term performance measures and targets.

Another important implication of our findings is that managerial talent is best deployed in agencies driving reforms such as the NHSO rather than in the hospitals. In reforming large scale systems such as the public healthcare sector, very few strategic choices are exercised by sub system managers such as the directors of public hospitals. It will be left to agencies such as the NHSO and MOPH to determine and drive public hospitals in a desired strategic direction.

Governments in many emerging markets such as in Asia are pursuing aggressive public sector reforms to improve accountability and ensure better utilisation of resources. Healthcare is a prominent sector as a target of such reforms. There are several sub systems under a national healthcare system each with its unique organisational challenges in implementing reforms. How managers in these organisations respond environmental change in the form of reforms is an important area of research, learnings from which can contribute to successful implementation of reforms not only in healthcare but also across other sectors.

References


Appendix 1

Respondent Profile

<table>
<thead>
<tr>
<th>Designation:</th>
<th>Age:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male/Female:</td>
<td>Number of years of work in the hospital:</td>
</tr>
<tr>
<td>Education level:</td>
<td>Undergraduate/Graduate/Masters/Doctorate/Other</td>
</tr>
</tbody>
</table>

In the table below, indicate which of the nine statements, in your view, closely represent what your hospital had or had not adopted as a strategy. If you have no opinion on a statement, please mark ‘no answer’.

Thank you for your cooperation

<table>
<thead>
<tr>
<th>Strategy used by hospital</th>
<th>Pre-UC and DRG (2004 and before)</th>
<th>Post-UC and DRG (after 2004)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Had</td>
<td>not</td>
</tr>
<tr>
<td>1. Cost control or reduce expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The lowest price in the industry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The ‘Best Cost’ in order to maintain a competitive market position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Created unique and desirable product and service offerings that match the market and customer needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Proper customer satisfaction responsiveness</td>
<td></td>
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</tbody>
</table>
### Appendix 1 (continued)

<table>
<thead>
<tr>
<th>Strategy used by hospital</th>
<th>Pre-UC and DRG (2004 and before)</th>
<th>Post-UC and DRG (after 2004)</th>
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<tbody>
<tr>
<td>Had not had</td>
<td>Had had No answer rank</td>
<td>Had had No answer rank</td>
</tr>
</tbody>
</table>

6. Adapting to the private hospital method/system
7. Shrinking the size of organisations, such as: the hospital bed number
8. Slimming down of the range of services, such as: get rid of ineffective/inefficient service
9. Act as the ‘Hospital Networks and Partnership’ to reduce the degree of mobility barriers and rivalry in the area