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計劃名稱：台灣地區非營利組織管理之研究
–非營利醫療機構的策略和績效之探討
Strategy & Performance：
A study of the health care industry in Taiwan

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Strategy & Performance：
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This study collected survey data from 75 hospitals in Taiwan to test a multilevel model addressing the issue of organizational adaptation. We focused on the extent of TQM adoption by the individual hospitals as the dependent variable. We also controlled for the possible confounding effect of the age of the hospital, the number of doctors in the hospital, whether the hospital is a religious hospital, the number of high-tech services offered by the hospital, and the class status of the hospital. As for the independent variables, we selected five multilevel constructs: the scope of the network cooperation, the nature of the network relationship, organizational identity, adaptation strategy and organizational citizenship behavior. Results from regression analyses indicate that both the nature of the network relationship and adaptation strategy are positively and significantly related to the extent of the TQM adoption. Subsample analyses also showed that while only adaptation strategy is related to TQM adoption for for-profit hospitals, only the nature of the network relationship is related to TQM adoption for nonprofit hospitals.

Key Words:
Organizational Adaptation,
TQM, Health Care Management,
Nonprofit Organizations, Multilevel Study.

近年來由於全民健保、勞基法等外在環境的變化對醫療管理造成相當大的衝擊，本研究目的便在於探討醫院推行 TQM **以為因應環境變化之對策，以及有那些內在因素會影響到醫院推行** TQM **的程度。本研究依據行政院衛生署醫院評鑑名單（**84 **至** 86 **年）採樣** 200 **家醫院問卷調查，一共回收** 75 **家，回收率達** 37.5 **%，經過迴歸分析發現長期合作夥伴網路關係和探勘者策略對醫院推行** TQM **的程度有正面影響。進一步的分組分析則發現只有探勘者策略對營利醫院有影響，而對非營利醫院則只有長**

期合作夥伴網路關係會有影響。

關鍵字：策略管理，醫療管理，網路組織

Three years ago, Taiwan started to implement its National Health Insurance Program (NHI). It has since ushered in waves of changes in the island's health care industry (Young, 1995). It also creates an opportunity for researchers to study how the local hospitals cope with the impact of NHI. This paper reports the empirical results of a theoretical model, which focuses on the adoption of total quality management (TQM) as one of the key ways for hospitals to deal with the NHI challenges. To explain what factors determine the extent of TQM adoption by hospitals in Taiwan, we incorporate ideas from the studies of social network, organizational identity, adaptation strategy and organizational citizenship behavior. At first glance, the above four streams of studies may appear unrelated to one another, even cumbersome. However, we believe that by adopting this synthetic approach (Morgan, 1986; Rousseau, Sitkin, Burt & Camerer, 1998), we can highlight the potential of drawing various literature to shed new light on a classical subject, organizational adaptation (Barnett & Burgelman, 1996; Fox-Wolframm, Boal & Hunt, 1998; Meyer, 1982).

THEORY DEVELOPMENT

Total Quality Management

Facing the uncertainty introduced by NHI, hospitals have many choices to deal with it. The most urgent issue may be to reduce costs, since NHI establishes a schedule of reimbursement in which it pays health care providers a fixed sum. In this new era of controlled payment, hospitals have a strong incentive to maximize net income by cutting costs. In addition to putting a cap on what hospitals can charge across a wide spectrum of cases, NHI also aims to redirect patients to various classes of hospitals. Taiwanese tend to prefer large urban hospital centers over small neighborhood clinics, regardless of case severity. As a result, while huge numbers of outpatient services have tied up large hospital centers' resources, small clinics struggle to find enough customers. NHI attempts to remedy this misuse of resources by redirecting less sever cases back to clinics. However, from the perspective of hospitals, this may mean reduced future revenues. In sum, both cost reduction and revenue enhancement are two key concerns for hospitals as the result of the introduction of NHI.

With its emphasis on customer satisfaction, continuous improvement, problem-solving processes and employee empowerment (Westphal, Gulati & Shortell, 1997), TQM stands out as one of the most obvious answer for hospitals to reduce costs and enhance revenues. The operational details of how to implement TQM are certainly of great consequences for practitioners. However, a no less important inquiry for organizational researchers is to view TQM as an organizational adaptation scheme. While scholars continuously debate the feasibility and merits of adaptation (Child, 1972; DiMaggio & Powell, 1983; Hannan & Freeman 1977; Meyer &

Rowan, 1977), our purpose in this paper is to draw several diverse literature to explain the extent of adaptation. Specifically, we include both internal and external factors in our integrated model. Starting from the abstract to the concrete, the internal factors include organizational identity, organizational strategy and citizenship behavior. We deliberately combine the above three groups of values, strategy and behavior constructs together to maximize the explanatory power of our model. As for the external factor, we choose to examine the social network of hospitals.

Social Network

In recent years, we have witnessed a rise of interests in social network (Osborn & Hagedoorn, 1997), particularly in the study of high-tech industries. The health care industry may not require as much cooperation among various players as the high-tech industries do to cope with the constantly shifting complex technologies. However, the nature of the Taiwanese society in general and its hospitals in particular prompt us to incorporate social network as the first key construct to explain the adoption of TQM. It is well-known that in many Eastern societies, particularly the Chinese, social network plays a key role in everyday life (Xin & Pearce, 1996). It's not what you know, but who you know that counts the most. The Japanese have long been accused of relying on its close domestic network of buyers and suppliers to keep foreign suppliers from gaining a foothold in their market. The competitive advantage enjoyed by the Japanese auto makers is further attributed to their tight social network of domestic suppliers, who share long-term relationships and locate in close geographical proximity with them (Dyer, 1996). As for the Chinese, the notorious term of Guanxi push the meaning of social network to its boundary. To be successful in China, give-and-take favor bargaining is a must. Less extreme than China, Taiwan is no exception to the rule of social network. Particularly in those industries where governmental licenses and regulations prevail, social network means good relationships with the right government and party officials. More positive aspects of social network can be found in other export-oriented industries, though. The machine tools, bicycles, and PC-related industries all operate with their own local network of suppliers, not unlike those found in the Japanese auto industry (Chen, 1998).

As for the hospital industry, we have noticed that the industry has several distinctive groups of players (Chwang, 1998). In terms of history and impact, the National Taiwan University Hospital enjoys the highest prestige. Furthermore, it has trained numerous doctors who subsequently took up positions in many other hospitals. Second in line are Christian hospitals. Reflecting the superiority of Western medicine in the late 1800s, Christian hospitals were founded by ministers one by one since then. More recently, many business conglomerate groups have stepped into the hospital industry as well. They are known for bringing the concern for efficiency into this industry. Lastly, there are government hospitals, including provincial and city hospitals. Those are in greatest need of good management.

Researchers have pointed out that social network acts as a context for members to learn from one another (Human & Provan, 1997). Furthermore, this learning can have its basis in efficiency improving or legitimacy enhancing, depending on the timing of the learning. While early adopters of an innovation have efficiency improving as their goal, late adopters mimic others to enhance their legitimacy (Westphal, Gulati & Shortell, 1997:372). Since our study subjects are all in the early stage of adopting TQM, the learning basis is therefore in efficiency improving. We conceptualize social network as providing an learning opportunity for hospitals to achieve efficiency rather than legitimacy. Furthermore, we break down social network into two separate components: the scope of cooperation (Powell, Koput & Smith-Doer, 1996) and the nature of the cooperation (Uzzi, 1997). Scope refers to the count of practices members learn from and share with one another. On the other hand, nature addresses the issue of whether the cooperative relationship is pure business-like or resembles family-like partnerships. Larger scope and more intimate relationships provide greater opportunities for sharing and learning to take shape. Therefore, our first set of hypotheses relate to social network and TQM is presented below:

H1: The larger the scope of cooperation between the focal hospital and other hospitals, the greater the extent of the focal hospital's TQM adoption.

H2: The more family-like the cooperative relationship is, the greater the extent of the focal hospital's TQM adoption.

Organizational Identity

While social network may open the opportunity to learn from others, organizational identity determines whether there is an open mentality to learn in the first place. As the very basic value system underlying what an organization prefers to do or not to do (Elsbach & Kramer, 1996; Gioia & Thomas, 1996; Meyer, 1982:530), organizational identity is likely to shape the various textures of TQM implementation. Specifically, the motivation of adopting TQM may vary. Researchers (Sitkin, Sutcliffe & Schroeder, 1994; Spencer, 1994:459) have pointed out that TQM philosophy can range from a control mentality to a more open learning attitude. While a control mentality puts its emphasis on cost reduction and variance minimization, a learning attitude strives for opening up new possibility in areas other than cost reduction. As pointed out earlier, the relatively young hospitals run by the several business conglomerate groups in Taiwan have emphasized efficiency. Even though these hospitals are nonprofits, they retain the concern for cost reduction from their parent corporations. On the other hand, the National Taiwan University Hospital is said to pride itself for its ability to advance the frontier of medical science, at the expense of budget deficits (Chwang, 1994). Similarly, the Christian hospitals have their most significant mission in caring for the sick, in bodies and in soul (Chwang, 1998).

The trouble with organizational identity is that its conceptualization varies according to the context at hand (Albert & Whetten, 1985:280). This is similar to the problem facing research in

organizational culture (Hofstede, 1991). There is no single set of items to describe organizational identity or culture for every organization. Nevertheless, we found the distinction between utilitarian identity and normative identity particularly suited for the hospital industry. While an utilitarian identity goes for profits maximization, a normative identity strives for less concrete contribution to the society (Gioia & Thomas, 1996:387). In other words, an utilitarian identity acts like a business, and a normative identity operates like a social cause. We predict that an utilitarian identity is positively related to TQM implementation through their common interest in cost reduction. We also predict that a positive relationship exists for a normative identity as well. The linkage lies in the concern for customers (patients and employees), another characteristics of TQM. Similar to our attempt to link identity with TQM, Reger, Gustafson, Demarie and Mullane (1994) also discuss the possibility of using identity to explain why TQM implementation often encountered resistance from employees. Based on the above discussion, we present our second set of hypotheses as below:

H3: An utilitarian identity is positively related to TQM adoption
H4: A normative identity is positively related to TQM adoption.

Adaptation Strategy

While organizational identity may set the overall tone for the adoption of TQM, adaptation strategy further reflects whether the focal hospital is equipped to deal with this administrative innovation. Relying on Miles and Snow' s (1978) classical study of business strategy, various researchers have studied the issue of organizational adaptation. For instance, Meyer (1982) studied the effect of a doctors' strike on hospital locating in the same Bay area. However, the responses to the environmental jolt by these geographically proximate hospitals vary. Specifically, while Meyer found that defender, prospector and analyzer all are strategies capable of dealing with the jolt, only prospector emphasizes experiment and learning as its adaptation tactics. Zajac and Shortell (1989) subsequently examined the health care industry as well. They found that when facing a major environmental shift (the Medicare Prospective Payment System), hospitals would change their strategy away from defender towards analyzer and prospector. Furthermore, defender performed poorly, as compared with analyzer and prospector. Less concerned with the performance implications of the various strategies, Fox-Wolfgramm, Boal and Hunt (1998) focused on the process of the adaptation. While they found defender ended up with an aborted adaptation, prospector was able to proceed towards a reorientation. In sum, while the thesis of equal viability of the various strategies has been contested in the literature, researchers seem to have agreed that prospector sets itself apart by excelling in experimenting and learning.

It is easy to associate a defender strategy and its focus on internal cost control with the control variety of TQM. However, as a whole, TQM represents an administrative innovation for many

hospitals in Taiwan. Unlike the U.S. context where TQM has become an institutionalized practice (Westphal, Gulati & Shortell, 1997), TQM adoption by hospitals in Taiwan is still in an early stage. As a result, it may have a better match with a prospector strategy where constant innovation is a way of life. In other words, a prospector's innovative frame of mind makes it more inclined to embark on TQM as an administrative innovation to address the uncertainty ushered in by NHI. We therefore present our strategy hypothesis as below:

H5: A prospector strategy is positively related to the extent of TQM adoption.

Organizational Citizenship Behavior

Similar to adaptation strategy, organizational citizenship behavior (OCB) is concerned with whether the focal hospital has the capability to learn. The difference is that the level of analysis in OCB is the individual employees of the focal hospital. By addressing both macro and micro constructs, we hope our model can achieve a greater explanatory power.

In recent years, researcher have shown an increasing interest in the OCB construct (Fah, Earley & Lin, 1997). One of the reasons may be the realization that to run a business effectively in an increasingly complex and dynamic world, employees' initiatives are no less crucial than managerial guidance from the top. As originally stipulated by Organ (1988), OCB emphasizes employees' discretionary efforts not specified in their employment contracts. This bottom-up volunteerism can also find its macro-level counterpart in Burgleman's (1991) study of intra-organizational innovation. Specifically, what Burgleman labels as autonomous strategic processes (unplanned innovation) is conceivably related to OCB. While we find intriguing the possibility of applying OCB beyond its micro-level context, the OCB literature has predominantly treated OCB as the dependent variable in various studies (Dyne, Graham & Dienesch, 1994). Furthermore, researchers have frequently used the construct of procedural justice to predict OCB, with various mediating or moderating variables in between (Fah, Earley, & Lin, 1997; Konovsky & Pugh, 1994; Mooran, Blakely & Niehoff, 1998).

Our approach in this paper is to examine the consequences of OCB. As we discussed earlier, one of TQM's characteristics is employees empowerment (Reger, Gustafson, DeMarie & Mullane, 1994:580). Successful adoption of TQM requires effort throughout the organizational hierarchy, not just from top managers. OCB depicts a situation where employees put in extra effort for the common good of the organization. It is this unselfish effort that prompt us to present the OCB hypothesis as below:

H6: Organizational citizenship behavior is positively related to the extent of TQM adoption.

METHODOLOGY

To facilitate the design of a survey questionnaire, we first conducted interviews with five hospitals

in Chiayi County, Taiwan. We interviewed the head administrator in every case, lasting at least two hours each. These interviews significantly informed our theoretical model. We then pilot tested our survey questionnaire by consulting the same five hospitals again. The final version of the questionnaire were then mailed to 200 selected hospitals in Taiwan in early June, 1998. The mailing list we obtained from the Health Department of the central government contains 525 hospitals. In its annual accreditation process, the Department classifies these hospitals into four main categories. Starting from the largest scale to the smallest one, these four classes are major hospital center, regional hospital, local teaching hospital and local hospital. Based on our belief that the response rate is likely to go down for the smaller hospitals, we decided to include all the hospitals in the first three classes (n= 117), and randomly selected 83 hospitals in the last class. In sum, our final sample contains 13 major hospital centers, 42 regional hospitals, 62 local teaching hospitals, and 83 local hospitals.

After mailing the questionnaire, we waited for ten days before we sent another round of the same questionnaire to increase response rate. After waiting for another ten days, we solicited for more responses by calling those hospitals that had not yet returned the survey. In early August, we collected 75 completed responses, with a 37.5% response rate. As we anticipated, smaller hospitals have a lower response rate. Specifically, only 19 of the class four hospitals completed the questionnaire, representing a 23% response rate. Our subsequent regression analysis all include hospital class as one of the control variables. To further address this heterogeneous sample issue, we also conducted separate regression analyses for each of the four hospital classes. First we turn to the discussion of the measurement of dependent and independent variables. The specific items are listed in the appendix.

Dependent Variable

We borrow the work of Westphal and his colleagues (1997) to ask respondents to check whether their hospitals have adopted each of the ten TQM-related items. Among others, these items include periodical assessment of the local community' s need, establishing teams to improve health care quality and service quality, and etc.

Independent Variables

In regard to social network, we measured the scope of network cooperation by asking respondents to check yes or no on each of the eight cooperation items. We compiled this list based on the results of our five interviews, and these eight items include joint personnel training, group purchasing, and etc. As for the second measurement of social network, the nature of the network cooperation is measured by 12 items. We selected these items from Uzzi' s (1997) work and they include personal friendship is closely related to the cooperation, trust is the key element of the cooperation, and etc. Respondents were asked to rate each statement on a seven-point Likert scale.

To capture the construct of organizational citizenship behavior, we modified 20 items from the work of Farh and his colleagues (1997) to fit into the hospital context. These items include willingness to protect the reputation of the hospital, willingness to spread good news to external constituencies and clear misunderstandings for the hospitals, and etc. We provided seven-point Likert scales for respondents to check each statement.

We follow the commonly-used scenario approach to measure adaptation strategy (Zajac & Shortell, 1989). We wrote four paragraphs, each representing a defender, an analyzer, a prospector and a reactor, respectively. We then lined up these types on a seven-point Likert scale, with defender having a value of one (low change), analyzer four (medium change), and prospector seven (high change). We labeled reactor as a separate point outside the scale.

As for organizational identity, we borrowed the idea of normative vs. utilitarian identity from Albert and Whetten (1985). Based on our reading of the popular press and interviews with the five hospitals, we wrote four items to measure normative identity, including the calling of a doctor is to take care of patients at all costs, being a good person comes before being a good doctor, and etc. We wrote five items to measure utilitarian identity, including running the hospital like a business to increase efficiency, encouraging doctors to see more patients to increase revenues, and etc.

Validity Check

We ran several correlation analyses to examine the validity of our key constructs. We found that OCB is positively and significantly correlated with prospector strategy (p=.05), normative organizational identity (p=.0001), reduction of employees turnover (p=.005), improvement of the relationship between the administration and doctors (p=.0004) and the overall effectiveness of TQM (p=.0004). The above results suggest that OCB as measured in this study is capable of making positive contributions to organizations, lending support to OCB's validity. As for the nature of the network cooperation, we found it positively and significantly related to the item that asks whether the respondent considers cooperation is important (p=.001). We also found that a prospector strategy is positively and significantly correlated with the counts of high-tech services (p=.05) and viewing NHI as an opportunity rather than as a threat (p=.01).

RESULTS

Tables 1 shows the descriptive statistics for the key constructs of this study. While the reliability of the nature of the network cooperation is .88, that of the OCB is .96.

To test the above six hypotheses, we applied regression analyses to the full sample, for-profit vs. nonprofits, and the four classes of hospitals separately. For the full sample, we included five control variables to remove their possible effects on the dependent variable of TQM adoption. These five control variables are the age of the hospital, the number of doctors in the hospital, whether the hospital is a religious

hospital, the number of high-tech services offered by the hospital and the class status of the hospital. We then used the stepwise approach to fit the scope of the network cooperation (NETST), the nature of the network cooperation (NETRE), normative identity (ORIDN), OCB and adaptation strategy (V74) into the independent variables side of the equation. We chose not to enter utilitarian identity (ORIDU) due to its low reliability. Table 2 provides the detailed information of the results of the full sample. The results showed that both NETRE and V74 are positively and significantly related to TQMP ($p<.01$). This equation has a R-square of 28%.

Table 2 also contains the results of the for-profit and nonprofit hospitals. To see whether these two groups of hospitals behave differently, we applied the same regression analysis to each of them. The for-profit hospitals show that only V74 is positively and significantly related to TQMP ($p<.01$), with a R-square of 40%. On the other hand, the nonprofit hospitals contain only NETRE in the equation. The sign is positive ($p<.01$) and its R-square is 25%.

Although the above analyses all have controlled the effect of the class status of the hospitals, we subsequently apply the same regression analyses to each of the four classes of hospitals. The list of the control variables was reduced to four, since the variable of the class status was the basis of the four separate analyses. Table 3 shows the results of the four analyses. It was impossible to run regression analysis for the first class of hospitals due to its insufficient degree of freedom. As for the second class, both NETRE ($p<.01$) and OCB ($p<.05$) enter the equation positively, with a R-square of 63%, the highest among the various equations in this study. As for the third class, both NETST ($p<.05$) and ORIDN ($p<.05$) entered the equation positively, with a R-square of 47%. Lastly, for the fourth class, only V74 ($p<.05$) entered the equation positively, with a R-square of 57%.

Overall, the above results confirm that the full sample is composed of heterogeneous subsamples. Whether a particular independent variable is related to the extent of TQM adoption depends on which subsample we choose to look at. Due to the small numbers of hospitals in Taiwan and missing values, the degree of freedom of the subsamples falls short of the n=30 cut-off point in each case. However, the large R-square values of these subsample analyses suggest that our model is capable of explaining the adoption of TQM fairly well.

DISCUSSION AND CONCLUSION

Taiwan implemented its NHI program three years ago, and it is still adjusting various part of the program. Coupled with other changes such as the aging population, the entrance of new competitors backed by the business conglomerate groups and etc., the health care industry in Taiwan is going through a period of major adjustments. It also provides an excellent opportunity to study the classical issue of organizational adaptation. We choose to focus on the adoption of TQM as the key adaptation response by hospitals in Taiwan. Naturally, TQM is only but one of many

possible adaptation responses, and we need to examine other constructs in the future if we are to gain a fuller understanding of the issue of organizational adaptation in the health care industry in Taiwan.

Nevertheless, we think our work has contributed to the literature by demonstrating the explanatory power of a multi-level model. Our full sample analysis supports the hypotheses that both the hospital's own strategy and its network relationships with its partners are positively related to the extent of its TQM adoption. Furthermore, the regression equation has a R-square value of 28%, a relatively high level in the organizational research literature. Although suffering from the problem of small sample size, the various subsample analyses resulted in even more encouraging explanatory power of our model. In particular, the subsample of regional hospitals confirmed that both the hospital's OCB and its network relationship with its partners are positively related to its TQM adoption. The R-square reach the high level of 63%. The results of this particular subsample analysis point to the potential payoffs in studying the macro-level consequences of OCB.

To further improve our study, we need to solve its several limitations in the future. In addition to tackle the small sample size issue, we need to collect data from sources other than the survey questionnaire. We are currently in the process of collecting secondary data to validate and complement the subjective data supplied by the single informant in each of the individual hospitals. We also plan to design in-depth case studies to provide a deeper and richer account of organizational adaptation as it unfolds in the health care industry in Taiwan.

Even though our research focuses on one single industry in one single nation, we hope this work eventually will also make contribution to the field of international business. Issues such as whether network relationship, organizational identity and OCB have the same effect in the East and the West certainly deserve our attention in today's global environment.

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附錄

TABLE 1

Descriptive Statistics for Key Variables

Variable	Mean	s.d	α	Correlation					
				1	2	3	4	5	6
1.TQMP	0.62	0.27	N/A						
2.NETST	0.68	0.26	N/A	0.36**					
3.ORIDN	5.70	0.85	0.68	0.24*	0.20^{+}				
4.ORIDU	5.2	0.8	0.55	0.19^{+}	0.11	0.36**			
5.NETRE	5.53	0.95	0.89	0.09	0.11	0.24*	0.36**		
6.CITI	5.50	1.00	0.96	0.11	0.10	0.52***	0.20^{+}	0.25*	
7.V74	4.04	1.83	N/A	0.30*	0.24*	0.17	0.15	0.01	0.24^{+}

+ p≦.1
* p≦.05
** p≦.01
*** p≦.001

TABLE 2

Results of Full Sample and nonprofits vs for-profits subsamples Regression Analyses[a]

Variable	Full Sample	Nonprofits	For-profits
CON	-.03	.11	-.11
	(.07)	(.11)	(.16)
V80	-.00	-.00	.00
	(.00)	(.00)	(.00)
V82	-.00	-.00	-.00
	(.00)	(.00)	(.00)
V83	.01	.09	.09
	(.09)	(.10)	(.20)
Tech	.15	.46	.29
	(.21)	(.32)	(.32)
NETRE	.13**	.15*	—
	(.04)	(.07)	
V74	.05**	—	.09**
	(.02)		(.03)
Intercept	-.26	-.49	.22
	(.30)	(.45)	(.50)
Adjusted R^2	.28	.25	.40
N	64	37	27

a. Standard errors are in parentheses

\+ $p \leq .1$

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

TABLE 3

Results of Four Subsamples (Hospital Class Status) Regression Analyses[a]

Variable	1	2	3	4
V80	—	-.00	-.00	.01+
		(.00)	(.00)	(.01)
V82	—	.00	-.00	-.02
		(.00)	(.00)	(-.02)
V83	—	-.28	.09	.09
		(.21)	(.12)	(.21)
Tech	—	.05	.26	.34
		(.34)	(.32)	(.46)
NETRE	—	.29**	—	—
		(.09)		
CITI	—	.18*	—	—
		(.08)		
NETST	—	—	.45*	—
			(.18)	
ORIDN	—	—	.11*	—
			(.05)	
V74	—	—	—	.10*
				(.04)
Intercept	—	-1.94**	-.13	-.40
		(.62)	(.36)	(.38)
Adjusted R^2	—	.63	.47	.57
N	5	20	24	15

a. Standard errors are in parentheses

\+ $p \leq .1$

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

計畫主持人自我評估表之附錄

一、本計畫的 independent variables **從原先的策略擴張至網路合作性質、網路合作項目、組織價值－精神性、組織價值－實用性、策略探勘者、以及公民行為。**Dependent variable **在此份報告則為個別醫院推行** TQM **的程度。而相關績效的資料雖然此次問卷調查亦有收集，但未及進一步分析整理，故自我評鑑和原計畫相符程度為** 70%

二、略

三、本研究所提的六項假設依所測試的分組樣本而定，共有五項得到證實。不過必須注意的是由於分組分析進一步減少原本已不多的樣本數，因此結論僅可供初步參考，不宜視為最後結論

四、Academy of Management

五、行政院衛生署，全省各綜合醫院

六、因本研究為學術理論導向研究，非技術開發案

七、持續收集多年度資料，進行 longitodinal **分析以確定** Causality

八、略

九、本研究順利於研究執行期限內運用核定的經費進行問卷調查，在研究方法方面，我們事先進行五場深度面談協助問卷的設計，問卷本身亦郵寄兩次，再加上最後一次以電話催收，獲得 37.5%**回收率。主要發現方面，透過迴歸分析，下列五項假設依分析樣本組別不同分別得到初步的證實：**

1.**網路合作性質和醫院推行** TQM **程度有正面相關**

2.**網路合作項目和醫院推行** TQM **程度有正面相關**

3.**組織價值－精神性和醫院推行** TQM **程度有正面相關**

4.**策略－探勘者和醫院推行** TQM **程度有正面相關**

5.**公民行為和醫院推行** TQM **程度有正面相關**

整體而言，本研究確定我們所假設的理論架構具有進一步探討的必要，以確定各變數之間的因果關係，而非僅是相關性。