

Inside Smaller Hospitals: Managing Service Operations

Track: Health Care Management

Abstract

The present paper is based on the study of smaller private healthcare providers, carried out during 1998-99. The study covered almost 60 percent of such hospitals in the five major cities of the state of Rajasthan. Study attempts to identify major areas of operational concerns for smaller hospitals. Study also evaluates location and process issues involved in healthcare delivery. The study makes a comparative study of hypothesized professionalism in the practices in hospitals in larger cities as compared to those in smaller cities thus bring out a trend that accompanies the growing professionalism.

Authors also attempt to make some useful suggestions for these smaller hospitals to adopt **total progressive patient care**.

Key Words: Operations Management, Smaller hospital, Health-care, Rajasthan, total progressive patient care

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Background of Study

Conventionally hospital is a service organization, though it has now become an industry legally and practically. Hence, the need of professionally managing a hospital had been stressed, some decades ago. In recent times, though the Professional Management has been accepted, adopted and implemented by most of the non-government hospitals, this management is facing some challenges that have not been envisaged before. On one side, in our country, this new profession of *Hospital Management* is an upcoming profession, but on the other side, it has to face the grave challenges, which have erupted in a decade or so. The initial task before the Hospital Management was - (a) to integrate and coordinate the disintegrated and distorted configuration of men and material in a channelized effort for better patient care and (b) to obtain maximum returns from minimum input of resources. While trying to achieve these tasks in a better way, now the profession has to get ready to face the additional new challenges in the form of the totality of quality care, which can be illustrated by dimensions like cost containment, consumer satisfaction, etc. If the Indian Hospital Management fails to face successfully these new and recent challenges, the future seems to be doomed. This calls for studying, creating and developing our own model of "Health-care Delivery".

Operations management in hospitals involves the designing, operating and controlling of a system capable of optimally utilizing the physical resources and involvement of human element into creation of needed services. The health-care process consists of interrelated parts (TQM model), each dependent on the others.

Research Design

It is very clear from the survey of literature and discussions with experts in the area, that almost no study has ever been made in India, that pertains to management practices of **smaller hospitals**. No similar study with such a comprehensive scope was available from the international literature as it exists within the country. As there is no benchmark or previous study for designing a central model for relevance, the **exploratory research** is justified. The nature of variables and the relationship that existed between them was not clear at the initial stages of research. As little is known about the given area, **useful hypothesis cannot be formulated**. It is decided to move in the direction where it can be attempted to define certain relationships that will permit statement of specific hypothesis or make certain generalizations that can serve as inputs for future conclusive researches.

Scope

As the research is intended to study the professionalism in the practice of management in the health-care organisations, smaller hospitals (50 or less than 50 bedded) in the important cities and towns of the state of Rajasthan were proposed to be studied, as a beginning point, assuming some degree of professionalization in practice there. "Important cities" in turn were defined as category A and category B towns of the state.

Data Collection Tools

In this research both types of data, i.e., primary as well as secondary have been used. The questionnaire method was used for collecting data from primary sources - the doctor-in-charge or the owner or the administrator of the small non-corporate private medical establishments. Structured, non-disguised questioning method was considered appropriate for collecting factual as well as attitude-related data. Further it was desired to have a small discussion with the respondents on the various issues and problems relating to their hospitals and nursing homes and solicit his perception about the type of management practices he profess or have faith in.

The secondary data is collected from journals, magazines, newspaper-reports, published and unpublished reports, etc.

Pattern of Analysis

The population for this study is very small. Data and information collected for this research is mostly descriptive in form. The quantitative data is much less for the study of practice of management in hospitals defined above. Therefore, there was no scope of using statistical tools or any of such formal methods of analysis. The author has, therefore, collected the data and essential information and subsequently studied the same thoroughly, analyzed it and attempted to draw some inferences that pertain not to quantitative estimation of values but that are based on qualitative logic about the actual status of professionalism in the practice of management in the above defined health-care organisations.

Response profile

Questionnaires were distributed personally. After sometime a second visit was made and queries of the respondents were clarified and the questionnaires were collected. A total of 107 questionnaire were distributed. 60 health-care organisations at Jaipur, 20 at Jodhpur, 10 at Ajmer, 8 at Bikaner and 9 at Kota were identified. 38 responses in Category I and 34 responses in Category II were received. Out of these 35 in category I and 32 in category II were proper for the purpose of analysis. This means a response rate of 58.33% and 68.09% respectively in category I and Category II with a composite response of 62.62%.

The maximum response was in Jodhpur (75 %) followed by Ajmer (70 %), Bikaner (62.50 %), Jaipur (58.33 %) and Kota (55.55 %) in that order. Overall response in Category-I was 58.33% while that in category-II was 68.09%.

Major Findings

Operations Management in Hospitals involves the designing, operating and controlling of a system capable of manipulating the physical resources and involvement of human element into creation of needed services. The health-care process consists of interrelated parts (TQM model), each dependent on the others. Among the important parts of productive systems are six activities in general: service design; service planning, scheduling, and control; procurement of support facilities and materials; inventory control; work flow layout; and quality control and assurance.

While overwhelming 69.5% administrators put their offer as social -services, only a moderate 31.5% admitted that they are into the business for the reasons of making profit. 5.1% of the respondents claimed that they were not-for-profit organisations.

Major Concerns

Respondents were most concerned about the non-availability of skilled manpower. Assuming this to be 100% the other areas of problems were identified and their intensity was presented as percentiles (see Exhibit - 1). While high costs and availability of quality resources posed certain problems, administrators were least threatened by service quality that they felt was not much of a problem.

See Figure 1

Most of the hospitals tried to compete as high quality provider of health care services. Reducing cost was not found to be a priority with the administrators. While many hospitals in category I stressed customer servicing, hospitals in both the categories very frequently attempted innovation and improvement in services. Hospitals generally strive for regular growth, but vertical integration was not popular. In some cases they maintained reserve capacities to meet any unforeseen situations. On a very few occasions did the hospitals attempt dispersion of facilities? They did not stressed mechanization, as manual labor is cheaply available.

Selection of Location

Convenience (Cate.I- 1.6, Cate.II- 1.31 on a 2 point scale) is the main reason for choosing a particular location for the facility. The importance of various factors for choosing a location for the health-care facilities as opined by the professional is presented in the radar in exhibit - 2.

See Figure 2

For hospitals in category II availability of support services (1.31) like the laboratories, pharma-shops, etc. and transport facilities (1.27) were almost equally important, while convenience was a priority far ahead of other considerations. Geographical and

Environmental factors (0.78- cate.I, 0.55- cate.II), Business Climate (0.78- cate.I, 0.31 - Cate.II) and Communication networks (0.78- cate.I, 0.31 - Cate.II) were found to be low on priorities of the health-care facility planners. Locality (0.78- cate.I, 0.31 - Cate.II) was yet another consideration in selection of location for health care facilities.

Convenience in making available the space forms the basis of location decision. Market potential, support facilities, etc., were given lesser consideration during selection. Generally a part of the residential facility was converted into a nursing home / hospital.

Process

See Figure 3

While managing the processes the smaller hospitals tend to emphasize their doctors the most (77.1% of them in category I and 62.5% of them in category II). 60.0% of the hospitals in category I and 53.1% of them in category II emphasize nursing care also. While 34.3% in category I and 34.4% in category II emphasize equipment and medicare technology, none in category I appeared emphasizing non-medical facilities. 9.4% hospitals in category II were found emphasizing non-medical facilities. Ratings, for different factors important for delivery process, are presented on a 2 point scale on the radar in Exhibit - 4.

See Figure 4

While the hospitals in category I tend to lay more emphasis on Ease of contact and Communication vis-a-vis category II hospitals, the latter seems to emphasize speed, comfortable environment and ease of access to facilities more as compared to category I hospitals. While ease of contact was thought to be the most important factor (rating- 1.56) for category I hospitals, in the other category emphasized comfortable environment the most (rating- 1.38). Security found least importance in both the categories. Patients treated by doctors were followed up in 88.7% of cases.

Discussion and Conclusions

The requirements of a hospital system change continually. Hospitals therefore must be planned and designed to be flexible and adaptive. Every hospital must include in its planning, enough facilities for its expansion programme, both for its O.P.D. wing and indoor facilities including supportive services. Future expansions must be planned before hand. Most of the small hospital's management lacked this vision.

Minimization of hospital infection and cross infection must be ensured, particularly in wards, operation theatres, I.C.U.s., etc., through proper designing of hospital.

The hospitals that practice **total progressive patient care** and even those practicing some of its components are less harassed. Two components of P.P.C., viz., intensive care and outpatient care should be well established in our hospitals and must be provided for in planning a hospital. P.P.C. is beneficial to physicians, nurses, patients, hospital and the community.

Modern hospital innovations like day hospitals, night hostels, Monday to Friday wards, capsule hospital rooms, are some of the things which must be kept in mind while

planning a hospital. These conceptual changes are likely to make their effect in years to come, as hospitals are entities in themselves - living and developing organisations that can and should absorb new ideas.

The consideration must be given to the flow of traffic and provision of suitable vertical and horizontal transportation. The floors, width of doors, etc., must be conducive to easy and untiring traction for men (patients) and material and working with pre determined methodology to achieve the means for end on point of improved patient care and better hospital image in the community.

Most practices use equipment, facilities, and staff at much less than capacity. Frequently, one aspect of a practice's resources, such as patient waiting area, is highly utilized. Due to this visible, high usage, the perception is that all the practice's resources are operating at full capacity. This perception frequently leads to the belief that other resources are more needed than they really are. Without objective data, a waiting area full of anxious and angry patients creates the impression that more staff, building space, equipment, doctors, etc. are needed. In fact, what may be needed is a method that allows the practice to use existing resources more efficiently, such as good scheduling system.

Productivity in competitive market of the health care delivery systems is very important. Computers can play an important role in increasing the productivity of smaller hospitals. They can help improve the patient care. With the reduction in the cost of computer hardware and access to intelligent software-packages computerization of hospital systems is becoming more relevant. Health care professionals should ensure that the computer revolution does not by pass their organization. This change in technology is playing important role in the computerization of standard systems like accounting, stores, etc. It is also being used in relevant management information systems (MIS) applications. Use of computer has enhanced the applications like ECG, CATscan, etc., in medical fields. Such applications are unique to a particular system like a hospital.

With the advent of Hi-Tech equipment in the hospital, a strong need is felt to have proper repair and maintenance services for the effective and efficient services to the patients. It was observed that the equipment worth lakhs of Rupees lie idle after purchase because of non-availability of expert user, non-availability of proper space for installation, frequent breakdown of equipment, and non-availability of spares or competent persons for repairs and proper maintenance.

In order to establish proper repair and maintenance, care should be taken right through planning the purchase, procurement, installation, and use of equipment. Selection of proper supplier with required after sales services, preventive maintenance, supply of important spares, circuit diagrams, information on danger signals, etc. would solve most of the repair and maintenance issues and provide better services to the patients with optimal utilization of equipment. Proper handling, motivated personnel with sense of responsibility are other requirements in this regard.

As the health-care environment becomes more and more complex and competitive, there is a growing need for a more professional approach to managing the supportive

operations in a small hospital. There is no gainsaying that the efficient operation of a medical practice is vital today. An important step in this direction is the proper documentation of the routine office procedures. An important function of the office procedure manual is to effectively record the knowledge of the employees of practice in a physical document (2). Employees as a reference source to obtain answers to questions that may arise from time to time that are outside the employees' specific expertise may use these procedure manuals. The manual is also to be used as a training instrument. This may also serve as a control device. It may serve to effectively monitor the employees adherence to the to the operating procedures. An office procedure manual is therefore essential for the continued or future efficient operation of a (medical) practice.

The smaller hospitals must attempt to conquer the traditional duality in their decision-making process that is caused by the different interests of the management and the professional staff. Still most of the smaller health service organisations are organised along functional lines, where nursing administration, supervisors of laboratory, pharmacy, etc. are responsible for controlling the cost of services provided. Patients move through the hospital production process, usually under the direction of a physician who often is not employed by the hospital. Although the direct and indirect patient care services are under the administrative responsibility of health care organization, the amount of services ordered for each patient is not.

References

1. Dixon, M., (1994) "Doctors as Managers", World Hospitals, Vol. 29 No.2. pp.3-5.
 2. Milner, D.E., (1994) Creating and Maintaining an Office Procedures Manual, New York Practice Management, Williams and Wilkins, New York.
- Janssen, R. and Merode, F., (1991) "Hospital Management by Product Lines", Health Services Management Research, Vol.4 No.1, pp.25-31.

Fig.1: Problem Areas in Management of Operations

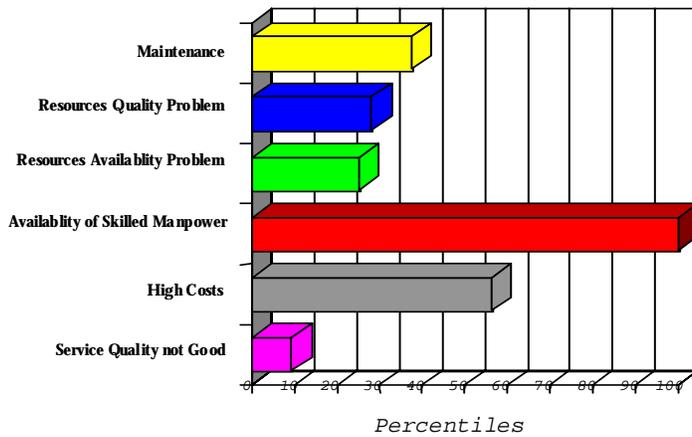


Fig. 2: Relative Importance of Various Factors Influencing a Location Decision

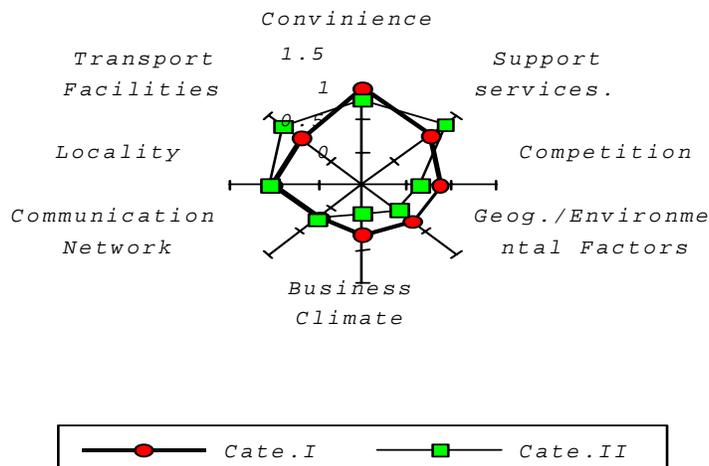


Fig. 3: Emphasis During Service Process

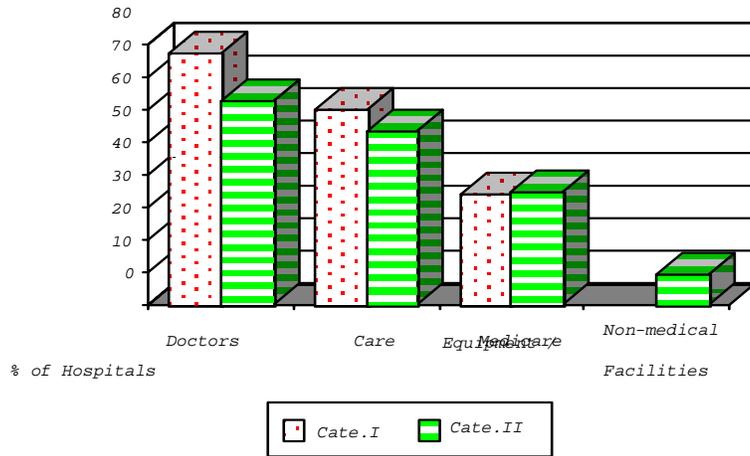


Fig.4: Relative Importance of Service Features

