

Comparison of health care professionals' and surveyors' opinions on problems and obstacles in implementing quality management system in Thailand: a national survey

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Abstract

Objectives. To explore problems and obstacles of hospitals in Thailand implementing quality management systems according to the hospital accreditation (HA) standards.

Design. Questionnaire survey.

Setting. Thirty-nine hospitals in all 13 regions of Thailand.

Participants. A total of 728 health care professionals and 41 surveyors of the national accreditation program.

Main outcome measures. Health care professionals' and surveyors' opinions on problems and obstacles in 24 items representing Thailand HA standards.

Results. The response rates were 94.9 and 73.2% in health care professionals and surveyors, respectively. More than 90% of both groups thought that there had been problems in the items such as 'quality improvement (QI) activities' and 'integration and utilization of information'. The items considered by health care professionals as major obstacles included 'adequacy of staff' (34.6%) and 'integration and utilization of information' (26.6%), for example. For surveyors, 'integration and utilization of information' was ranked highest as presenting a major obstacle (43.9%), followed by 'discharge and referral process' (31.7%) and 'medical recording process' (29.3%). The rank orders for the 24 items as problems and major obstacles were similar in both groups (Spearman's rank correlation 0.436, $P = 0.033$ and 0.583, $P = 0.003$, respectively). Surveyors had a higher degree of concern and paid more attention to care-related items than health care professionals.

Conclusions. Health care professionals have been facing many problems with multidisciplinary process-related issues of the accreditation standard, whereas surveyors might have had some difficulties in conveying the core QI concepts to them. The findings might be explained by the effects of health care reform on the underlying accreditation principles. One of the strategies to respond to the situation was presented.

Keywords: developing countries, hospital accreditation, hospital care quality, hospital staff, provider perceptions, standards, surveys

As in other developed and developing countries, concerns about quality of health care have been increasing in Thailand. These are expressed in both the current Constitution [1] and through recent health care reforms [2]. However, quality improvement (QI) and accreditation are still in their infancy in many developing and transitional countries, including Thailand. To improve the quality of health services, various

strategies have been pursued including the hospital accreditation (HA) program, one of the most noticeable and modern mechanisms.

Conceived in 1996 as a research and development project, the HA program was closely modeled after the Canadian Council on Health Services Accreditation (CCHSA). Participating hospitals are required to apply Total Quality

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Management (TQM) principles, self-assess quality performance, and demonstrate activities in the areas of quality assurance and customer-focused continuous QI (CQI). Hospitals must also show a strong commitment to quality at all levels and implement patient-safety programs [3]. External evaluation is then carried out by a team of certified surveyors recruited by similar approach used in developed countries [4]. The standards used for accreditation comprise 20 chapters divided into six key components—leadership and policy direction, resource management, QI process, professional standards and ethics, patient rights and organizational ethics, and patient care.

However, progress has been slow and interest in accreditation limited. After the implementation of the HA program in 2001, only 35 hospitals were accredited in the first 3 years [5]. By October 2004, only 6.6% of all hospitals in Thailand (86 hospitals) had been accredited. Table 1 briefly summarizes Thailand health care system.

Literature from developed countries that have implemented HA and other quality assurance initiatives indicates that resistance to improvement initiatives by health care professionals, especially physicians [6], was common [7]. Important reasons included a lack of leadership commitment [8,9], resource deficiency [10], and personal factors [11]. Various hospital-initiated approaches for the implementation of quality systems in the United States [12] might not be entirely suitable for countries with less developed health systems.

The evidence from developing countries is encouraging and may be applicable to developed countries [13]; however, only a few case studies were published. For example, the Zambian experience revealed many administrative and infrastructural problems in implementing national accreditation system [14]. In transitional countries such as Thailand, some small studies and case reports have identified major barriers to the introduction and implementation of quality management system in hospitals. These include infrastructure limitations and, in particular, health care providers' comprehension of the issues at hand [15,16]. Some hospital staff considered QI activities a burden, particularly when the National Health Security Office's (NHSO) and Ministry of Public Health's policies required hospitals to participate in the program without proper prior introduction of QI concepts. In addition, the lack of consistency of hospital surveyors' 'subjective' evaluation has been strongly criticized [15].

Studies at the national level to support hospital QI and accreditation have been recommended but are still lacking [17]. In addition, discussions among health care sector stakeholders demonstrate a keen interest in identifying barriers to the issues. This included the comprehensibility of national standard and the capacity of accreditation system [15]. Our

study is the first national survey to analyze the opinions of health care professionals and surveyors about problems and obstacles to using standards in the HA framework in Thailand.

Methods

Study sites and populations

We surveyed two populations from November 2003 to April 2004. The first group consisted of health care professionals in hospital settings. Multistage cluster sampling was done by randomly selecting provinces in 12 regions, whereas Bangkok (the 13th region) was purposively chosen. In each selected province, three hospitals [one provincial, one medium-sized community (30–60 beds), and one private hospital] were randomly selected. Respondents were purposively sampled from outpatient, male and female in-patient, emergency, dentistry, pharmacy, and health promotion departments, operating room, and labor and delivery room in each of the 39 selected hospitals. If there were more than one outpatient department, only two of them were randomly selected. In each department, the unit head and one staff member with at least 3 years experience in the hospital were selected; simple randomization of staff identification number was done by the investigators when there were more than one of them.

The second survey population comprised all 56 nationally registered surveyors [5]. The recruitment and selection process, survey team composition, and some administrative logistics were comparable with the system in other developed countries, especially CCHSA [4]. Although most were part-time surveyors and worked in hospitals, none of them were employed by the surveyed hospitals.

Questionnaires

Separate self-administered questionnaires for health care professionals and surveyors were developed and tested. Both questionnaires consisted of three parts. The first part assessed characteristics of health care professionals (profession, department, work experience, and type of hospital) and surveyors (profession, authority, work status, and survey experience).

Because the HA standards were very detailed [18], the second part of the questionnaire represented an abstracted version of them. To represent the most important standards, major structural and process measures in the six key areas were selected and validated by a panel of three experts in QIs, provision of care in hospitals, and research on quality of care.

Table 1 Thailand health care system

Thailand's health care system comprises the Bangkok metropolitan area and 12 geographic regions with a total of 75 provinces. Most hospitals are publicly owned. They are classified into community and provincial hospitals and funded through the government's capitation mechanism under a Universal Health Care Coverage Scheme. Some private hospitals participate voluntarily in this scheme provided they fulfill specific conditions. Public hospitals were politically expected to achieve some national quality standards, whereas private hospitals were not so intense.

Twenty-four items (10 structural and 14 process measures) were then selected (Table 2). The question was 'In each of the following items which represent major issues in the Hospital Accreditation standard, do you think that there is a problem for improving quality of care in the hospital?' Four-point scale (1. 'No problem', 2. 'There is a problem but not an obstacle', 3. 'There is a problem that became a minor obstacle', and 4. 'There is a problem with a major obstacle') was used to assess respondents' opinions.

Health care professionals were asked to give opinions based on experiences in their hospital. The questionnaires

were explained, delivered, and collected on site, though some uncompleted ones were sent back later by post. Non-respondents were defined as those who did not respond to the follow-up telephone calls 2 weeks after the field visits. Surveyors' opinions were assessed on the basis of their experiences from consulting and survey visit in hospitals. The questionnaires were distributed and collected in the Surveyor Annual Meeting in April 2004. Respondents in each survey were blinded to the results from the other group.

To help validate the answers, the open-ended questions in the last part asked about comments and suggestions to deal

Table 2 The opinions of health care professionals and surveyors toward 24 selected items in the national hospital accreditation (HA) standards

Items in each category	Health care professionals (<i>n</i> = 728)				Surveyors (<i>n</i> = 41)			
	% Problem	Rank	% Major obstacle	Rank	% Problem	Rank	% Major obstacle	Rank
Category 1. Leadership and policy direction								
1. Concerns for quality improvement (QI) (S)	87.4	9	18.7	7	92.7	5	12.2	10
2. Promotion of staff participation (P)	92.6	3	24.0	3	97.6	2	24.4	6
3. Participation in QI (P)	84.3	15	13.0	12	100.0	1	19.5	8
Category 2. Resource management								
4. Budget for QI activities (S)	79.8	18	21.4	4	95.1	3	12.2	10
5. Communication among departments (P)	92.3	4	12.0	13	97.6	2	26.8	5
6. Human resource development policies (S)	85.3	13	14.3	11	95.0	4	27.5	4
7. Adequacy of staff (S)	89.7	7	34.6	1	95.1	3	29.3	3
8. Adequacy of medical equipment (S)	85.3	14	17.2	9	95.1	3	2.4	14
9. Efficiency of maintenance system (P)	90.2	6	19.4	6	97.6	2	19.5	8
10. Integration and utilization of information (P)	93.5	2	26.6	2	100.0	1	43.9	1
Category 3. QI								
11. QI activities (P)	94.9	1	14.6	10	100.0	1	14.6	9
12. Clinical practice guideline development (P)	91.3	5	12.0	14	100.0	1	22.0	7
13. Knowledge of staff about infection control (S)	85.6	12	6.6	21	95.1	3	2.4	14
Category 4. Professional standards and ethics								
14. Concerns for professional standards (S)	74.3	23	6.9	19	87.8	7	2.4	14
15. Professional standard manuals (S)	76.2	22	6.7	20	92.7	5	2.4	14
Category 5. Patient rights and organizational ethics								
16. Prosecutions and complaints about services (P)	86.5	10	8.5	16	92.3	6	0.0	15
17. Concerns of staff about patient rights (S)	72.9	24	6.2	22	95.1	3	7.3	12
Category 6. Patient care								
18. Staff competency (S)	79.7	19	4.8	24	92.7	5	9.8	11
19. Multidisciplinary care (P)	86.3	11	21.3	5	100.0	1	24.4	6
20. Discharge and referral process (P)	80.1	17	8.8	15	100.0	1	31.7	2
21. Medical recording process (P)	88.0	8	17.9	8	97.6	2	29.3	3
22. Emergency care process (P)	82.0	16	8.4	18	97.6	2	4.9	13
23. Pharmacy process (P)	78.7	21	5.4	23	97.6	2	14.6	9
24. Consultation process (P)	79.4	20	8.5	17	97.6	2	4.9	13

P, process measures; S, structural measures.

with problems and obstacles. The questionnaire was pretested with 30 staff from a 60-bed community hospital in a province other than the sampled ones. Ambiguous responses will be verified by either interview during the field visit or follow-up telephone call for late respondents.

Data analysis

Descriptive statistics were used to describe respondents' characteristics. The number of response to choices 2, 3, and 4 in the second part was simply grouped into 'problem', whereas choice 4 (problem with a major obstacle) was presented as 'major obstacle' (Table 2). Items were then ranked by the scales of problem and major obstacle from highest to lowest. The level of agreement on ranking of problems and major obstacles as seen by health care professionals and surveyors was compared using Spearman's rank correlation test.

Results

Study samples

Of the 767 questionnaires sent to health care professionals, 728 were returned (response rate 94.9%). A total of 114 physicians, 44 dentists, 52 pharmacists, and 518 nurses were included in the study (Table 3). For surveyors, 41 questionnaires were collected; this number accounted for 73.2% of all registered surveyors in Thailand. Most of them were part-time surveyors, working in accredited hospitals as either clinicians or administrators and had good survey experiences (Table 4). Health care professionals had a higher proportion of nurses

than surveyors. Table 2 summarizes the results of both health care professionals' and surveyors' responses.

Health care professionals' opinions

All items were identified by most health care professionals (range 72.9–94.9%) as problems for hospital QI. Of these, >90% thought that there had been problems in the items 'QI activities' (94.9%), 'integration and utilization of information' (93.5%), 'promotion of staff participation' (92.6%), 'communication among departments' (92.3%), 'clinical practice guideline development' (91.3%), and 'efficiency of maintenance system' (90.2%).

Items considered by health care professionals as major obstacles to hospital QI included 'adequacy of staff' (34.6%), 'integration and utilization of information' (26.6%), 'promotion of staff participation' (24.0%), 'budget for QI activities' (21.4%), and 'multidisciplinary care' (21.3%).

Surveyors' opinions

Although the ratings of health care professionals and surveyors regarding problematic items were quite concordant, higher ratings were generally observed in the surveyor group (range 87.80–100%). All surveyors agreed that the items 'integration and utilization of information', 'QI activities', 'clinical practice guideline development', 'multidisciplinary care', 'participation in QI', and 'discharge and referral process' were problems for hospital QI. Of these, 'integration and utilization of information' was ranked highest as presenting a major obstacle (43.9%), followed by 'discharge and referral process' (31.7%), 'medical recording process' (29.3%), 'adequacy of

Table 3 Characteristics of participating health care professionals

Characteristics	Physicians	Dentists	Pharmacists	Nurses	Total
Target population ¹ (%)	16 569 (14.77)	3414 (3.04)	5941 (5.30)	86 231 (76.89)	112 155 (100)
Study population (%)	114 (15.66)	44 (6.04)	52 (7.14)	518 (71.15)	728 (100)
Department					
Dentistry		44		3	47
Pharmacy			51	2	53
Emergency room	23			67	90
Labor room	28			60	88
Operating room	10			56	66
Outpatient department	26			98	124
In-patient department	1			116	117
Health promotion	9			99	109
Mean experience (year)					
In that department	9.90	11.07	8.35	11.04	10.67
In the hospital	9.86	9.41	9.52	13.14	12.14
Hospital type					
General	55	20	24	225	324
Community	30	14	14	146	204
Private	29	10	14	147	200

¹Hospital Directory and Public Health Statistics 2000–2001 [26].

Table 4 Characteristics of participating surveyors ($n = 41$)

Characteristics (%)	
Profession	
Physician	39.0
Dentist	4.9
Pharmacist	9.8
Nurse	34.1
Others	12.2
Authority	
Hospital accreditation (HA)-Thailand	26.2
Hospital	40.5
Others	33.3
Status	
Full-time surveyor	16.7
Hospital director	19.0
Department leader	16.7
Professional	23.8
Others	23.8
Survey experience (years)	
1	23.8
2	28.6
3	19.0
>3	14.3
Not answered	14.3
Number of hospitals attended (within last 3 months)	
1–5	46.3
6–10	19.5
11–15	7.3
16–20	4.9
>20	22.0

staff (29.3%), and ‘human resource development policies’ (27.5%).

The correlation between health care professionals’ and surveyors’ opinions on the 24 items as problem and as major obstacle was 0.436 ($P = 0.033$) and 0.583 ($P = 0.003$), respectively. That is, the rank orders for the 24 items were similar in both groups, although some differences were observed. For example, the items in category 6 (patient care) were ranked higher as being major obstacles by surveyors (range 2–13) when compared with health care professionals (range 5–24). Obvious differences were notable for the items ‘pharmacy system’, ‘discharge and referral system’, and ‘staff competency’ (ranked 23, 15, 24 by health care professionals and 9, 2, 11 by surveyors, respectively, for being major obstacles).

Discussion

We found that health care professionals have been facing many problems with multidisciplinary process-related issues of the standard which should have been solved by the consultation and survey process in well-developed accreditation systems [4]. That is, the underlying philosophy of the accreditation

program might not be entirely congruent with the contexts of less developed countries. In Zambia, for example, productivity of accreditation system was low at the national level because of the lack of incentive for hospitals to join [14].

In Thailand, the situation is even more complicated and has been challenged by a wide range of external factors, in particular those related to health care reform. Although quality was emphasized [2], resources required for QI activities were not explicitly considered by the capitation-based budget of the Universal Health Care Coverage Scheme [19]. Hence, hospitals had to improve quality relying on their own limited resources. Because a national survey revealed that 43.8% of governmental hospitals were not ready for QI programs [20], NHSO—as a ‘purchaser’ in the current health system—has granted a special budget to promote holistic QI activities. Because the HA was chosen to accommodate this policy, hospitals have considered it as a mandatory program. Although this partly helped solve the issue of financing the accreditation program, which was problematic in other countries [14,21], the accreditation philosophy becomes affected.

Interestingly, the same phenomenon is likely to happen with the US Joint Commission on Accreditation of Health Care Organizations (JCAHO), the first and largest accreditation program [4]. As being criticized for the ‘collegial’ nature of accreditation process and the inability to explicitly identify poor care patterns, some recommendations were proposed to improve JCAHO oversight by the Centers for Medicare and Medicaid Services (CMS) [22]. One of them is ‘...making JCAHO a federal contract or by following the Government Accountability Office (GAO)’s suggestion of strengthening CMS’ oversight authority of JCAHO’. Despite different contexts, our study provided some insights into the effects of this recommendation.

Structural issues in the standard did not cause health care professionals as many problems as process-related ones, which were more likely to be major obstacles to hospital QI. Zambian experiences suggested that hospitals are not always able to marshal their staff knowledge and resources necessary to meet the standards [14]. Our findings specified that adequacy of staff and budget for QI are the key issues; this cannot be solved solely by hospital management. Interestingly, a few public community hospitals with limited resources in Thailand have been successful in implementing quality management systems and have been accredited [5]. Hence, further studies of these hospitals might provide insight into specific strategies that may be successful for implementing hospital QI.

We found that surveyors paid more attention to core clinical issues, whereas hospital staff were concerned with more general ones. Although the difference was not significant, our results suggested that surveyors have had some difficulties in conveying the core concepts of QI to health care professionals. Comments from surveyors revealed that, for example, hospital staff often presented service improvement projects to them, whereas some clinical areas of major risks remained unaddressed. In the current mandatory system, hospitals aim at getting a certificate just to satisfy the expected goals. Because most health care professionals could not bring QI

concepts into practice at hospital level [23], they might consider QI an additional burden and try to use the easiest way to 'show off'. Hence, surveyors have been considered as quality auditors rather than external peers [24]. Although our findings might be confounded by professions because health care professionals had a higher proportion of nurses, and nursing was one of the areas most affected by accreditation [25], this reflects the actual proportions between the two groups.

We think that surveyors should be able to apply their professional backgrounds, QI concepts, and counseling skills to give context-specific recommendations to hospitals, whereas health care professionals should focus more on core clinical values as expected by the national standards. However, unlike well-developed accreditation systems [4], 'adjunct' mechanisms might help improve hospital quality in Thailand. One example at the national level was the modification of the single accreditation process to a 'three-step ladder' graduated approach. Hospitals with an 'acceptable' level of clinical risk management are now certified in the first step. Once they implement limited multidisciplinary care as well as a more systematic quality program and major systems, such as infection control or medical record management, they can be promoted to step 2. The final step is awarded to hospitals after they meet full implementation of HA standards.

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