AN INTRODUCTION TO TATA BUSINESS EXCELLENCE MODEL (TBEM)

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The Tata Business Excellence Model (TBEM) is based on the Malcolm Baldridge Model adapted for Health Care Services (Ref. Health Care Pilot Criteria). The seven criteria to be addressed in the TBEM model are Leadership to set direction, Strategic planning to achieve goals, Customer focus to address the patient's need, Information and analysis to back up planning, Human resource development and process management to achieve goals, all leading to improved results (Fig.l).

The need for improvement may be a customer expectation. This model shows you how to bridge the gap between expectation and capability through a series of inter-linked approaches. To illustrate the point, reduction in hospital stay was a customer and Management need. By following the guidelines of the model, leaders at TMH systematically planned to reduce hospital stay by increasing the number of day care surgeries. For this, target for hospital stay was set after data collection and analysis. Hospital staff was trained to handle short surgical procedures. The procedure for management of surgical patients was suitably modified to include guidelines for management of such patients. After implementing the approach, the new length of hospital stay was compared with the set target.

This is an oversimplification of the TBEM, but it serves to exemplify the integrated step-by-step improvement the model suggests.

Tata Main Hospital adopted the model in 1995. The approach to provide curative and cost effective health care in a customer friendly manner was through the seven criteria of the model.

Leadership: Leadership played the all-important role of providing direction. However, it took some time to realise that Leadership did not mean simply the 'top boss'. Every person at his work place was a leader and was accountable for a certain task. Once the concept of a Leadership system sunk in, the Hospital shared one common goal- of better patient care. Senior leaders brainstormed to articulate the Quality Objective of the Hospital. They communicated these goals to all sections of employees and set performance standards for each individual. They were involved in choosing the right person for the right job'. Potential leaders were identified and trained to handle higher responsibility. Merit was recognised and rewarded. Through their constant commitment to Customer Satisfaction, they served as role models.

Strategic Planning: The first task the Leadership undertook was to establish measurable goals for Quality Health Care, keeping in mind the Vision, Mission and Quality Objective of the Hospital.

The customer needed 'prompt and expert health care delivered in a friendly atmosphere.'

'Promptness' was addressed through cycle time - for investigation, for an OPD visit or surgery, for hospital stay.

'Expert health care' was measured by mortality and morbidity rate and infection rate.

'Friendly atmosphere' appeared to be a subjective parameter. But 'what needs to be improved needs to be measured' (corollary to 'what can be measured can be improved'!). Customer satisfaction on contact time with hospital staff, communication and attitude of treating personnel and response time were taken as indicators of this parameter. Satisfaction regarding cleanliness in the hospital and quality of food served were also included.

Cost competitiveness and a ***'happy & knowledge-based organisation' was a***

Management and Customer need. These also became strategic goals.

The next step was to develop an action plan to achieve these goals.

A health care scorecard (fig.2) was used to break up each goal into measurable indicators, e.g. one of the goals of the Hospital was expert health care. A measure of this was perinatal mortality rate. Data analysis was done to establish the present perinatal mortality rate at the Hospital. This was then compared with world class figures. To bridge the gap, an improvement project was taken up by the Obstetrics and Paediatrics department. They planned and implemented process changes to achieve the target in a specified time frame. The improved figure of Perinatal Mortality reflected the success of the project (Ref. Singhal.S et.al, 2000)

Customer Focus required a constant sensitivity to ever-changing patient needs. A common refrain at all customer interface was "Doctors don't care". A planned customer survey showed low satisfaction levels amongst patients regarding communication with hospital staff.

A special task force was formed to address the problem. A review of patient complaints received showed a number of these to be related to poor communication. It was felt that any training given to the hospital staff would be better assimilated if trainers were from amongst themselves. A group specially chosen for their credibility and known communication skills was sent for specialized training. It then modified the training module to suit hospital needs. After a year of intensive training to cover all levels of staff in the hospital, a repeat customer survey showed significant improvement in satisfaction regarding communication.

Reinforcement of training was undertaken two years later. This time, the module was named MATT training programme and included, besides Communication, Motivation, Attitude and Team building. It has been one of the most successful in-house training programmes at TMH and has given sustained results.

Customer requirement at times triggered the need for a new technology. A customer need for shorter hospital stay translated into introduction of endoscopic surgery both in Surgery and O&G.

Similar approaches to satisfaction regarding food and hospitality services have been made. Regular surveys keep the administration apprised of satisfaction regarding quality and quantity of food served in the hospital, cleanliness of the wards and toilets, linen etc. A TBEM feedback led to the appointment of a Welfare Coordinator, who is readily accessible for lodging complaints. Routine analysis of recurring complaints helped in finding permanent solutions. A third party customer perception survey done annually further focussed on customer needs, which were then used as inputs for the planning process.

Information and analysis: Management by fact is a TBEM criteria, because performance must be measured before it can be improved upon. In a health care service, Performance measurement areas could include Patient Satisfaction, professional expertise (morbidity and mortality), cycle time and cost. The scorecard again played a vital part by aligning the measures and goals. Computer linking of Hospital Reception, Accounts, Pharmacy, investigative departments, ICU and wards facilitated quick retrieval and monitoring of data.

The analysis of data implied extracting larger meaning from a set of information to support decision making and improvement. By regular review of data, the Leadership ensured maximal use of information. Complaint statistics were presented every two months. The complaints were segregated on basis of their nature and frequency. Recurring complaints or those of serious nature were tackled on a priority basis. Thus, random data was converted to actionable information. To illustrate, a recurrent complaint was that linen supplied in the wards were torn and dirty.

An improvement project was taken up jointly by the Nursing section and the hospital laundry. The root cause of torn linen was carelessness in extracting the ironed linen from the rollers. On the job training led to reduction in number of torn linen and thus, in the number of complaints regarding linen.

Human resource focus: The TBEM believes in valuing employees. The success of an Organisation depends upon the capabilities, skills and motivation of its staff. The breakthrough in motivational levels was achieved through the MAT classes, which trained the entire staff of TMH on issues as varied as communication, team building and stress management.

Career progression was an area of concern to many. To address the need for specialisation, TMH became a recognised centre for DNB. The Leadership opened up avenues of merit-based promotion through regular interviews. Viewed by many as a stumbling block, the fairness of the system finally appealed to all. As a spin-off, weekly CME programme was started. Areas of deficiency brought to a focus by these interviews were addressed in the CME. The Clinical Society is a knowledge sharing forum which addresses training needs through guest lectures, seminars, update sessions etc. The leaders were unanimous in their decision not to tolerate mediocrity, but to train and retrain to achieve performance excellence.

The nursing staff have their CME sessions too. Other programmes like Mind Set Management, Know your Company etc are arranged by the JDC (Joint Developmental Council), a management-union interface, which looks after issues relating to employee satisfaction.

Thus TMH addressed both managerial and technical training through a structured approach. It is recognised as a benchmark for knowledge sharing in Tata Steel and clocks the maximum man-hours training for its employees.

Process Management and Results: It was recognised that many areas of dissatisfaction were due to inadequate or faulty system or obsolete processes. The ISO system helped to straighten this problem. All vital functions in the hospital were documented, right from the procedure of admission to handing over a dead body. These documents enumerated the exact steps, allocated specific responsibility and ensured record keeping. Any new procedure e.g. Hepatitis B vaccination was designed

and executed, keeping the requirements of the ISO procedures in mind.

Improving patient care was reflected iii parameters like mortality, infection rates, length of patient stay, post- operative pain score. All these measures figured as thrust areas for improvement. Departments identified these as their Key Performance Measures and took up Quality Improvement Projects to achieve targets or benchmarks. Significant reduction in perinatal mortality rate- from 40.5 per 1,000 births in 1996 to 32.3 per 1,000 in 1999- was achieved through a Quality Improvement Project taken up jointly by the Departments of Obstetrics and Gynecology and Paediatrics. Similar efforts by Department of Anaesthesia brought about a reduction in the post-operative Pain Score from 22.93 to 11.16 (Ref. JN Tata application, 2000)

Improvement in delivery systems required reduction in cycle time. One of the best success stories so far has been reduction in the Door to needle time for Streptokinase therapy in Acute Myocardial Infarction (Ref. Bharat.et al, 1999) from 33 minutes to 12 minutes. The Casualty Department similarly reduced time for delivery of Bronchodilator therapy to Bronchial Asthma patients.

Cycle time reduction was brought about in reporting time for X rays. This was done through a MOU (Memorandum Of Understanding) between Department of Radiology and Medicine. Another QIP taken up jointly between the Departments of Medicine and Pathology resulted in reduction in reporting time of urgent blood reports from 380 minutes to 90 minutes.

Infection rate was reduced through sharing of best practices and through constant monitoring by the Infection Control Committee.

Thus, after five years, a number of vital processes have undergone repeated cycles of improvement. These have been in areas of human resource, customer satisfaction, Patient care and cost. The impact of adopting an excellence model for continuous improvement is being felt now.

The main benefits accrued from implementing this is discussed later (Ref. S Mitra, Benefits from TQM).

DISCUSSION

The TBEM offers an integrated, planned approach to quality implementation. An improvement activity is not isolated and random, but part of the larger cycle of all round improvement. Alignment therefore remains the key word. Improvement in one area is not at the cost of another. A balance between the interests of the customer (in health care services, the patient) and other stake holders (management, society, partners employees) is maintained. Business results are important, but so is human resource, ethical practices, and corporate citizenship. Today, health care is also a business. TBEM helps to achieve business excellence through a humane approach, which accepts that the health of a business is not reflected just through its business results.

REFERENCES

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Fig.1

TATA BUSINESS EXCELLENCE MODEL

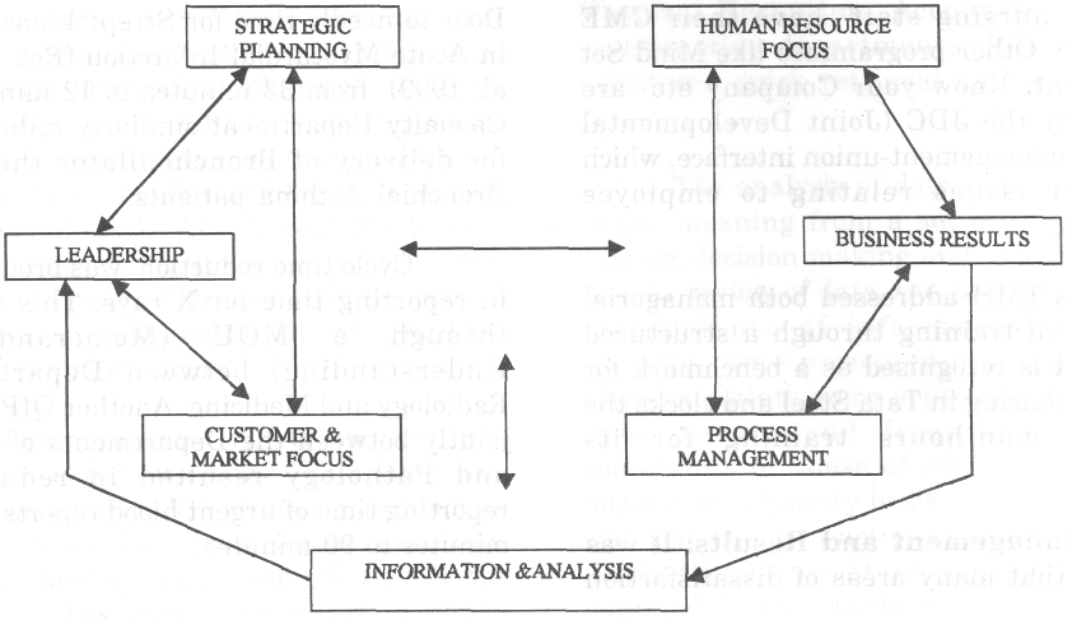

Figure-2

TMH HEALTH CARE SCORECARD

STRATEGIC GOAL	PERFORMANCE MEASURE	UNIT	DEPARTMENT	MONITOR FREQ	ACTUAL 2K-01	TARGET 01-02
PROMPT HEALTH CARE	OPD waiting time	% patients seen in 30 minutes	All	Quarterly	94%	96%
	Path report cycle time	% reports in 24 hours	Pathology	Quarterly	98%	100%
	Door-to needle time in STK therapy	Minutes	Cardiology ICU	Quarterly	12	10
EXPERT HEALTH CARE	Infection rate in inguinal hernia	%	Surgery	Quarterly	1.7	<1
	Perinatal mortality rate	%	O&G Paediatrics	Quarterly	33.9	33
	Length of hospital stay	Days	All	Quarterly	4.66	4.60
FRIENDLY ATMOSPHERE	Satisfaction on contact time	% satisfaction	All	Annually	88%	90%
	Satisfaction on cleanliness	% satisfaction	Steward section	Annually	64%	70%
	Satisfaction on food	% satisfaction	Hospital kitchen	Annually	66%	70%
COST COMPE-TITIVENESS	Decrease in expenditure	Rs. in Lakhs	All	Quarterly	3413.43	-2%
	Revenue collection	Rs. in Crores	All	Quarterly	10.42	12.5
	Cost of power	Rs. in Lakhs	All consumption	Quarterly	377.57	-5%
LEARNING AND CHANGE	Employee satisfaction index	5 pt scale	All	Annually	3.07	3.15
	Training of Doctors	Man-days	All	Quarterly	9.6	10