

Study on Gap Assessment of Small Healthcare Organizations for Entry level Pre-accreditation NABH Standards

By

Sumit Marotisingh Bilgaye

*Dissertation submitted for the partial fulfillment of the
MBA Hospital and Health Management*

Academic year, 2016-2018



The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Sanganer, Airport
Jaipur 302029, Rajasthan
Ph: 0141 3924700, Fax: 3924738
Website: www.iihmr.edu.in

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Website: www.iihmr.edu.in

TO WHOMSOEVER MAY CONCERN

This is to certify that **Dr. Sumit.M.Bilgaye** student of MBA Hospital Management from The IIHMR University, Jaipur has undergone internship training at Mediqop Consultancy on topic **A Study on Gap Assessment of Small Healthcare organizations to Entry level Pre-accreditation NABH standards** from 19th Feb 2018 to 16th May 2018.

He has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific, and analytical.

The Internship is in fulfillment of the course requirements.

I wish him all success in all his future endeavors.



Ashok Kaushik
Dean, Academics and Student Affairs
The IIHMR University, Jaipur



Dr. Neetu Purohit
Associate Professor
The IIHMR University,

Ref. No.: _____

Date: _____

Appendix E

Certificate of completion of Internship/dissertation for the duration of at least three months from the organisation.

The certificate is awarded to

Dr. Sumit M Bilgaye

In recognition of having successfully completed his
Internship in the department of

Name of Department: Quality

and has successfully completed his Project on

A study on gap analysis for Entry level NABH standards in small healthcare organizations.

Date: 19 February 2018 to 16 May 2018

Organization : Mediqop Management Services

He comes across as a committed, sincere & diligent person who has a strong
drive and zeal for learning

We wish him all the best for future endeavors

Training & Development

Head-Human Resources



THE IIMR UNIVERSITY, JAIPUR

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This is to certify that the dissertation titled **A Study on Gap Assessment of Small Healthcare organizations to Entry level Pre-accreditation NABH standard** submitted by Dr. Sumit M. Bilgaye under the supervision of Dr. Neetu Purohit for award of MBA Hospital Management of the University carried out during the period from 19th February 2018 to 16th May 2018 embodies my original work and has not formed the basis for the award of any degree, diploma association, fellowship, titles in this or any other institute or other similar institution of higher learning.



Signature

ACKNOWLEDGEMENT

The successful completion of any given task requires a lot of challenging work and sincere efforts. Challenging work and efforts are only the building blocks of an assignment, but the plinth has to be inspiration, suggestion, support and guidance.

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Dr Sumit M Bilgaye

Assistant Quality Manager

MEDIQOP, Dwarka, Delhi

TABLE OF CONTENTS

S.NO.	TITLE	Pg No.
1.	CHAPTER 1-INTRODUCTION	1
1.1	RATIONALE	13
2.	CHAPTER 2-REVIEW OF LITERATURE	17
3.	CHAPTER 3-METHODOLOGY	22
3.1	AIM	16
3.2	OBJECTIVES	16
3.3	STUDY DESIGN	16
3.4	STUDY LOCATION AND DURATION	16
3.5	SAMPLING FRAME	16
3.6	SAMPLING SIZE	17

3.7	SAMPLING TECHNIQUE	17
3.8	DATA COLLECTION TOOL	17
3.9	DATA COLLECTION METHOD	17
4.	CHAPTER 4-RESULT	25
5.	CHAPTER 5-CONCLUSION	32
6.	INSTRUMENTATION	36
7.	APPENDIX	37
8.	BIBLIOGRAPHY	38

LIST OF FIGURES

S.NO.	TITLE OF FIGURES	Pg. No.
1.	Figure 4.1- Gap Analysis for compliance to Objective Elements for SHCOs A,B and C	21
2.	Figure 4.2-Gap Analysis for compliance to Objective elements for SHCOs A,B and C in percentage.	22
3.	Figure 4.3-Gap Analysis for compliance to Objective Elements for SHCOs D,E and F	23
4.	Figure 4.4-Gap Analysis for compliance to Objective elements for SHCOs D, E and F in percentage.	24
5.	Figure 4.5-Gap Analysis for compliance to Objective Elements for SHCOs G,H and I	25
6.	Figure 4.6-Gap Analysis for compliance to Objective elements for SHCOs G, H and I in percentage.	26
7.	Figure 4.7-Gap Analysis for compliance to Objective Elements for SHCOs J,K and L	27
8.	Figure 4.8-Gap Analysis for compliance to Objective elements for SHCOs J, K and L in percentage	28
9.	Figure 4.9-Comparison of Compliance between the SHCOs	29
10.	Figure 4.10-Comparison of Compliance between the SHCOs in percentage	30
11.	Figure 4.11-Plotting of Line Graph	31

CHAPTER 1

INTRODUCTION

India has made great strides in the field of healthcare in past years, which can be seen from the reduced infant mortality rates, maternal mortality rates etc. (NFHS4). Despite the rapid growth of the health industry in India, patient safety and quality care remain a concern. This growth does not suffice the needs of a rapidly growing population of India. Just to meet the basic health needs of the masses, many small hospitals spring up which may not have adequate facilities and proper quality, thus risking the lives of patient and giving them unnecessary economic burden. In already resource scarce nation, such small health organizations put additional burden. The consumers are becoming increasingly aware and quality oriented & do not hesitate to pay a little extra for better facilities offered. Owing the increased preference for quality services the hospitals have to scale up the quality of services provided by them.

On the international front, there is ISQua for monitoring quality. The International Society for Quality in Healthcare is a global organization and was established in 1985. The aim is to, have quality of care and patient safety worldwide by various methods like by inspiring the healthcare organizations, education and creating a system of networks of accredited healthcare worldwide (31). ISQua is involved in the accreditation of national and regional healthcare facilities worldwide via the “International Accreditation Programme”. ISQua is responsible for assessing the standards of organizations who set benchmarks in healthcare safety and quality and this society is the standards. (31)

Joint Commission International is a U.S. based not for profit accreditation body founded in 1994, which sets and designs standards and processes to create a culture of ethics, safety and quality within an organization that strive to improve continuously the process of patient care and the outcomes. “It is the oldest and largest standards-setting and accrediting body in health care in the United States, it

evaluates more than 20,000 organizations and inspires them to excel in providing safe and effective care. Many sets of standards for healthcare organizations are taken by the International Society for Quality in Health Care (ISQua) which were set by JCI. This accreditation provides assurance that the standards, training, and processes used by JCI to survey the performance of health care organizations meet the highest international benchmarks for accreditation entities. JCI accreditation is considered gold standard in global healthcare. Again, accreditation by JCI is a voluntary process, where the healthcare organization can apply for accreditation in its free will. They (JCI assessors) will assess the HCO against the standards set by them which will enhance patient safety and quality of care. The standards set by JCI are easy to achieve, economical and optimal (30).

At the Asian level, on October 2006, during the 24th ISQua International Conference, a special session for regional and national quality healthcare societies was held in Boston, USA. In this conference, The Asian Society for Quality in Healthcare (ASQua) was found by a group of National Societies from Malaysia, Japan, Thailand, India, Taiwan, and the Philippines; dedicated to the improvement of quality in healthcare at national and international levels; under the auspices of ISQua. The ASQua's commitment to achieve its aim through collaboration, network and association with other health and quality related individuals and Asian organization (32).

The directive "*primum non nocere*" {First do no harm} is the central tenet for contemporary medicine. More than 140 yrs ago Florence Nightingale warned, "the very first requirement in a Hospital is that it should do the sick no harm" (Nightingale, 1863, preface). Thus, patient safety assumed a very important role, which itself is subset of health care quality. This led the Government of India to establish in 1997, Quality Council of India, which is responsible for setting the quality initiative in India. The Quality Council of India (QCI) was established by the Government of India in setting up organizations in partnership with the Indian industry. The industries are FICCI, ASSOCHAM and CII. The very mission of QCI to start a quality movement in India to emphasis adherence to quality in all spheres of life of Indians (38). To maintain the quality of hospitals and healthcare organization NABH was established.

In 2006, the Quality Council of India, established National Accreditation Board for Hospitals & Healthcare Providers (NABH), as one of its constituent board. It establishes and operate accreditation programmes for healthcare organizations. The board is structured to maintain the quality of healthcare services given to patients in India and to set benchmarks for progress of health industry. This board set by QCI, has full functional autonomy, even if it has been supported by many stakeholders like customer, industry and government to name a few (<http://www.nabh.co>). NABH is formed to support improvement of quality of healthcare service in our country for all strata of the population, meaning it is equitable in nature through various methodologies and tools to supplement the efforts of the providers of healthcare service and the requirements of the system at various levels. “NABH therefore intends to be a robust, accessible and competent organization to compliment the healthcare system to improve its efficiency and the predictability of healthcare outcomes”, said by CEO of NABH.

The vision of NABH is as follows, “To be apex national healthcare accreditation and quality improvement body, functioning at par with global benchmarks.” (<http://www.nabh.co/introduction.aspx>).

and mission of NABH is to provide accreditation to HCOs which have met the standards set by NABH focusing on patient safety and quality, through self-assessment by HCOs and then assessment by NABH assessor. The standards are made taking best international quality practices (41).

Objectives of NABH is as follows.” (41).

- Accreditation of healthcare facilities
- Many qualities enhancing and promotion initiatives like Safe-I, Excellent Nursing practices, laboratory certification programs not limited to these and many more programmes.
- Various IEC activities like public lecture, advertisement, workshops/seminars
- Education and Training for Quality & Patient Safety
- Recognition by endorsement of various healthcare quality courses/workshops.

According to NABH the definition of accreditation is as follows, "A public recognition of the achievement of accreditation standards by a healthcare organisation, demonstrated through an independent external peer assessment of that organisation's level of performance in relation to the standards".

The benefit for an organization to achieve this NABH accreditation is as follows (42):

- Accreditation benefits all stake holders. Patients gain the maximum with accreditation, thus resulting in high quality of care and patient safety.
- The patients get services by credential medical staff. Every patient has right, which is respected and taken care of. By asking patient to fill feedback forms, their satisfaction levels are monitored, to improve quality of care.
- The group of persons working in an accredited health care organization are satisfied as the organization provides for continuous learning, good working environment, leadership and above all ownership of clinical processes (because of credentialing).
- The quality is not one-time achievement but is a continuous one. This is initiated by accreditation, because the HCO has to be committed for improvement in everyday quality of care. Even the organization after accreditation has many advantages as the customers(patients) have huge trust in such hospitals and comes in large numbers. This increase in volume of patients, lead to increased motivation and confidence in the HCO, which help them to raise their standards, improve each passing day and thus try to reach global levels of quality benchmarks set.
- Finally, accreditation provides insurance companies and TPA (third party administrators) confidence and thus lead to the empanelment of the HCOs. This benefits the patients at large. Accreditation provides access to reliable and certified information on facilities, infrastructure and level of care to the patients.

NABH accreditation leads to foreign tourists approaching to Indian hospitals for good quality and reliable care at affordable price. India has 22-25 per cent growth in medical tourism and the industry is expected to double its size from present (April 2017) US\$ 3 billion to US\$ 6 billion by 2018. Medical tourist arrivals in India increased more than 50 per cent to 200,000 in 2016 from 130,000 in 2015. (37).

The NABH accreditation is for Healthcare organizations, which are places that offer treatment to patients. Health care organizations in India can be divided into 3 categories based on number of beds-

- (a) Category C hospitals or Small Healthcare organizations are located in many places for easy reach. They have 50 or fewer beds and provide primary care. These are clinics and nursing homes.
- (b) Category B hospitals have 51-100 beds, provide some specialty care, have few designated departments including some investigation facilities. They have arrangements to provide basic care to patients and their relatives.
- (c) Category A hospitals have bed strength more than 100 beds, are multispecialty, use better diagnostic technology and attract superior, experienced and qualified professionals (26).

There are approximately 50,000 healthcare organizations functioning in India as provided in NABH website, where majority can be categorized as the Small Healthcare Organization (SHCO). The SHCOs are defined by NABH, as those healthcare organizations (HCO) having less than 50 beds and have all medical facilities, utility and supportive services as claimed by SHCOs.

The centers offering super speciality services like rheumatology, neurology, orthopaedics etc. and should have qualified superspecialist with DM/Mch degree. are also included. The polyclinic and diagnostic Centers are excluded (43).

As per the information provided by NABH website, majority (around 90%) of healthcare organizations are having less than 100 beds, therefore there was a demand to have specific guidelines for small healthcare organizations so that they can also easily apply for accreditation, get themselves certified as a destination of quality care. In Delhi as per the data available on nursing home cell of Delhi Government; out of total registered 933 private nursing homes and hospital 878 are Small healthcare organizations (SHCO)

(http://www.delhi.gov.in/wps/wcm/connect/doi_health/Health/Home/Directorate+General+of+Health+Services/Nursing+Home+Cell). The present standard for Small Health Care organisations (SHCO) is compiled by taking only 41 standards of total 105 standards and 149 objective elements of total 686 elements of full NABH accreditation programme (NABH Standards 4th edition, 2015), which are relevant for small healthcare organisations. Government is confident and expects that these SHCOs will comply to

these entry level pre-accreditation standards and give best quality care and will create a culture of quality in India (<http://www.nabh.co/shco-standard.aspx>).

Pre-Accreditation Entry Level NABH Standards for SHCO has 10 Chapters containing 41 Standards and 149 Objective Elements, keeping in view the SHCOs, so that they can easily implement it.

Outline of NABH Chapters are:

Patient Centered Standards:

- Access, Assessment and Continuity of Care (AAC)
- Care of Patient (COP)
- Management of Medication (MOM)
- Patient Right and Education (PRE)
- Hospital Infection Control (HIC)

Organisation Centered Standards:

- Continuous Quality Improvement (CQI)
- Responsibility of Management (ROM)
- Facility Management and Safety (FMS)
- Human Resource Management (HRM)
- Information Management System (IMS) □

(<http://www.nabh.co/SHCO-Pdf.aspx>)

The SHCO which wish to get pre-accreditation entry level NABH, must have conducted self-assessment against NABH Pre Accreditation Entry Level standards after implementing for at least 3 months before submission of application and must ensure that it complies with the standards. (<http://www.nabh.co/SHCO-Entrylevel.aspx>). After achieving pre-accreditation entry level NABH, the organization should strive for progressive level NABH and then finally full accreditation. This shows the commitment of the Small healthcare organization towards continuous improvement in quality and giving the best possible care to patients.

There are total accredited 140 SHCO in India and 300 are certified pre-accreditation entry level SHCOs in India. (34)

1.1 RATIONALE

From the census 2011, it is clear that approximately 70% population lives in rural areas and only 30% in urban areas. Since going to private practitioners is costly, they prefer to go to government hospitals with no proper basic facilities and overcrowded places. But due to poor availability of doctors, short supply of medicines and poor quality they are forced to go to the private hospitals and practitioners. This gap of demand and supply is filled by private nursing homes and hospitals but at a huge cost! According to report published on November 2017 by KPMG, the share of private hospitals in total number of hospitals is 74% and in total number of hospital beds is 40%. There is a huge earning possibility in the hospital industry, as a result of which a large number of entrepreneurs and technocrats are investing in setting up hospitals. Nowadays a group of doctors come together and set up polyclinics and nursing homes with small number of beds (say less than 50) and start minting money. Doctors in private places are available but the cost of their consultation, medicines cost and travelling expenses for poor put a lot of strain on them leading to very high out of pocket expenditure (MoHFW). But it was observed that even these private hospitals and nursing homes were shabby and did not give quality care to patients (26)

In Indian scenario, there are about 50,000 HCOs in India. As of 28 February 2014, 201 Large HCOs and 29 small (<50 beds) HCOs are accredited by NABH. In addition, 397 large HCOs and 123 small HCOs are in the process of gaining accreditation. This means that only small percentage of HCOs is accredited or is in the process of accreditation.

The first reason for such a small percentage may be because NABH accreditation is a voluntary process. Not only is there is no compulsion for HCOs to opt for it, but HCOs may also not perceive it as an added value. There is no evidence available that has proved that NABH accreditation has improved the business prospects of HCOs by making them more profitable. Hence the HCOs may distinguish this painful journey to be a path of “no returns”. Also, because this

NABH accreditation process has been felt to be so difficult, many HCOs do not feel the need to begin on such a strenuous journey. (16)

Approximately 50,000 Health care organizations are functioning in our country out of which significant number fall under the Small Healthcare Organization (SHCO). Lack of knowledge, poor insurance coverage and challenges faced by the SHCOs for accreditation are road block for enhancing the level of quality care across the country. From NABH website we know that almost 90% of hospitals are with less than 100 beds, there was a demand to have specific guidelines on how to apply hospital accreditation standards for small healthcare organizations or carve out separate standard. To be more inclusive and encourage SHCOs to join quality journey NABH has developed Pre-Accreditation Entry Level standards, in consultation with various stakeholders in the country, as a stepping-stone for enhancing the quality of patient care and safety. Pre-Accreditation Entry Level NABH standards which is almost 25% of the full accreditation NABH standards, requires SHCO aspiring to achieve entry level standards, to focus on the minimum critical elements important for patient safety. This process is thought to be affordable and will motivate the SHCOs to adopt quality as their organizational culture and to attain the next stage (progressive level) and eventually full NABH accreditation. These are easily achievable, sustainable, and are equally applicable in both government and private hospitals. This will facilitate small healthcare organisations for easy understanding of standards and the easy implementation of the same. These standards also apply to single specialty hospitals. Apart from patients, who are going to be the biggest beneficiaries from accreditation, it is envisaged to provide easy and transparent mechanism for empanelment of small healthcare organisation(s) by Government, Corporate and the Insurance companies. The SHCOs accredited by NABH will have global reputation and recognition, as they become a quality destination for treatment, which in turn will provide boost to the medical tourism in our country.

A recent study by KPMG, shows that only 27% of Indians are covered by health insurance. Of these also majority are belonging to high income group who can afford to buy one. The government through Rashtriya Swasthya Beema Yojana (RSBY) is trying to cover the poor, but still is far behind. According to a new

notification from IRDAI, it is now going to be mandatory for all small and big hospitals and healthcare organizations to get at least entry-level NABH accreditation, in order to continue their insurance tie-ups and to continue providing cashless services.

"All such providers offering cashless services for allopathic treatment shall meet with the pre-accreditation entry level standards laid down by National Accreditation Board for Hospitals (NABH) or such other standards or requirements as may be specified by the Authority from time to time within a period of two years from the date of notification of these Guidelines. (Explanatory Note: Network Providers are to visit NABH website for details regarding procedure for obtaining the necessary accreditation)"(33)

Ref notification: (IRDA/HLT/REG/CIR/146/07/2016 dated 29.07.2016)

In such scenario, it is very important for the SCHO to get at least entry level NABH accreditation.

There is no organization to monitor these SHCOs, whether they are operating with required basic standards of quality or not. As NABH is a voluntary process, nobody can force these organization to undergo any type of accreditation. Many times, these organization don't undergo the accreditation process due to heavy paper work involved, as reported in Chennai, where hospitals should mandatorily undergo NABH accreditation to be eligible for Chief Minister's State Insurance scheme. Similarly, it is made mandatory in other states as well like in Madhya Pradesh and Haryana, where if the healthcare organization is not accredited by NABH at least entry level then the organization will be de-empanelled from government health insurance scheme. So now at least the healthcare organizations are willing to undergo entry level NABH accreditation. The Janani Suraksha Yojana (JSY) of the Government of India, under the National Rural Health Mission (NRHM), has also made accreditation mandatory for private health organizations wishing to participate in order to promote quality and encourage institutional deliveries (MoHFW, 2005: 12, 39).

The technical quality of care depends on the competence of the personnel involved and adherence to clinical protocols and standard treatment guidelines. While the accredited hospitals ensure both, in the case of non-accredited private hospitals, technical quality of care is suspect. (22)

But whether these SHCO are capable enough to undergo pre-accreditation entry level NABH? This very basic question is answered with this study. The reason for this study is clear as can be seen from above arguments. Because of lack of knowledge, awareness and the ignorant attitude of these SHCO, the NABH came up with pre-accreditation entry level self-assessment toolkit for such organizations. Using this toolkit, the organization can compare themselves to the standards mentioned and can analyse where they stand. This study aims to study the compliance of the organizations to the standards mentioned in the pre-accreditation entry level. For the ease of study, the organizations are divided into 4 stages on basis of time period:

- (a) those SHCO which got entry level NABH pre-accreditation (stage 4)
- (b) those which are completely ready for pre-assessment for entry level NABH. (stage 3)
- (c) those SHCO 2 months post filling application before entry level pre-accreditation. (stage 2)
- (c) those SHCO which have just filled the application (stage 1)

CHAPTER 2

REVIEW OF LITERATURE

In a study on hospital accreditation in middle and low-income countries it was found that, hospital accreditation was first developed in the United States by the American College of Surgeons close to 100 years ago [3]. Spread to other countries was slow at first but accelerated in the 1980s and 1990s, chiefly in English-speaking developed countries [6].

In a handbook compiled by Apollo Hospital, Dhaka, Bangladesh, it says that accreditation by JCI is an effective quality evaluation and management tool for ensuring a safe care environment which helps continuous improvement process to reduce risk to patient and staffs. There are total 16 chapters in which, 8 are patient centered chapters, 6 are organization management centered chapter and 2 are academic medical centre hospital chapters.

One of the study, reviews the various organizations in the United States that perform accreditation and establish standards for healthcare delivery. These agencies include the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the National Committee for Quality Assurance (NCQA), the American Medical Accreditation Program (AMAP), the American Accreditation HealthCare Commission/Utilization Review Accreditation Commission (AAHC/URAC), and the Accreditation Association for Ambulatory HealthCare (AAAHC). In addition, the Foundation for Accountability (FACCT) and the Agency for Healthcare Research and Quality (AHRQ) play important roles in ensuring the quality of healthcare. It was observed that accreditation is generally viewed as a desirable process to establish standards and work towards achieving higher quality care, but it has its own limitations. (27)

In another study done, it was found that, more recently, accreditation has been adopted in a number of low- and middle-income countries (LMICs) as a strategy to improve quality of basic health care [2], [9], [1], [7], [11], [13]. It is observed that fast increase of universal health coverage (UHC) in LMICs through insurance also appears to have accelerated the use of accreditation and accreditation-like systems [4]. Such systems are attractive to insurers as a way of defining which institutions may participate and which

might receive bonus payments. Accreditation also appeals to governments seeking to provide UHC since it permits the use of independent professional surveys to ensure that financing for health care services is provided only to facilities that meet a high standard of care [8]. External validation of quality is thought to be provided by accreditation of healthcare organizations, in a scenario where medical care is highly variable from one place to another [5]. Such proof can have an impact on consumer behavior, generating a new or increased income stream for accredited institutions as a result of the insurance support new patients bring with them. (25)

Another example of both standards development and indicator use is currently being developed in India, where the National Accreditation Board of Hospitals (NABH) has to date been able to accredit relatively few hospitals within this vast country [10]. In a study, to evaluate the attitude of medical staff to accreditation and then the knowledge on accrediting standards. This study is conducted with the objectives to identify the attitude level of medical staff on accreditation, as well as their knowledge level on NABH standards. The study revealed that medical staff had a positive attitude and improved knowledge about accreditation after 6 months working in a hospital on the way to NABH. The attitude reflected in their positive approach in managing patients under better work atmosphere thus, indirectly reflecting on the benefit to the society as whole. The next decade shall see a great change in the health care sector and there is a need for standardization of health care delivery at all levels, which at the moment is lacking in India. The standardization can come if we adopt some sort of uniform accreditation. For proper deliverance of health care, the role of medical staff is significant. (20)

A study by PH.Rao , on importance and need of accreditation which asks the question, does accreditation ensure quality of care and lead to improved outcomes? In India, Wockhardt Hospital in Bangalore, under JCI accreditation implementation, achieved noteworthy decreases in the monthly rate of ventilator-associated pneumonia (from 17 to 7); surgical site infections (from 3.25 to 0.9); hospital associated urinary tract infections (from 15 to 4) and blood stream infections (from 19 to 3) during the period May 2007 to May 2008 (Cooper, Helfrick and de Silva, 2009). Indraprastha Apollo Hospital in Delhi reduced medication errors by 78 per cent, and its revenue grew by 20 per cent in the six months after it received international accreditation from JCI

(http://johnpunnoose.com/yahoo_site_admin/assets/docs/Indraprastha_Apollo_Hospital_-_Delhi_-_India.30354104.pdf). The Apollo Hospitals Group, with 8,000 beds across 47 hospitals (7 accredited by JCI, 2 by NABH) performed over 7,600 cardiac surgeries during 2009–10 with a 99.2 per cent success rate (Apollo Hospitals, 2010: 18).

In India, hospitals at all three NABH accreditation levels are paid more than non-accredited hospitals by certain health plans. (Gyani, 2013) The study on LMICs also show that, UHC in India is the responsibility of individual states, resulting in very large government-sponsored insurance companies being developed on a state-by-state basis. Recently the Aarogyasri Health Care Trust, the insurer to more than 65 million people in the state of Andhra Pradesh, began work on identifying standards and indicators that will be required of all hospitals empaneled to provide care to their beneficiaries. The Trust is working with NABH to ensure that their standards and indicators are consistent with those required of accredited hospitals, with the expectation that this consistency will both improve care in the short term and encourage more hospitals to achieve accreditation. With support from the World Bank, insurers from several states are meeting on a regular basis to co-develop a shared set of standards and indicators that encourage hospitals to move towards a harmonized system of providing higher quality service delivery [12]. The hope is also that this will lessen the reporting burden and streamline the number of quality measures—something that is sorely needed in the “developed” world, where measures of quality have multiplied. The current test case for this work is focused on neonatal care delivery and the first patient-level results should be available later in 2014. The expanded health care financing made available under UHC schemes makes it possible to develop financial incentives such as additional payment per case for good performance, or a general bonus for good performance. (25)

In a study in Delhi, on Hospital acquired infections, the study was carried out at three ICU's of Hospital A in North-West Delhi—Surgical Intensive Care Unit (SICU), Respiratory Intensive Care Unit (RICU) and Medical Intensive Care Unit (MICU). It was found that in the SICU and RICU the strict PPE were used; hand hygiene was strictly followed which are part of NABH standards the incidence of HAI was very low but in MICU it was not followed with complete vigilance, so the incidence of HAI was high. The definition of Hospital acquired infections is as follows:

An infection that is acquired by or originates in a patient while in hospital or other health care facility and refers to a new disorder associated with being in a hospital, unrelated to the patient's primary condition for which he or she is admitted.

Patients admitted to hospital for some ailments, get HAIs during some diagnosis procedure or surgery or by cross infection. The Centers for Disease Control (CDC) of the US Department of Health and Human Services has shown that about 36% of these infections are preventable through the adherence to the Standard operating procedures for infection control by the health care workers.

This work is important as now awareness among patients is increasing and also as per law in some countries the financial liability of HAI lies with the hospitals itself. As is rightly said prevention is better than cure, if we prevent HAI, financially the burden is going to be less than when we are already fighting with the infection. Furthermore, the mortality rate is going to be lesser than if we can't prevent infections as they are positively correlated. (7)

In another study conducted by Sudha.P, published in IMA Kerala Medical Journal ,2015 where gap analysis was done for Major OT complex standards in a tertiary care hospital against NABH standards, it was found that it was poorly compliant due to lack of proper documentation because of unawareness.

In another study done on antimicrobial resistance in India, it is found that different hospitals have different standards infection control. Some organizations report successful initiatives, while there is paucity of published data on the existence of an antibiotic policy in the majority of Indian hospitals or on their compliance with existing policies. [11], [12], [13], [14]. As per data available from NABH assessor's conclave, most accredited hospitals, though having a well written antibiotic policy on paper, are not compliant in practice. [15] (Ghafur A and et al.,2013)

As we can see from above literatures, there is a huge need of a standardized provision of quality care in health care organizations. This is provided by NABH standards. Also, from above literatures it is evident that many organizations post achievement of NABH accreditation are very relaxed and not compliant to standards. But a research gap can be seen, as no much study has been performed on the gap assessment of SHCO comparing them at various stages of pre-accreditation entry level NABH and after entry level

NABH pre-accreditation. This project aims at doing the gap assessment of small healthcare organizations at various stages of pre-accreditation and after achieving entry level NABH pre-accreditation certification and comparing the findings so obtained.

CHAPTER 3

METHODOLOGY

3.1 Aim:

Gap analysis and assessment of Small Healthcare organizations (SHCOs) as per NABH pre-accreditation entry level standards.

3.2 Objectives:

1. To identify gaps as per the NABH pre-accreditation entry level hospital standards for SHCOs.
2. To compare the compliance of SHCOs for entry level pre-accreditation NABH standards, before and after obtaining entry level pre-accreditation NABH certification.
3. To give suggestions and recommendations for filling the gaps in SHCOs, in accordance to pre-accreditation NABH entry level standards.

3.3 Study Design: Descriptive Cross-sectional study

- **Operational definition of SHCO:** It is defined as those healthcare organizations, with less than 50 beds.
- **Operational definition for Pre-accreditation entry level NABH standards:** NABH Pre Accreditation Entry Level Standards for SHCO has 10 Chapters incorporating 41 Standards and 149 Objective Elements.

3.4 Study Location and Duration: The study was done in Small healthcare organizations in New Delhi and nearby regions for duration of 3 months.

3.5 Sampling frame: All Those small health care organizations which get consultancy services from Mediqop, Delhi. As of now there are approximately 60 small healthcare organisations which get consultancy services from Mediqop.

3.6 Sampling size: 12 SHCO in New Delhi and nearby region out of 60 projects which Mediqop is handling.

3.7 Sampling Technique: Non-probability Sampling, where convenient sampling was done, as these SHCOs were assessed during three months' time out of total sampling frame.

3.8 Data Collection

Data collection tool

Pre-accreditation entry level NABH self-assessment toolkit which include 5 chapters for patient centric and 5 organization centric chapters.

- Chapter 1 Access, Assessment and Continuity of Care (AAC)
 - Chapter 2 Patients' Rights and Education (PRE)
 - Chapter 3 Care of Patients (COP)
 - Chapter 4 Management of Medications (MOM)
 - Chapter 5 Hospital Infection Control (HIC)
- 5 chapters of organization centric chapters:
- Continuous Quality Improvement (CQI)
 - Responsibility of Management (ROM)
 - Facility Management and Safety (FMS)
 - Human Resource Management (HRM)
 - Information Management System(IMS)

3.9 Data Collection Method

The Pre-accreditation entry level NABH self-assessment toolkit was used for data collection, where for assessing some objective elements, observation was required, for some other elements reviewing of SHCO manuals, policies and records was required and in some, interview with the hospital staff and patients was required. The NABH toolkit consists of:

- 1) Implementation (YES/NO): Whether the objective is implemented in the department or not.
- 2) Documentation (YES/NO): If the objective is implemented, whether there is proper documentation regarding same or not.
- 3) Evidence: If there is proper documentation of the said objective, then evidence will be collected regarding the same.

4) Score (0/5/10): Once all the above criteria is fulfilled score would be given as follow

- Compliance to the requirement:10
- Partial compliance to the requirement: 5 (if any of the samples is found to be non-compliance of total sample selected.
- Non-compliance to the requirement: 0
- Not applicable: NA

Inclusion criteria and Exclusion criteria for SHCO: According to NABH website, SHCO include super speciality centres, which reflect requirement of DM/Mch or equivalent qualified personnel. And exclude all the polyclinics and diagnostic centres.

Data Analysis: The data collected by interviews and observation of the staff and also after comparing the SHCO with self-assessment toolkit for pre-accreditation entry level NABH standards both before and after pre-accreditation, it was analyzed quantitatively on excel sheet. The analysis shows that, those SHCOs which are just about to go for assessment (in 4-5 months' time) are most compliant to standards , while those SHCOs who have just filled the application are least compliant. The SHCOs which obtained the entry level NABH pre-accreditation are less compliant than those SHCOs which are about to undergo assessment.

Ethical Considerations:

Purpose and importance of the study will be explained to the individuals. An informed consent will be taken before commencing the survey. Respondents will be assured about their volunteer participation in the study. Confidentiality will be maintained throughout the study and the participants will be informed about the objective of the study. The respondents will be informed that the study is for academic purpose only.

CHAPTER 4

RESULT

The result obtained as a result of gap assessment done for SHCOs, is presented in the form of graphs. These graphs are obtained after doing quantitative data analysis on excel sheet. A line graph is also plotted to compare the trend in the compliance in different SHCOs according to their status. 12 SHCOs are selected from total 60 SHCOs which are having consultancy service from Mediqop at present.

The SHCO are categorized into before entry level assessment at various time interval and post assessment entry level accreditation for this study

- 1) New Project (1-2 week)
- 2) 2 months after starting of project
- 3) Those SHCO who are about to go for assessment (pre-assessment approximately 4-5 month)
- 4) Post assessment after entry level pre-accreditation (approximately 2 months after entry level accreditation)

Three SHCOs in each of these stages were selected for study, so total 12 SHCOs were selected out of total 60 projects, right now Mediqop is handling, for entry level SHCOs.

Prior permission was taken from Mediqop consultancy as well as from respective SHCOs. SHCO identity was kept confidential.

Details of SHCOs under the study:

All SHCO selected for this study are below 50 bedded hospitals which mainly include nursing home, small multispecialty hospitals, maternity hospital and pediatric hospital. All hospital names are not disclosed for ethical reasons. So, hospitals are coded as A, B, C and so on. The SHCOs are grouped or categorized into four stages for the ease of study on the basis of time period from filling application for entry level NABH pre-accreditation to actually getting pre-accreditation. This time from application for pre-accreditation to actually getting entry level NABH pre-accreditation, is divided into three stages i.e.

Stage 1 – Those SHCOs which just filled application form (fresh start) for entry level NABH pre-accreditation (1-2 weeks), which has three SHCOs namely, A, B and C.

Stage 2 – Those SHCOs where 2 months' time period passed after filling of application for entry level NABH pre-accreditation, which has three SHCOs, namely, D, E and F.

Stage 3 – Those SHCOs where only 4-5 months are left for actual pre-accreditation NABH assessment. Here namely three SHCOs are G, H and I.

There is Stage 4, which are SHCOs which has obtained pre-accreditation entry level NABH certification. Here no sub groupings are present as after obtaining Pre-accreditation which is valid for two years, these SHCOs have to aspire for progressive level NABH accreditation and then ultimately go for full NABH accreditation.

Stage 4 – Those SHCOs which obtained entry level pre-accreditation NABH certification. It includes three SHCOs namely J, K and L.

The above information is tabulated as follows:

Sr. No	Categories	Stage	Categories according to time period	Code name
1	New project	Pre-assessment	Fresh start (1-2 weeks)	A, B, C
2	Before assessment	Pre-assessment	2 months after taking over project	D, E, F
3	Before assessment	Pre-assessment	Around 4- 5 months about to go for assessment	G, H, I
4	Post Entry level NABH accreditation	Post assessment	approximately 1 month after entry level accreditation	J, K, L

The data was collected by Self-assessment toolkit for pre-accreditation entry level NABH standards for Small healthcare organizations (SHCO). There are total 41 standards and 149 objective elements.

STAGE 1 SHCOs- A, B, C

The data is presented in the form of graph.

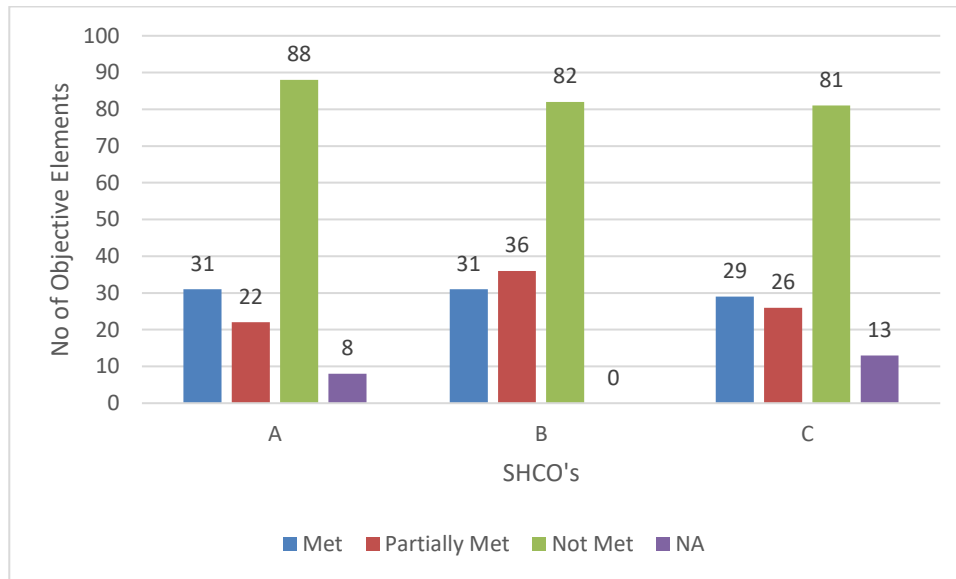


Figure 4.1-Gap Analysis (compliance to Objective elements) in SHCO A, B and C

The graph number 4.1 shows, three SHCOs A, B and C categorized as Stage 1. It shows that the SHCOs in Stage 1, are not compliant to around 80-90 objective elements. Around 25 -35 objective elements are partially met by these SHCOs. Only for around 29-31 objective elements, these SHCOs are compliant. Of the three SHCOs , SHCO B is in better position than A and C , as it is compliant to 31 objective elements and has the highest partial objective elements met(36), among them(A,B and C) .The total objective elements that they were supposed to be compliant is 149, according to entry level pre-accreditation NABH standards for SHCOs. This means, these organizations who have just applied for the pre-accreditation entry level NABH are very low in compliance to the standards.

The same data is expressed in percentages in the below chart:

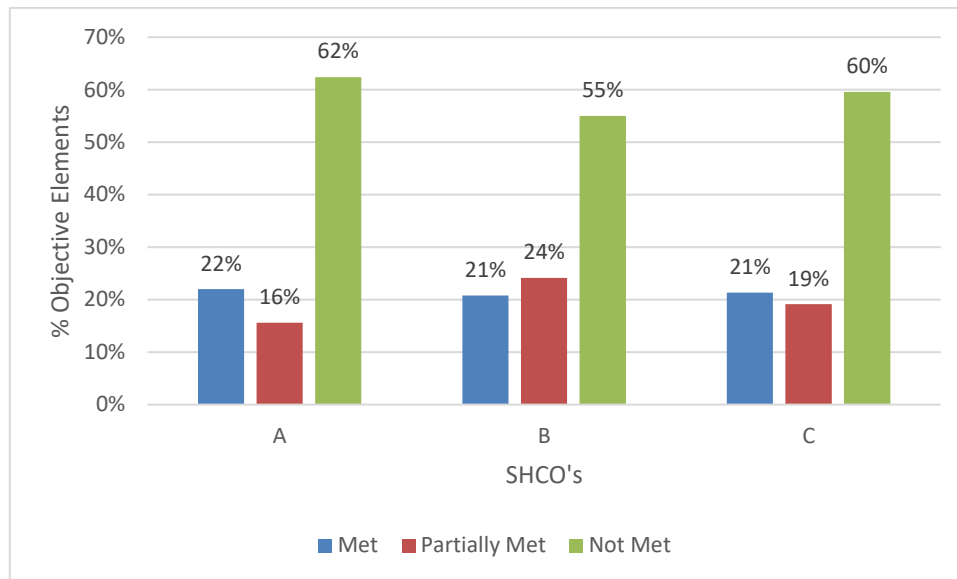


Figure 4. 2-Gap Analysis (compliance to objective elements in %) in SHCOs A, Band C

As can be seen from chart number 4.2, the compliance to objective element is only around 20-22% by the three SHCOs, 16-25% of objective elements are partially met and around 55-63% of objective elements are not met that is, they are not compliant to standards. Thus, the compliance to objective elements of entry level pre-accreditation NABH standards for Stage 1 SHCOs is very less and requires much improvement.

STAGE 2 SHCOs- D, E and F

The data is presented in the form of graph.

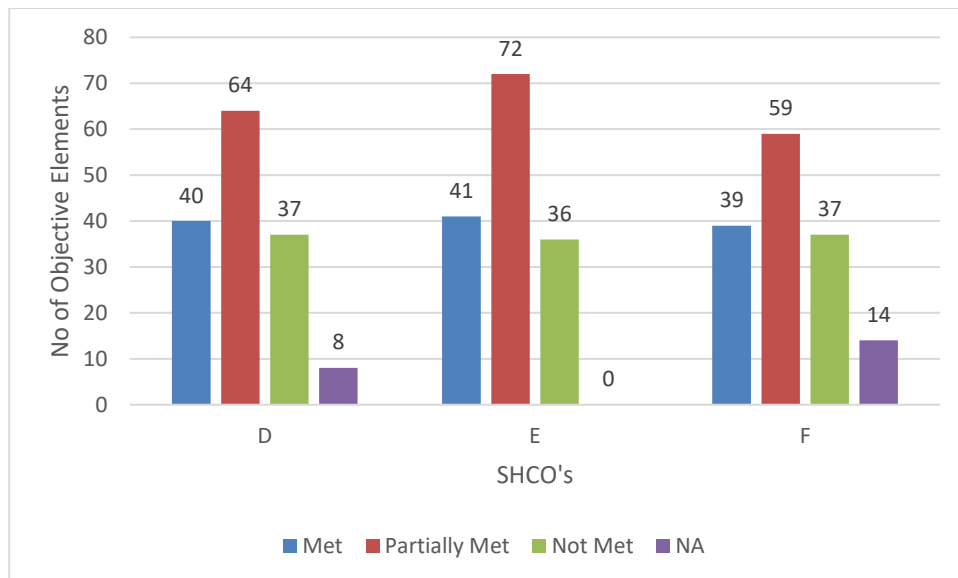


Figure 4.3-Gap Analysis (compliance to Objective elements) in SHCO D, E and F

The graph number 4.3 shows, three SHCOs D, E and F categorized as Stage 2. It shows that the SHCOs in Stage 2, are not compliant to around 36-37 objective elements. Around 59-72 objective elements are partially met by these SHCOs. Only for around 39-41 objective elements, these SHCOs are compliant. Of the three SHCOs, SHCO E is in better position than D and F , as it is compliant to 41 objective elements and has the highest partial objective elements met(72), among them(D,E and F) .The total objective elements that they were supposed to be compliant is 149, according to entry level pre-accreditation NABH standards for SHCOs. This means, these organizations who have just applied for the pre-accreditation entry level NABH are low in compliance to the standards.

The same data is expressed in percentages in the below chart:

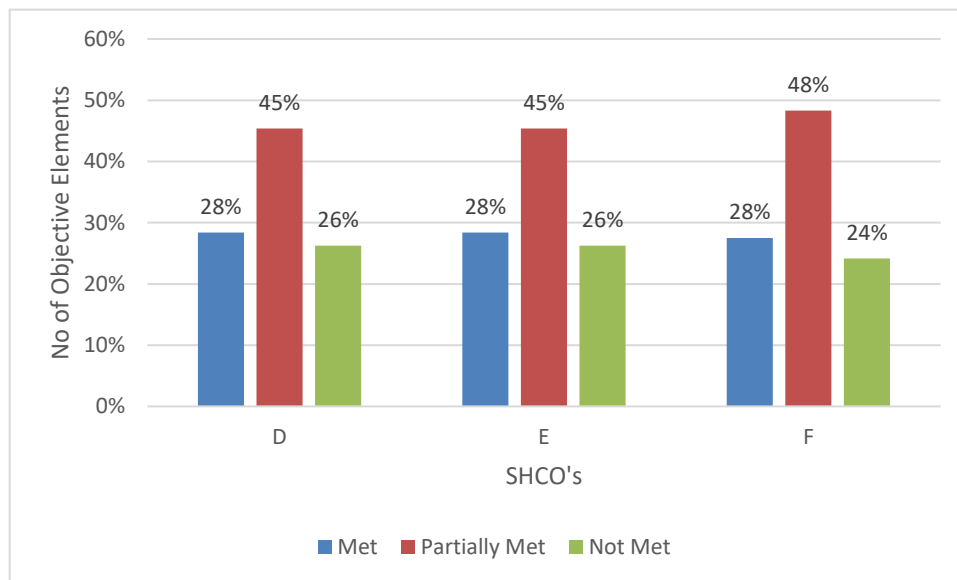


Figure 4.4-Gap Analysis (compliance to objective elements in %) in SHCOs D, E and F

As can be seen from chart no. 4.4, only around 27-30% of standards are met, 44-48% of objective elements are partially met and around 24-27% of elements are not met. Thus, the compliance to objective elements of entry level pre-accreditation NABH standards for Stage 2 SHCOs is just better than stage 1.

STAGE 3 SHCOs – G, H and I

The data is presented in the form of graph.

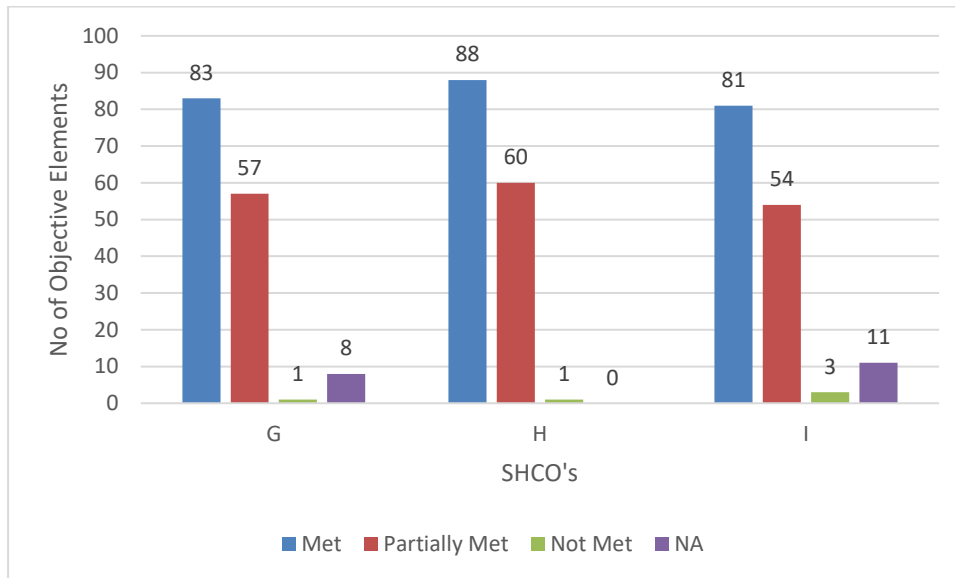


Figure 4.5--Gap Analysis (compliance to Objective elements) in SHCO G, H and I

The graph number 4.5 shows, three SHCOs G, H and I categorized as Stage 3. It shows that the SHCOs in Stage 3, are not compliant to around just inconspicuous 1 or 2 objective elements. Around 57-78 objective elements are partially met by these SHCOs. And impressively, for around 70-80 objective elements, these SHCOs are compliant. Of the three SHCOs, SHCO H is in better position than G and I , as it is compliant to 83 objective elements, among them(G,H and I) .The total objective elements that they were supposed to be compliant is 149, according to entry level pre-accreditation NABH standards for SHCOs. This means, these organizations who are just 4-5 months from actual NABH pre-accreditation entry level assessment are high in compliance to the standards.

The same data is expressed in percentage in the below chart:

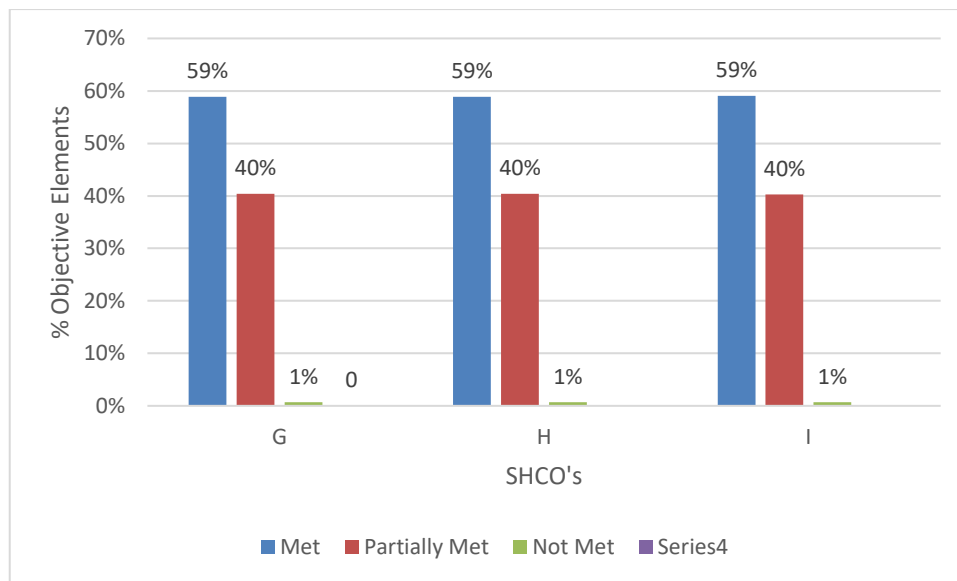


Figure 4 6--Gap Analysis (compliance to objective elements in %) in SHCOs G, H and I

As can be seen from chart no.4.6, there is compliance to around 45-56% of objective elements, 38-52% of objective elements are partially met and percentage of elements not met are inconspicuous. Thus, the compliance to objective elements of entry level pre-accreditation NABH standards for Stage 3 SHCOs which are just 4-5 months away from actual NABH entry level assessment, is very high.

STAGE 4 SHCOs- J, K and L

The data is presented in the form of graph.

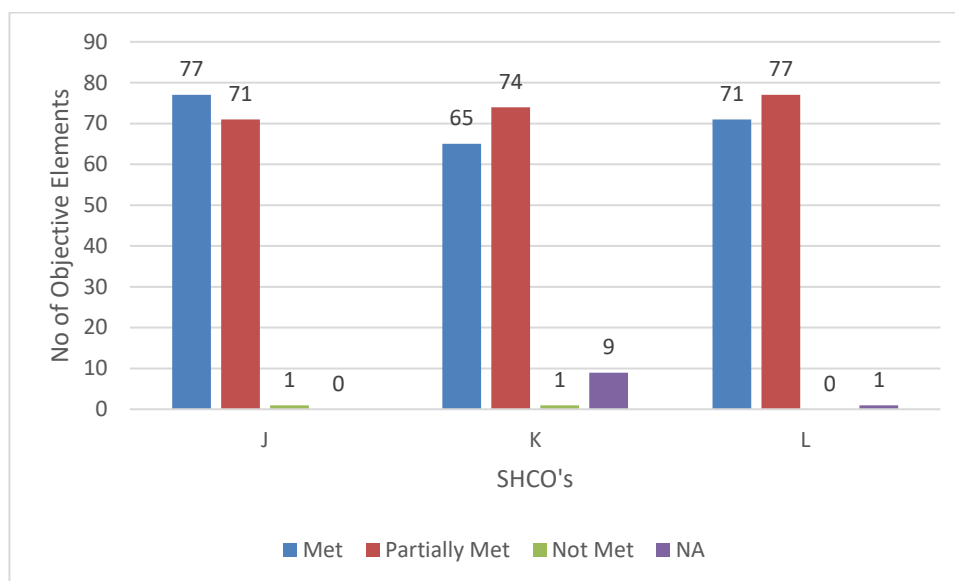


Figure 4.7- Gap Analysis (compliance to Objective elements) in SHCO J, K and L

The graph number 4.7 shows, three SHCOs J, K and L categorized as Stage 4. It shows that the SHCOs in Stage 4, are not compliant to around just inconspicuous 1 or 2 objective elements. Around 80-90 objective elements are partially met by these SHCOs. And for, around 52-72 objective elements, these SHCOs are compliant. Of the three SHCOs, SHCO K is in better position than J and L , as it is compliant to 69 objective elements and has the highest partial objective elements met(80), among them(G,H and I). The total objective elements that they were supposed to be compliant are 149, according to entry level pre-accreditation NABH standards for SHCOs. This means, these organizations, which got entry level NABH pre-accreditation certification are having more partial compliance than full compliance.

The same data is expressed in % form in the below chart:

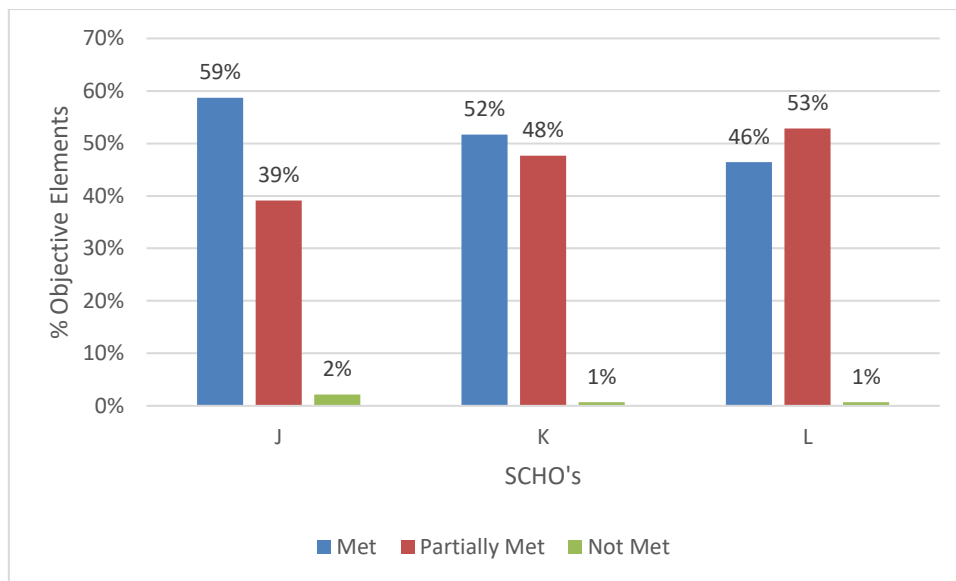


Figure 4.8- Gap Analysis (compliance to objective elements in %) in SHCOs J, K and L

As can be seen from chart no. 4.8, compliance of around 38-46% is present, 54-62% of objective elements are partially met and percentage of elements not met is inconspicuous. Thus, the compliance to objective elements by Stage 4 SHCOs i.e. J, K and L, is less as compared to Stage 3 SHCOs i.e. G, H and I.

COMPARISON OF COMPLIANCE BETWEEN FOUR STAGES

When the gap assessment of 12 SHCOs grouped into four stages, for ease of study, was done and was put together, the following chart was obtained. This graph is for comparison of compliance to objective elements in pre-accreditation entry level NABH standards.

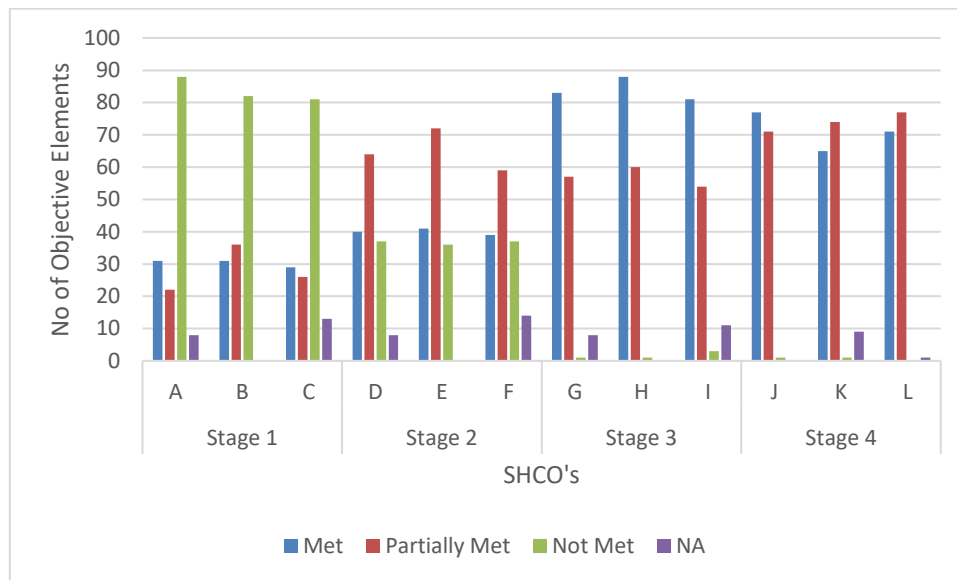


Figure 4.9- Comparison of Compliance to the objective elements by SHCOs

As can be seen from above chart no.4.9, the compliance to the number of objective elements increases as the stage progresses from 1 to 3, but then decreases slightly in Stage 4. The partial compliance to objective elements also increases as the stage progresses. But in Stage 4, the partial compliance to objective elements increases and the number of objective elements found compliant decreases. This is due to the fact that, the objective elements are documented well but not implemented in Stage 4 SHCOs i.e. J, K and L, thus increasing the partial compliance. The number of objective elements not met (not compliant) decreases progressively and by Stage 3 they become inconspicuous. This shows that between all SHCOs; SHCOs in Stage 1 i.e. SHCO A, B and C are least compliant and the SHCOs in Stage 3 i.e. G, H and I ; are most compliant.

The above chart when expressed in the percentage form can be seen as follows:

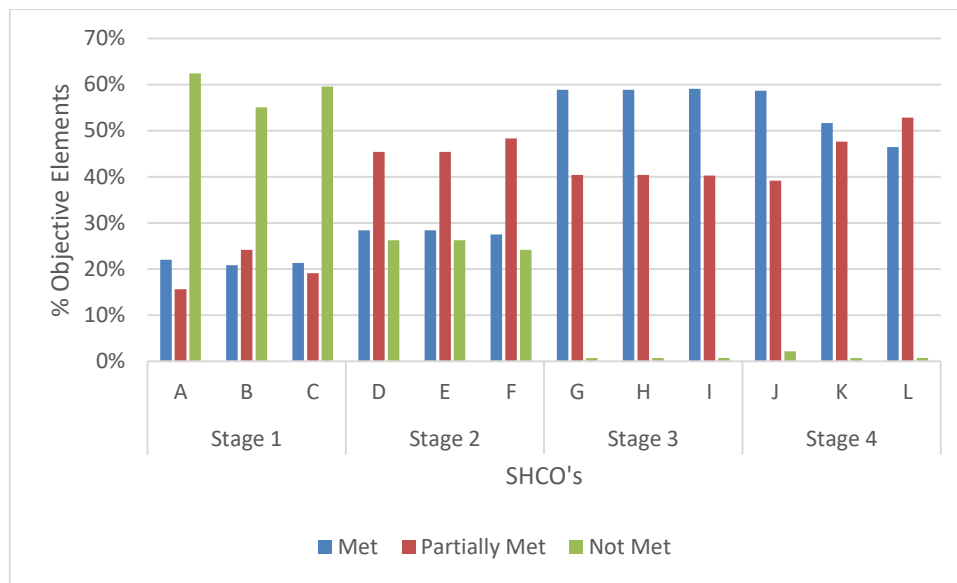


Figure 4.10-Comparison of Compliance (in %) to the Objective Elements by SHCOs

The chart number 4.10 shows that, the % of compliance to objective elements increases from 22% in Stage 1 to around 60% in Stage 3 and then decreases slightly to around 48% in Stage 4. The % of objective elements partially met increases from an average 18% in stage 1 to approximately 45% in Stage 2 but decreases to 40% in stage 3. The % of partial compliance increases in Stage 4 to around 52%. The % of objective elements not met decreases from on an average 55% in Stage 1 to becoming negligible in Stage 3 and 4. Thus, the least compliant to objective elements is SHCOs in Stage 1(A, B and C) (around 22%) and highest compliance is shown by SHCOs in Stage 3(G, H and I) (around 60%).

PLOTTING LINE GRAPH

The line graph is plotted to compare the trend of compliance to objective elements of pre-accreditation entry level NABH standards. The y-axis shows the percentage of compliance to objective elements and x-axis shows the 12 SHCOs grouped into 4 stages for the ease of study, on basis of time period for Accreditation.

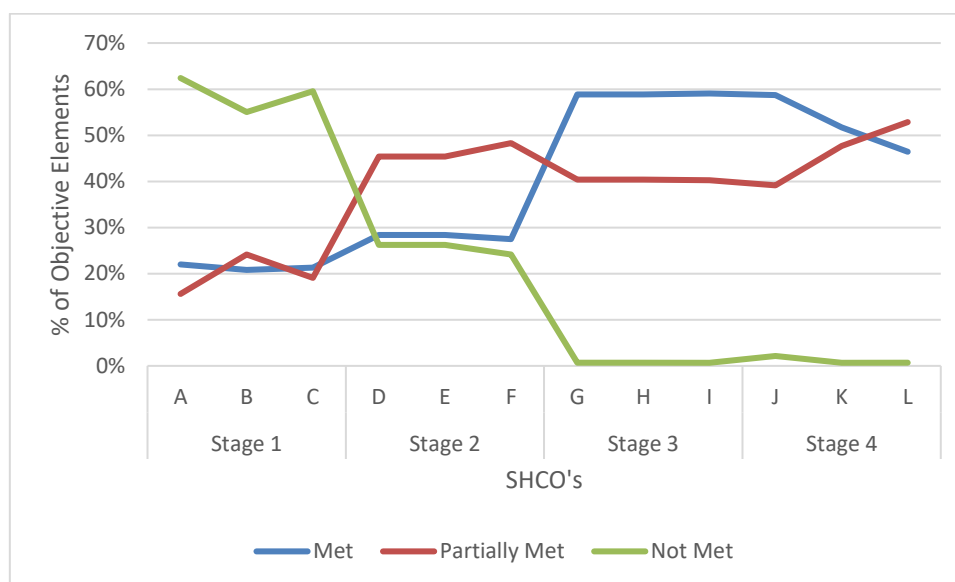


Figure 4.11-Analysis of the Compliance Trend of the SHCOs

As can be seen from the graph number 4.11, the % of noncompliance to objective elements decreases and becomes nearly 0% as the stage progresses to Stage 4. The line graph clearly shows that % of compliance to objective elements increases and becomes maximum in Stage 3 around 60% and then reduces in Stage 4. Also, the % of partial compliance increases, then decreases in Stage 3 and again increases in Stage 4. This increase in partial compliance in Stage 4, is due to only documentation of objective elements and ignoring the implementation of same by SHCOs (J, K and L) post achievement of entry level NABH certification

CHAPTER 5

CONCLUSION

The result shows that the Small Healthcare organizations (SHCO), going for entry level NABH pre-accreditation, has to work a lot more to improve their compliance and give quality patient care. The analysis shows us that the organization in Stage 1, who have just filled the application form are least compliant to the objective elements as compared to other SHCOs of other Stages. The one reason could be their ignorance and unawareness to the importance to quality in patient care or due to their reluctance to follow the standards as they find it very expensive and cumbersome.

The Stage 2 organizations are having better compliance as they are willing to inculcate the culture of quality in their organization and wants to have a better competitive edge over the other SHCOs. The Stage 3 SHCOs have greatest compliance to objective elements as they are getting ready for their actual assessment by the NABH pre-assessor. These organizations make sure that they leave no stone upturned, to get the entry level pre-accreditation NABH. They show up their best and put all efforts to be compliant to the standards.

But the result shown in Stage 4 SHCO is little worrying. The gap assessment done for such organizations, that are post the NABH pre-accreditation shows that their compliance to objective elements reduces and partial element compliance increases. This increase in partial element compliance is due to the fact that they show proper documentation for the elements but when it comes to implementation they fail to do so. The reason they don't like to implement is the fact that they are confident and complacent that they already have pre-accreditation NABH, so need to be 100% compliant now. This very attitude of these SHCOs is the cause of the decrease of compliance to standards as compared to Stage 3 SHCOs. Ideally, their compliance should be higher than Stage 3 SHCOs, as they should be trying to go for progressive level NABH accreditation, but in reality the scenario is little different as can be seen from above data analysis.

Similarly, some other elements are not met, or the organization is not compliant in stage 4, that is after getting NABH pre-accreditation. Some of them are:

- In spite of being trained for safe practices, laboratory personnel are not following the same
- Beyond expiry medicines are found in hospitals.
- Fridge temperature recording is not monitored strictly.
- Care and the treatment orders are not dated.
- Medication orders are not signed and dated.
- Adverse drug events are not documented.
- Cleanliness and general hygiene is not monitored strictly.
- In spite of training staff, they are not following the proper segregation and disposal of hospital waste.
- Maintenance staff is not available round the clock.
- Water tank cleaning protocol not followed.
- Medical record file is not complete and time, date signs are absent in some files

Recommendations

- Hospital staff should be trained and retrained properly to follow safe practices and hospital infection control practices strictly
- Hospital staff should be trained for emergency conditions like medical emergencies, disaster emergencies, fire emergency so that they should be able to follow protocols when required.
- Hospital top management should actively involve monitoring the quality program and standards are monitored strictly.
- Medicine and store inventory need to be monitored strictly.
- Fridge temperature monitoring should be strictly followed.
- Safe sample collection and transport practices need to be followed.
- Facility management round should be carried out periodically
- Mock drills should have conducted regularly
- Doctor, nurse and other staff should be motivated to follow the standards and fill the medical record completely with sign, date, time.
- Quality indicators should be monitored regularly and for that raw that should be collected promptly to catch the actual state.
- Patient feedback and patient complains need to monitor and address them appropriately.

Small healthcare organization serves to huge population across the region. To deliver quality services to the patients at such a setup is a challenge for hospital management. And NABH pre-accreditation entry level standards can give a roadmap to deliver the quality service to the patient and face this challenge.

Being not used to such a comprehensive documentation and implementation process, SHCO struggles to comply with the standards. Continuous, disciplined effort and intent is required to comply with the standards. Top management needs to plan, execute motivate and monitor the resources to achieve the goal. Quality improvement is a continuous process and need to be monitored continuously. Entry level standard is a roadmap to achieve this goal of quality services which should be continued.

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