

The Effectiveness of Accreditation Assessment for Quality Improvement in Healthcare: Malaysian Private Hospital experience

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Abstract

This paper investigates how effective the usage of accreditation, license and external assessment used to improve quality private hospital services to customers. Our case study is based on KPJ Seremban Specialist Hospital, belong to KPJ Healthcare Berhad, the biggest private healthcare providers in Malaysia. A retrospective study was conducted from January to December 2008 before the accreditation of the hospital compared to January to December 2009 after the accreditation activities. We can conclude that the Patient Safety Indicators (PSIs) For KPJ Seremban, the rate of 2009 was lower compared to 2008. Rate of White Appendix was higher than the standard (5-20%) for year 2008 but it had dropped significantly for year 2009 after the implementation of Accreditation with recorded rate of only 12% which is within the standard rate.

Keywords: Accreditation, quality, private hospital, PSI.

1. Introduction

KPJ Seremban Specialist Hospital is a private hospital in Malaysia. This hospital belong to KPJ Healthcare Berhad, the biggest private healthcare providers in Malaysia. KPJ Healthcare Berhad currently had 21 hospitals in Malaysia and 2 hospitals in Indonesia. KPJ Seremban Specialist Hospital was 134 bedded hospital excluding 3 bedded Cardiac Care Unit, 4 bedded Intensive Care Unit, 4 bedded High Dependent Care Unit and 7 bedded trauma and observation bay at the Emergency Services and it started business in January 2005. In year 2006, it has been certified with ISO 9001:2000 certification and recertified during the transition audit of ISO 9001:2008 in year 2009 by Moody International. To further enhance the quality and patient safety, in July 2009, it has been awarded with 3 years Hospital Accreditation by Malaysian Society For Quality in Health (MSQH), a certification body for hospital accreditation in Malaysia. MSQH is a member of International Society For Quality in Health (ISQUA)

Objectives of the study:

- To monitor how certification by external bodies will enable the organization to increase the quality of the services provided to our customers.
- This study will enable the management to monitor the quality or services provided
- Using indicators and benchmarking will facilitate the organization to measure level of compliance to the clinical standards to ensure the services provided are safe and following international standards.
- The monitor how the external certification Enhance staff education.

2. Literature Review

Robert M. Pirsig 1928-, American philosopher, defined 'Quality improvement' is a term that summarises a whole range of approaches used by industry and business to improve the quality of services and products. A number of quality improvement tools and techniques are used in Clinical Governance to influence changes in patient care. The operation of these systems and processes will be influenced by the organisational culture and quality improvement methods adopted in your workplace.

There is no straightforward definition of quality in healthcare. There are a variety of views on its meaning and some debate as to whether quality has to be measurable. The World Health Organisation (WHO) suggests: Quality is a process of meeting the needs and expectations of patients and health service staff (WHO 2000). Quality is the degree to which care services influence the probability of optimal patient outcome. (American Medical Association, 1991)

Gronroos (1984) suggested that quality in healthcare had two distinct components:

- **Functional quality:** how a patient receives a service (food quality, access to care)
- **Technical quality:** the quality of the delivery of care (competence and outcome)

Other definitions of quality in health care include its relationship to public perceptions of trust in those who deliver care and the appropriate use of resources.

Patient perceptions of quality in healthcare also influence the public expectations and confidence placed in the NHS. Clinical errors, patient suffering and hospital closures always attract media attention while development of new services, changes to treatments and good news stories are hard to publicise. 'Trends of patients' experiences of the NHS' (The Picker Institute 2005) identifies eight dimensions of patient-centred care:

- Fast access to reliable health advice
- Effective treatment delivered by trusted professionals
- Clear, comprehensible information and support for self-care
- Involvement in decisions and respect for patient preferences
- Attention to physical and environmental needs
- Emotional support, empathy and respect
- Involvement of, and support for, family and carers
- Continuity of care and smooth transitions.

In their simplicity these eight dimensions underline the need to co-ordinate the work required to improve the quality of every patient experience.

Crossing the Quality Chasm (Institute of Medicine 2001) proposes an agenda for improving the quality of health care made up of six components:

Safe: avoiding injuries to patients from the care that is intended to help them

Effective: providing services based on scientific knowledge to all those who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively)

Patient-centred: providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions

Timely: reducing waits and sometimes harmful delays for both those who receive and those who give care

Efficient: avoiding waste, including waste of equipment, supplies, ideas and energy

Equitable: providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location and socio-economic status.

Quality measurement:

A quality measure is information from a patient's record or an operational process that is converted into a rate, percentage or time that shows how well providers are taking care of their patients. Quality measures give you information about how well providers care for some, but not all of their patients. Most quality measures have been designed to measure evidence based care. Patient who should not get the recommended care treatments are not counted in the measures.

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Quality measurement is a relatively new science and requires a large amount of resources to develop and collect the information. Fully developed and tested measures are only available for reporting on some of the most common conditions or processes of care. Over the past few years, an increased interest in this science has occurred which may increase the rate of quality measurement development and reporting over time. But there is some quality information you can use right now to help you compare your health care choices. Many public and private groups are working to improve and expand health care quality measures. The goal is to make these measures more reliable, uniform, and helpful to consumers in making health care choices.²

Research has shown that science-based measures can be used to assess quality for various conditions and for specific types of care. For example, quality health care is:

- Doing the right thing (getting the health care services you need).
- At the right time (when you need them).
- In the right way (using the appropriate test or procedure).
- To achieve the best possible results.

Providing quality health care also means striking the right balance of services by:

- Avoiding underuse (for example, not screening a person for high blood pressure).
- Avoiding overuse (for example, performing tests that a patient doesn't need).
- Eliminating misuse (for example, providing medications that may have dangerous interactions).

A well-understood and well implemented system helps all functions within the process to understand their responsibility for meeting customer needs, and appreciate their position in the overall process for doing so.

Facilitates continuous improvement.

There is a direct requirement that the quality management system be continually improved. The requirements are saturated with admonitions to monitor, review, and improve the subprocesses of the quality system. The preventive and corrective action activities required by the Standard enlist all levels and functions in the effort to prevent quality problems and quickly mitigate those that do occur.

Creates consistency throughout the organization.

It establishes and enforces consistent working methods and quality controls throughout the organization. This can be especially important in larger, multisite organizations whose facilities are major suppliers to each other.

Strengthens relationships between your organization, its suppliers and customers, and among suppliers/customers within your organization.

Provides confidence to customers in the capability of your organization to meet quality commitments. This benefit is much stronger when the quality system is registered.

Improves management decision making.

Internal audits, management reviews, analysis of organization-level data, and effective document and data control are

four strong pillars of ISO 9000 which provide management with the intelligence it needs to make the right moves.

Institutionalizes training in methods and procedures essential to quality.

Reduces dependence upon individuals.

People are vital to quality, but people also come and go. The levels of procedural development, documentation, record-keeping, and training required by an ISO 9000 quality system assure that techniques and skills will carry on even when performed by different individuals.

Impact of accreditation to hospital

Shortell et al. (2006) argued that quality improvement implementation leads to greater perceived patient outcomes.

Pomey et al. (2007) assessed organizational changes after accreditation in France and argued that accreditation can promote quality improvement implementation in hospitals thus leading to better outcomes.

Changes in professional practice

Study by Sekimoto et al. (2008) suggests that accreditation has an impact on the introduction of infection control programmes and development of infection control practice in Japanese hospitals.

Another study by D'Aunno et al. (2002) which suggests a relationship between accreditation by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and compliance with methadone doses prescribed in methadone maintenance programmes in the United States.

Managerial changes (organisational and cultural changes)

Study conducted by Pomey et al. (2010) on organisational and cultural changes (strengthening of the working team, teamworking, place of service users, etc) related to the introduction of a hospital accreditation programme in Canada.

Impact on health care outcomes: clinical results (7 studies) and/or patient and user satisfaction (4 studies).

Study by Menachemi et al. (2008) on the association between JCAHO accreditation and health care outcomes (hospital readmissions) of patients treated in ambulatory surgical centres in the United States.

3. Methodology

A retrospective study was conducted from January to December 2008 before the accreditation of the hospital compared to January to December 2009 after the accreditation activities. Even though the hospital was accredited in July 2009, the compliance to the standard started from January 2009. The data collected were as follows:

For Patient Safety Indicators:

1. Percentage of patients with length of hospital stay > 5 days after elective caesarean section.
2. Unplanned admission to the intensive care unit within 24 hours of surgery.
3. Rate of White Appendix
4. Percentage of Myocardial Infarction patients receiving Thrombolytic therapy within 1 hour of their presentation at the Emergency department.
5. Benchmarking indicators
 - Waiting time & number of complaints
 - Clinical and Non Clinical Incidents

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- Result of external audit / surveyed findings
- Staff development and recruitment.
- Quality Improvement Activities
- Medication Diabetic card and sticker for preventing medication errors

4. Results and analysis

Table 1: The result of various indicators for year 2008 and 2009 compared to the standard

Indicators	Standard	Year 2008	Year 2009
Patient Safety			
LOS > 5 days after elective caesarean	< 1%	0.47%	0%
Unplanned admission to ICU within 24 hours of surgery	0	8	5
Rate of White Appendix	5-20%	23%	12%
% of Myocardial Infarction patients receiving Thrombolytic therapy within 1 hour at the Emergency department	> 70%	75%	95%
Benchmarking			
	min	min	min
Waiting time admission	30	60	30
Waiting time for discharge	54	40	30
complaints recorded	137	75	62
Clinical incidents	3.7%	0.3%	0.2%
Non-Clinical Incidents	16%	0.4%	0.2%
Human Capital Development			
Diploma, Post Basic Training, Bachelor degree and Master Degree		21	34
Understanding of label		40%	32%
Ineffective communication		30%	29%

5. Discussion

Refer to table 1, we can conclude that the Patient Safety Indicators (PSIs) are a set of indicators providing information on potential in hospital complications and adverse events following surgeries, procedures, and childbirth. The PSIs were developed after a comprehensive literature review, analysis of ICD-9-CM codes, review by a clinician panel, implementation of risk adjustment, and empirical analyses.

The PSIs can be used to help hospitals identify potential adverse events that might need further study; provide the opportunity to assess the incidence of adverse events and in hospital complications using administrative data found in the typical discharge record; include indicators for complications occurring in hospital that may represent patient safety events; and, indicators also have area level analogs designed to detect patient safety events on a regional level.¹¹

Many studies now demonstrate that patient safety is an international problem. For example, large studies in the United States, New Zealand, Australia, Canada, and the United Kingdom have all identified high rates of adverse events, and smaller studies in many other countries have found important safety issues.

In KPJ Seremban Specialist Hospital, For patient safety, four indicators were monitored and the comparison was made between year 2009 with year 2008. It was found that for year 2008 the rate of Length of Stay (LOS) > 5 days after elective caesarean section was 0.47% and 0% in year 2009. Both data are better compared to the standard of < 1%.

Based on the study conducted by Stytt Sjukrahuslega, in the Icelandic medical journal, 2011 it was found that Median hospital stay decreased significantly from 81 to 52 hours between 2007 and 2008-9. Readmissions were four in each period and outpatient visit rates similar. In 2008-9, 66% of all women were discharged within 48 hours. Women in the fast-track program were satisfied with early discharge. Most healthy women can be discharged early after singleton birth by elective caesarean, without increasing readmissions.

Unplanned admission to ICU were higher for both years of 2008 and 2009 in KPJ Seremban Specialist Hospital compared to the standard of zero. Unplanned post-anaesthetic and surgical admission to the intensive care unit (ICU) can provide an insight into the standard of peri-operative management in operating theatres and ICU resource management, including quality of anaesthetic care.¹²

For KPJ Seremban, even though the rate of ICU admission was higher compared to the standard, most cases were post surgery admitted by anaesthetist for intensive monitoring of post surgery patients. However the rate of 2009 was lower compared to 2008. Rate of White Appendix was higher than the standard (5-20%) for year 2008 but it had dropped significantly for year 2009 after the implementation of Accreditation with recorded rate of only 12% which is within the standard rate.

Under pathological conditions, a thrombus can propagate into otherwise normal vessels. A thrombus that has propagated where it is not needed can obstruct flow in critical vessels. It can also obliterate valves and other structures that are essential to normal hemodynamic function. The principal clinical syndromes that result are acute myocardial infarction (AMI), deep vein thrombosis, pulmonary embolism, acute ischemic stroke, acute peripheral arterial occlusion, and occlusion of indwelling catheters. Therefore during acute Myocardial Infarction it is very important to administer Thrombolytic therapy within 1 hour of the onset.¹³

The standard rate for percentage of Myocardial Infarction patients receiving Thrombolytic therapy within 1 hour at the emergency department was > 70%. From the data collected in KPJ Seremban, it was found that for the year 2008 the rate was 75% and it was higher in year 2009 with the rate of 95% in year 2009 after the implementation of Accreditation.

More and more hospitals are finding that significant increases in patient satisfaction are an added benefit that results from improving patient flow and bed management performance. When a hospital establishes a solid foundation of effective patient flow processes and supporting tools, satisfaction with the overall care experience is enhanced. Given that consumers have more choice of where to receive services and are using data that are now widely available to inform their health care decisions, it is imperative that hospitals address patient satisfaction issues. And once a patient receives care, satisfaction plays a role in how likely he or she is to recommend a facility to others. Even High-Performing Organizations Struggle to Improve Patient Satisfaction

For several years the Hospital of the University of Pennsylvania (HUP), a member of the University of Pennsylvania Health System (UPHS) in Philadelphia, had not seen overall improvement in its patient satisfaction ratings. The organization focused on specific concerns, such as improving patient flow from

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the Emergency Department (ED) into the hospital, but did not address patient flow and bed management as a hospital-wide issue. Then, in October 2005, HUP began to take a comprehensive, end-to-end approach to improving patient flow.

The University Hospital (TUH) in Cincinnati, Ohio, a member of the Health Alliance, had not achieved its patient satisfaction goals for the three years prior to undertaking a comprehensive patient flow performance improvement initiative in June 2006. The hospital had established a committee to review patient satisfaction scores and outline activities to support improvement. However, the committee lacked meaningful data and analyses that could help pinpoint opportunities and assist in developing action plans for increasing patient satisfaction.

The Children's Hospital—Denver (TCH) began a comprehensive patient flow improvement effort in April 2007. For two years prior to the initiative TCH had seen a steady decline in its Press Ganey patient satisfaction scores. TCH attempted to improve patient satisfaction first focused on individual hospital departments taking responsibility for their own satisfaction scores. Then service excellence teams were developed that focused on areas such as the ED, inpatient units and surgical care. However, patient satisfaction improvement efforts did not link flow processes organization-wide or provide data necessary to monitor performance.¹⁴ Therefore KPJ Seremban Specialist Hospital had embarked on benchmarking activities on admission time, discharge time and number of complaints. The standard for patient admission was 30 minutes. However for year 2008 it was 60 minutes but for year 2009 it was reduced to 30 minutes and meeting the set standard. For discharge the set standard was 54 minutes. In year 2008 it was 40 minutes and much better in 2009 with only 30 minutes after Accreditation being implemented.

The complaints had also improved from 75 cases in 2008 to 62 cases in 2009. Both were lower than the set standard of 137 complaints. However for year 2009, it was better than year 2008.

Reasons for complaints:

The main reasons for complaints were the poor attitude of the staff (15 cases in 2008, 12 cases in 2009), not giving enough information to patients (30 cases 2008, 25 cases 2009), professionalism of staff and doctors (15 cases in 2008, 12 cases in 2009) delay in getting treatment (10 cases in 2008, 8 cases in 2009), delay in admission and discharges (5 cases in 2008 and 5 cases in 2009).

Patient complaints are indications of their dissatisfaction with the service received. With increasing patient expectations, we need to address this issue for a more satisfying relationship between healthcare provider and user.

As a comparison, another study was conducted by HC Lim et al, Why do patients complain which was published in Singapore Medical Journal, it was found that, the main reasons why patients in this study complained, were strikingly similar. Poor attitude/conduct, unprofessional conduct, mismanagement, poor communication and long waiting time were common causes of patients' unhappiness. The Medical Defence Union reported that breakdown in communication between doctor and patient constitutes a major component in complaints and claims. In this study, the main reasons for complaints were found to be related to attitude/conduct (28.8%), professional skills (17.8%), unmet patient expectations/requests (16.2%), waiting time (10.0%) and communication (7.8%). Awareness of these reasons for patient dissatisfaction is necessary as a first step in the prevention and management of complaints.

In this study, the top patient complaint was related to attitude/conduct. Patients seeking medical care expect to be treated by doctors and other healthcare personnel with kindness, concern and empathy. With increasing consumerism and the evolving medical scene into a more customer-orientated service, patients not only expect good medical care but also good service from the medical profession. Real or perceived poor attitudinal behaviour would cause dissatisfaction. Real conduct problems should be reduced to a minimum. It is also important for healthcare personnel to portray a professional and caring image so that

patients do not misperceive them as being rude and uncaring. Healthcare personnel also need to match their professional styles according to different patients. A doctor's personal style is not always appropriate for all his patients and may sometimes be misinterpreted as hostile even when it is not.

The second main reason for complaints was related to professional skills. The complaints were mainly of cursory examination, incompetence and inadequate explanation. Patients expect doctors to be competent and skillful, thorough in their clinical examination and to provide adequate explanation regarding patients' illnesses. Competency and good professional skills are basic requirements expected of any healthcare professional. With rapid advances in medical science and technology and with an increasingly well-informed public, healthcare personnel need to involve themselves in continuing medical education and training to maintain their professional skills and knowledge. Continuing educational and service training for all categories of healthcare personnel should be emphasised and maintained. In a busy polyclinic with a heavy workload, consultation time is sometimes limited. Complaints about cursory examination and inadequate explanation are often the reflection of short consultation time. Measures taken to increase the consultation time would also increase patient satisfaction and decrease complaints arising from a rushed consultation.

Dissatisfaction also occurs when there is a mismatch between patients' expectations or demands and medical services received or offered. These unmet expectations were found to be mostly related to medical leave, medication or referral. It is crucial for healthcare personnel to provide clear and adequate explanation to address these unmet needs and expectations. In cases of unrealistically high expectations, a more tactful approach is necessary. The information provided by the mass media and the press may sometimes be misinterpreted by the public resulting in unrealistic expectations. Healthcare personnel and the mass media should work together to provide appropriate information to better inform and educate the public.

Waiting time was found to be an important cause of unhappiness. Waiting to consult a doctor and registration accounted for the majority of complaints on waiting time. Patient load, staff situation and flow of patients in the polyclinics are factors that would affect waiting time. Having an adequate staff complement appropriate for the patient load is important in reducing waiting time. Continuing efforts at workflow improvement in the polyclinics would also help increase efficiency.

Unnecessary comments and inadequate explanation accounted for the majority of complaints under the category of communications. Whilst it is necessary to provide patients with adequate information, healthcare providers should at the same time avoid making unnecessary remarks. Complaints often follow a conflict situation. Good listening, communication and negotiation skills are needed to resolve these unpleasant situations. These are skills that can be learnt and improved upon. Role playing complaint situations can help healthcare personnel develop better strategies in the management of such problems

From the data collected in KPJ Seremban, it was found that for clinical incidences the percentages had reduced from 0.2% in 2009 compared to 0.3% in 2008. Result for year 2009 was better compared to 2008 before Accreditation implementation. For both years it was better compared to the standard of 3.7% to 16%. The same trend can be seen in non clinical incidences where 0.4 % was recorded in 2008 compared to only 0.2 in 2009.

For continuous human capital development, as part of the requirement of hospital Accreditation the number of staff attended training in KPJ Seremban had improved from 21 in year 2008 to 34 in year 2009. Corporations are recognizing the importance of investing in their employees now more than everbefore. Companies are beginning to understand that to stay on top in the global economy, they need to place more and more emphasis on developing and retaining their people. Organizations that appreciate the financial impact of their employees often refer to them as human capital.

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Derek Stockley (2008), who works as a human resource trainer, defines human capital as “recognition that people in organizations and businesses are an important and essential asset who contribute to development and growth, in a similar way to physical assets such as machines and money. The collective attitudes, skills and abilities of people contribute to organizational performance and productivity. Any expenditure in training, development, health and support is an investment, not just an expense.” He continues to say, “Competition is so fierce and change is so fast, that any

Competitive edge gained by the introduction of new processes or technology can be short-lived if competitors adopt the same technology. But to implement change, their people must have the same or better skills and abilities.”¹⁵

For the audit conducted for ISO 9001: 2008 compliance there was no non conformance recorded in year 2009. The result of final survey for MSQH Accreditation produced in July 2009 found that KPJ Seremban Specialist Hospital complied to the standard set by the accrediting body and the hospital was awarded 3 years accreditation until middle of 2012.

The figure on poor understanding of label was improved from 40% in 2008 to 32 % in 2009. Ineffective communication had also being improved from 30% in 2008 to 29% in year 2009

6. Conclusion

Based on the data collected we can see clearly how various clinical and non clinical indicators, accreditation, licensee and external assessment process had improved quality services for KPJ Seremban Specialist Hospital. The data produced by this study was in line with the other literature reviews conducted by many researches. After the implementation of various external assessment such as ISO 9001:2008 and MSQH hospital accreditation, we can see that for indicators related to patient safety such as rate of Length of Stay >5 days after elective caesarean section and percentage of Myocardial infarction receiving Thrombolytic therapy within 1 hour at the emergency department were better than 2008 and the standard after the implementation of the Accreditation.

Regarding the benchmarking indicators the admission time, discharge time and number of complaints had improved after the implementation of Accreditation.

The complaints had also improved from 75 cases in 2008 to 62 cases in 2009

For both ISO 9001: 2008 and MSQH Accreditation, during the surveys that were conducted, there was no non conformance recorded and in year 2009 the hospital was awarded 3 years accreditation until middle of 2012.

The figure on poor understanding of label was improved from 40% in 2008 to 32 % in 2009. Ineffective communication had also being improved from 30% in 2008 to 29% in year 2009

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