# Introducing Performance management in Secondary Government hospitals in Kerala and Tamil Nadu using the Balanced Scorecard framework

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**Abstract** Kerala has introduced decentralized planning for more than a decade now. As part of this, the Local Self Governments (Panchayat Raj Institutions) are vested with the responsibility to run the hospitals. The new element of elected representatives coming in the area of hospital administration has created more confusion than before. Similarly, Tamil Nadu has implemented a hospital systems project to improve the performance of secondary care hospitals. This paper tries to analyze whether one of the popular performance assessment tool – Balanced Score Card could be used to create a better administrative environment to improve the performance of the secondary care hospital. The paper conclusively argues that, Balanced Score Card is an important option for these hospitals to improve their performance.

**Keywords:** Performance of hospitals, Balanced Score Card, Decentralized Planning

#### 1. INTRODUCTION

Health care is an important public service. Enhancement of the health of people must be accepted more or less universally to be a major objective of the process of development **Sen** (1999). However despite India entering an impressive economic growth trajectory of around 8% in the recent past, no corresponding achievement is seen in the health sector. Performance of health care sector has placed India at 118th position in a list of 191 member countries based on the achievements in key functions and objectives of health systems (**World Health Report, 2000**).

Health sector in India is facing number of challenges: absence of a comprehensive health policy, loose regulatory mechanisms, inadequate budgetary allocation, improper man power planning, large scale absenteeism, infrastructure inadequacies, low-accountability, poor management of the Public Health Institutions (PHI) have all contributed in varying proportions to the underperformance. Increase in non-communicable diseases like Diabetes, Cardio-vascular accidents, re-emergence of tuberculosis, high incidence of HIV, hepatitis and other life style diseases, in addition to other health indicators like, high infant mortality, high maternal mortality, low life expectancy and low percentage of immunization further poses serious challenges to the health sector [Ramani and Mavalankar(2006), Bonu and Rani(2008)].

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Personal cost of healthcare in India is one of the highest in the world. National Sample Survey (60th round) in 2004 identified 63 million individuals (12 million households) falling into poverty due to health expenditures (6.2% of all households). About 79% of them spent on out-patient care, drugs and the remaining 21% due to costs associated with hospitalization. In some states, such as Uttar Pradesh, Maharashtra and West Bengal over 8% of households were impoverished as a result of health expenditures **Peters et al (2002)** found that on an average those who are hospitalized spend about 58% of their total annual expenditure on health care, and more than 40% have to borrow money by selling assets to cover expenditure.

Governing principles on health are equity, access, quality and cost effectiveness. On the issue of equity and accessibility, poor in India suffer more. Though the government hospitals are the centers of first call, long queues, difficulty of getting in, unavailability of specialist services, cost of drugs along with huge opportunity cost due to delay in getting service makes them seek services in private hospitals (Jeffery et al 2010).

However government hospitals also have several problems. They are remotely administered. Major decisions on procurement and development are taken at the state level. Unavailability of timely funds, inadequate delegation, low staff motivation, supply-chain breakdown, trade unionism, poor sharing of knowledge are some of them. In the normal practice, orders are issued from the top and seldom feedback are considered or factored in to the policy making. The leadership's ability to influence colleagues and coordinate activities between departments are often absent in government hospitals. Central to all these issues is the lack of any credible performance evaluation system with incentives and disincentives built in.

This paper aims to understand the functioning of the government secondary hospitals in the state of Kerala and Tamil Nadu. The reason for choosing these states is that, hospitals here are administered reasonably well indicated by the improved health parameters. The paper provides a policy prescription to put in place a performance management system in these hospitals. While analysing various options available for evaluating organisational performance, effort is made to select the one that suits the Indian context. Of all the models examined, Balance Scorecard framework is found to be suitable for the Indian context.

This paper is organised as follows: Section 2 describes the policy issue and underlying contributing factors. The Section 3 discusses the objectives and constraints. Section 4 explores all possible and available prescriptions and discusses relative strengths and weakness of them. Section 5 deals with the evaluation of selected policy alternative including the implementation schedule. Section 6 has evaluated the Policy environment by through stakeholder's analysis, communication issues and the political context in which this policy alternative will be implemented. Relevant material that could not form the body of the paper is enclosed in the annexures

and finally the reference section acknowledges the sources and authors from where information was obtained.

## 2. OUTLINE OF THE POLICY ISSUE

Huge dependency of poor on secondary care hospitals makes them a natural choice for our study. According to Mission statement of NRHM about 40% seek out patient service and 20% of them get admitted as in-patients. The relative position of public and private healthcare institutions in healthcare delivery is best explained in the figure 1 below.

Introducing
Performance
Management
in Secondary
Government
Hospitals in
Kerala and Tamil
Nadu using the
Balanced Scorecard
Framework

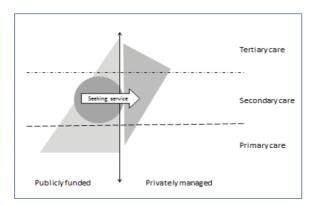
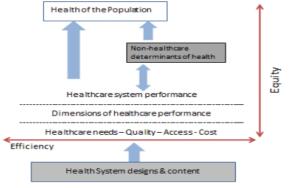


Figure 1: Organization of Public and Private Healthcare Institutions

Health has several externalities. The role played by the healthcare system along with a strong Public health measures could play a vital role on the disease prevalence in the community. Fig.2 below explains the importance of performance of healthcare institutions as a dominant determinant of health of the population. Basic health needs are; quality, access and cost.



Source: Netherlands National Institute for Public Health & Environmen

One of the reasons for poor performance of government hospitals is the low levels of investment. Commenting on the Health Expenditure in the South Asian countries, **Bonu and Rani (2008)**, indicated the total expenditure on Health in India as percentage of GDP at 4.8%, with private expenditure component constituting 3.6% and public spending a mere 1.2% of the GDP. Percentage of out-of-pocket (private) expenditure on Health worked out to be 97% in India one of the highest in the world. The corresponding percentages for Sri Lanka, Bangladesh and Afghanistan are 88%, 85.8% and 76.5% respectively (table 1).

## Health expenditures in South Asia

Countries Regions	External resources for health [% or total expenditure on health]	Health expenditure per capita [current US\$] Health	Health expenditure, private [% of GDP]	Health expenditure, public [% of GDP]	Health expenditure, total [% of GDP]	Out-of- pocket health expenditure [% of private expenditure on health]
Afghanistan	45.6	11.0	3.9	2.6	6.5	76.5
India	1.6	27.0	3.6	1.2	4.8	97.0
Bangladesh	12.4	14.0	2.3	1.1	3.4	85.8
Pakistan	2.5	13.0	1.7	0.7	2.4	98.0
<b>Sri</b> Lanka	2.3	31.0	1.9	1.6	3.5	88.9

Source: World Bank (2006) World Development Indicators 2006. Washington, DC: World Bank.

Health being a State subject, the central's contribution to overall public health spending is limited to 15 % and the remaining 85% are to be met from the State finances. Central budgetary allocation for health has remained static at 1.3 % of the total central budget. But in reality, budgetary allocations in several States have declined from 7 % to less than 5.5 % in many states (**Ramani and Mavalankar, 2006**). The approach paper to the twelfth five year plan on health has found out that as total expenditure during the eleventh plan would be around 1.4 % of the GDP. This is proposed to be increase to 2.5% of GDP in the 12<sup>th</sup> Plan.

Realising the need to scale up public investments in health, Government of India launched National Rural Health Mission (NRHM) in the year 2005 to improve the quality of healthcare delivery. NRHM has a rural bias; major portion of the allocation is towards the Primary health institutions targeting the preventive and primary care and not so much for the secondary care institutions. District hospitals mostly have dilapidated buildings besides, inadequate expertise to manage the challenges faced in the districts(NRHM, Mission Statement, 2007). Approach paper to the 12<sup>th</sup> plan has recognised district level secondary level institutions as the next point of reform and investment. Paper proposes to develop expertise and planning at the district level (Approach paper to 12<sup>th</sup> plan, 2011).

Typically, a government hospital is headed by the hospital superintendent (the senior most) and is assisted by another senior resident medical officer (RMO). Both these individuals are nearing their superannuation and do not risk (!) taking decisions, lest departmental and vigilance enquiries to be faced later. They cannot also be blamed as they do not get any managerial or administrative training. Interdepartmental coordination is generally low as doctors often do not agree others point of view. The head of the hospital and other colleagues may be competing against each other in the private practice. There are no discussions on the seriously ill to learn and share knowledge and information. Staffs have generally low motivation level as they have short tenures. The Para-clinical and non-clinical staffs have strong unions. Any disciplinary action against their colleagues could spark of strikes and noncooperation. There is a feeling that, patients are at the mercy of the doctors. Most of the surgical implants and drugs required for operative procedure are prescribed to be procured outside. Often, diagnostic equipments are either out dated or not functioning. The procurement and service contracts are signed by the higher ups in the State headquarters and any breakdowns of these equipments are to be taken up through long winding procedure. Availability of specialists in odd hours to tackle acute emergency care is a real problem. Often casualty services are inadequate, sparking protests from the patient attenders. It is equally true that, doctors in the acute care sections are at risk for fear of man handling and abuse by the patient attendants in case of unfortunate outcomes. The mechanism for redressal of grievances is either absent or not effective. There is no vision, mission documents or annual plans. As such, most of these hospitals are run on day to day basis without any long term planning. It is true that, the work load in these institutions are quite huge, putting the doctors under stress.

Introducing
Performance
Management
in Secondary
Government
Hospitals in
Kerala and Tamil
Nadu using the
Balanced Scorecard
Framework

A look at the secondary level hospitals in the State of Tamil Nadu and Kerala could give the magnitude of the problem. Both these states are fairly advanced in terms of achievement of health. Nevertheless the quality and equity issues exist in these states though not to the level and severity as seen in other states. The District level institutions and the statistics of achievement for these states are as under:

As could be seen above the numbers of minor and major surgeries conducted in secondary care institutions are substantial. The same pattern is seen reflected in the

**Table 2:** Number of people sought service from government hospital in Tamil Nadu during 2010-11

Institutions	No of Institutions	Out patients	In patients	Major surgeries conducted	Minor surgeries conducted
Tertiary care	30	30,798,955	1,245,230	300,266	488,449
Secondary care	300	7,3016,130	6,552,972	843,396	1,904,295
Primary	1589	81,148,000	1,127,655	-	-

(Source: Performance Budget 2011-12, Health & Family Welfare Department, Government of Tamil Nadu)

number of outpatient and in-patient visits. The burden of delivering service in the secondary institutions clearly makes it appropriate for introducing a performance evaluation system in these institutions.

**Table 3:** Number of people sought service from secondary care hospital in Kerala during 2009-10

	Outpatients	Inpatient	Major surgeries conducted	Minor surgeries conducted	No. of deliveries conducted
Secondary hospitals	63,122,415	1,664,508	176,998	175,838	490,324

(Source: HMIS, Directorate of Health services, Government of Kerala)

Considering the quantum of public funds that are spent towards the secondary hospitals and the number of public availing the servicesthat need to optimize their performance to achieve better patient satisfaction and clinical outcomes need not be over- emphasized. Central to the issue of underperformance is the low level of accountability in the system. This results from lack of supervision and effective monitoring in the system. Therefore, any effort that improves supervision and monitoring could redress the current issues to a large extent. Performance monitoring will also help in better utilization of scarce public resources. Therefore, the need of the hour is a credible Performance Management System (PMS) in these hospitals.

#### 3. OBJECTIVES AND CONSTRAINTS

Objectives of this policy paper are:

- i. Improve clinical outcomes Clinical outcomes are dependent largely on the appropriateness of treatment. If there is appropriateness in the clinical approach, the chances of medical errors, iatrogenic infections and the mortality will decrease making the hospital a preferred place. In due course, number of outpatients, inpatients, number of surgeries, number of deliveries, bed occupancy rate etc. will all increase keeping in view the 'better performance' of the hospitals.
- ii. Achieve better workforce satisfaction Motivation levels of workforce in government hospitals are generally low as there are no incentives and awards. Frequent transfers, political interference, group dynamics among staff, attitude of doctors towards paramedical and non-clinical staffs have all contributed to low levels of motivation. If a mechanism is put in place to manage the performance, the right and wrong decisions would get noticed making it easier for the doctors and staff to do right things every time. The mechanism will also improve the morale and satisfaction level of the staff as everyone will be held accountable for their decisions.
- iii. **Improve patient satisfaction** As of now, there are no mechanism to know the level of patients' satisfaction. The feedback from the patients is seldom taken as

useful suggestions. Convenient feedbacks are welcome while negative ones are ignored. As a result, patients tend to keep silent, even if they have received poor treatment. The performance management system proposed will consider patients' feedback as an essential component of the performance. This in the long run could redress many concerns of the patients.

iv. Improve in-house knowledge and expertise – Government hospitals normally do not have any institutional mechanism for sharing knowledge between departments and individuals. The concept of continued medical education is mostly restricted to teaching hospitals. It is left to the leadership of the hospital to organize events to share knowledge on the seriously ill or in the form of death audits. The critically ill cases are by and large left to the management by the concerned doctor and seldom there is collective management. Doctors complain lack of time for any such activities. The performance management mechanism proposed will evaluate the hospital in terms of continued learning and knowledge sharing.

**Constraints** - Some of the constraints to achieve these objectives are: resistance form doctors and staff, capacity issues in HR, political issues and financial issues. The doctors and staff in the government hospitals will resist any move that will bring in scrutiny. Being professionals, any evaluation by anyone outside their domain will evoke strong opposition. Often the performance assessment could be interpreted as a fault finding process. Likewise, capacity of the professionals to understand the jargon of performance management could be an obstacle for smooth implementation. The capacity of the administrative staff to recognize and record important events that contribute to the performance is also in question. Though there are no apparent political issues, politicians linked to trade unions in the hospitals could side with the employees and resist implementing any new procedure that brings in scrutiny. However, once the larger community is taken in to confidence, political class will play a supportive role, if not oppose it. There is also an issue of budgetary constraints at the level of the hospital, as there is a need to have an employee earmarked for collecting and collating the data from several departments.

v. **Policy alternatives:** Until recently the efficiency of hospitals was estimated as a cost or production function by means of ordinary regression methods. Though these regression studies provided some insights, the estimated equation represented the average as opposed to the best-practice cost-production relationship, Berry et al(2000). Some focused on professional competence through clinical guidelines, others concentrated on the continuing medical education (Accreditation).

**Donabedian (1988),** while studying hospitals across several countries outlined the three categories of performance dimensions that contribute to the quality of healthcare delivery namely; structure of the healthcare institution, process of care and outcome of the patient. The structure of the hospitals is assessed by human and material resources available in each hospital. Outcomes are usually evaluated by the standardized mortality ratio which is the ratio of the observed to expected

Introducing
Performance
Management
in Secondary
Government
Hospitals in
Kerala and Tamil
Nadu using the
Balanced Scorecard
Framework

mortality rate in each hospital. Process of hospitals has been difficult to measure by specific metrics.

Several studies are seen to be conducted on the role of HR on institutional performance issues like; training, job satisfaction, team work, leadership etc. Sommer and Merrit (1994) studied the functioning of a rehabilitation hospital in Midwest. Highlighting the role of human resources, they found that TQM principles introduced after discussions with the staff had significant results. Similar results were found by Zaire (1998) who published series of three articles on the link between Human Resources Management (HRM) and performance of Healthcare Institutions.

Developing a competency framework to support training in evidence-based healthcare, Cowling et al (1999) identified five clusters of variables that could lead to certain competencies; personal attributes, interpersonal relations, self-management, information management and technical knowledge skills for assessing the proficiency and staff training needs. Emphasizing the leadership dimension, Guo (2004) laid emphasis on re-engineering the process in health care institutions. Commenting on the outcome dimensions, Colton (2007) argued that, measuring the performance in health industry is rather difficult and not accurate. He outlined extreme client focus, difficulty in quantifying the outcome like betterment; change and improvement are not always in the control of the practitioner, the need for repeated measurements etc. as reasons for making the assessment rather difficult in health sector.

**Funck(2007)** carried out a qualitative case study involving semi-structured interviews with key informants on the political, administrative, and medical professional levels at Swedish counties. She developed a design based on the principle of Balanced Score Card (BSC) and found that it is possible to improve performance without giving priority to one interest over another. Focussing on the Process as a dimension contributing to the quality in an organization, attempts are made to apply the principle of **ISO 9000-2000 standards** in health care institutions - **Ruiz and Simon (2004)**.

Veillard et al (2005) described the stages through which the WHO Regional Office in Europe launched in 2003 a project aiming to develop and disseminate a flexible and comprehensive tool for the assessment of hospital performance and referred to as the performance assessment tool for quality improvement in hospitals (PATH). Six dimensions were identified for assessing hospital performance: clinical effectiveness, safety, patient-centeredness, production efficiency, staff orientation and responsive governance.

Dash et al(2007) in their work, "Benchmarking the Performance of Public Hospitals in Tamil Nadu: An Application of Data Envelopment Analysis" studied the technical efficiency of the public hospitals. They found out that eight of the

29 hospitals (27 per cent) were efficient, while the remaining 21 hospitals (72 per cent) are relatively inefficient, needing to benchmark their performance with that of their peer group.

**Kaplan and Norton** (1992) developed Balance scorecard (BSC) as a tool for strategic management of organizations. BSC translates institutional priorities in to actions. BSC considers different perspectives: customer focus, internal business process, Learning and Innovation and financial perspective. Effectiveness of a service is indicated by its overall outcomes or impacts. In healthcare context, effectiveness can be measured by measuring the following dimensions: service quality, customer satisfaction, growth andsafety. Flexibility is a lead performance measure, which focuses on analysing forward looking, predictive and future performance comparisons.

Literature also has very advanced Business Excellence models: European Foundation for Quality Management (EFQM) and Malcolm Baldrige National Quality Award (MBNQA). These models require very high level of hard and software as a pre-requisite to implement them. Therefore they are not feasible in the Indian context.

Considering the limitations in the Indian context following policy alternatives are discussed.

- i. Human Resource Management
- ii. Outsourcing management contract
- iii. Implementing Total Quality Management
- iv. Introducing Balance Scorecard
- i. Human Resource Management: The role of human resources in running service oriented institutions need not be re-emphasised. One of the reasons for not achieving high quality service standards is because of absence of any worthwhile human resource practices. Once the officer comes in to service there is hardly any training or mandatory learning. Frequent transfer of doctors leaves them with no commitment for the place. Corruption in posting of doctors also all contribute to low morale. Salary as payment as opposed to fee for service (FFS) in vogue in some of the OECD countries is not a motivator for doctors to increase their productivity. Introducing a system of award and incentive systems could motivate the doctors to perform better. However, selection of awardees could also be mired in controversy alienating others. This system does not take in to account non-clinical managerial aspects of hospital administration. Therefore this is not suitable for implementation.
- ii. **Outsourcing management contract:** Outsourcing management contract to professional agencies to improve the managerial capacity is popular in some of the hospitals in the Middle-east. By this set-up the entire managerial and administrative decisions are implemented by the contracted company. This option

Introducing
Performance
Management
in Secondary
Government
Hospitals in
Kerala and Tamil
Nadu using the
Balanced Scorecard
Framework

is therefore more suited for the private hospitals. Moreover such system may not be accepted by doctors in the government sector, as any external evaluation could be seen as interfering in their affairs. Doctors may not cooperate with this system. Moreover, selection of the agency and payment of management fee could be mired in controversy as people and politician may not visualise the actual benefits that could accrue to the community.

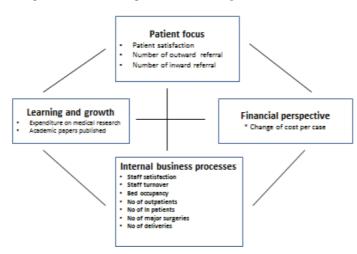
iii. Total Quality Management; Though, Total Quality Management (TQM) was developed as a management practices aiming to improve the quality of products, the ultimate result leading to increased customer satisfaction made it applicable to several other sectors, notable health care settings. Though, the TQM by itself was not a performance measurement system, its implementation led to improvement in the performance of the institutions. Yang (2003) after analysing the results in a number of Taiwanese hospitals that have imbibed the TQM practices, argued that TQM practices are conclusively beneficial in the health care settings. He commented that, hospitals are normally headed by professionals who have considerable authority over the subject they handle. They do not wish to hear opinions from their subordinates. Since the leadership in secondary hospitals do not have the kind of qualities to prevail upon the colleagues, implementing TQM in secondary hospitals may not be successful.

The Balanced scorecard framework (BSC) developed by Kaplan and Norton (1992) allowed the managers to look at a business from four important perspectives – financial perspective, internal business process perspective, customer perspective and learning and growth perspective. Due to its appropriateness for medium sized hospitals, BSC has come up as an important tool to improve the performance in health care institutions. The concept 'balanced' was regarded as a balance between four perspectives, implying that patients, employees and processes were as important as finances.

In any organization, capturing critical activities for assessment has always posed huge problems: either too many or very few measures were selected. Choosing a mix of financial and operational measures is ideal to capture comprehensive yet critical assessment of organizations. BSC provides for fast and comprehensive view of the business. BSC facilitates simultaneous assessment of performance in several key areas. Both financial and operation perspectives are included for measurement in Balance Scorecard. In any case according to Kaplan and Norton (1996) perspectives were never considered a straight-jacket prescriptions and therefore adapting these perspectives to suit the circumstances should be encouraged.

There are some challenges to introduce BSC in government hospitals. The availability of data, willingness to join the programme, availability of technical persons to analyze the data is seen as serious constraints. There is hardly any patient focus. There could be resistance to obtain feedback from patients as an indicator of performance. Similarly the internal business processes in public hospitals are institution and individual specific. There is no standardization.

The conceptual model developed is shown in fig 3.



Introducing
Performance
Management
in Secondary
Government
Hospitals in
Kerala and Tamil
Nadu using the
Balanced Scorecard
Framework

Figure 3: BSC framework

The proposed Balance Scorecard framework (perspectives, success indicators and their definition) is as under in Table No. 4

Perspective	Indiantors	Definition of calculation		
-				
Financial	Change of cost per patient	Operating expense of current year - Operating expense of		
	(both in and out patients)	previous year / Operating expense of current year		
Internal	Staff satisfaction	No of Staff expressed satisfaction in the survey / Total no. of		
business		staff		
processes	Staff turnover	No. of staff left the hospital in the year/Total staff		
	Bed occupancy	Average daily census / Total beds		
	No. of outpatients per Doctor	Outpatients/year/doctor		
	No. of in patients per	Admitted patients /year/ doctor		
	Doctor			
	Mortality	Total no. of deaths/ total admitted patients		
	No. of major surgeries	Total number of major surgeries /year/ surgeon.		
	No. of deliveries conducted	Total number of deliveries conducted/ year/ obstetrician		
	No. of outward referrals	No. of patients referred outside / total no. of patients admitted		
Customer	Patient satisfaction	No. of patients expressed satisfaction in survey/total surveyed		
focus		patients		
	No. of inward referrals	No. of inward referrals/Total no. of admitted patients		
	Community	No of people in utilized the hospital in the year / Total		
	participation	population of the community		
Learning	No. of clinical and	No. of clinical and death audits conducted / No of total deaths		
and	death audits	and critically ill in the year		
Growth	Expenditure on learning and	No. of doctors deputed fortraining / Total doctors in the		
	training	hospital in the year		

## Measurement, Evaluation and grading of Institutions:

The success indicators and the method of calculating / obtaining the value are mentioned above. As a prerequisite, using historical data for the previous year, State averages will be worked out in respect of each of the success indicators. The state average will be publicized. The value obtained in respect of success indicators in the selected hospitals will be compared with the average for the State. The overall performance will be calculated after giving appropriate weightage to the success indicators. Adequate importance will be given to internal business process and patient focus. All secondary hospitals will be graded with respect to state average. Hospitals above the averages will be accorded star status. Those below the state average will be closely examined and underlying factors will be explored. The best hospital in the state will be provided a "Gold Star". This rating will be done for every year.

#### vi. Evaluation of Policy alternative

(a) **Technical Analysis:** Use of BSC in Indian context is not reported. Therefore evaluation of this policy alternative is done using the evidence in the literature. BSC was used in the healthcare organizations as early as 1994 (Zelman, 2003). **Chan and Ho** (2000) conducted a survey of usage of BSC in Canadian hospitals and **Inamdar and Kaplan** (2002) made similar surveys on application of BSC in US hospitals. They reported BSC as a useful tool to develop strategy management for medium sized hospitals. **Guo** (2002) in an effort to introduce the quality improvement initiatives in a public sector hospital in Singapore combined the BSC approach with Singapore Quality Award (SQA) process and found that the organisation should have a strong leadership, customer focus, HR practices and empowerment.

In another study  ${\bf Guo}$  (2004) found all together 22 case studies were BSC was used in healthcare settings. They found BSC as a strategic tool very useful to translate the institutions mission in to actions. Funck E (2007) while studying health care institutions in Swedish counties found out that the performance from the point of community has improved significantly in these county hospitals. The study conducted by Chen et al (2006) on the usage of BSC in Chinese and Japanese hospitals were found to be close to our setting as they have studied government hospitals and found encouraging results.

The Ministry of Public Health (MOPH) in Afghanistan has developed a balanced score card to regularly monitor the progress of its strategy to deliver a basic package of health services to its population - Peters et al (2007). The project did well in taking the health services to the poor and women. While there are many instances where BSC was used a tool to improve the performance, this is probably the first time the BSC is used in a developing country like Afghanistan. Therefore there is enough evidence to note that, BSC is an effective tool for introducing performance management in secondary hospitals.

**Social effects:** Equity and participation issues: Participation of the marginalized sections of the society will be monitored through exit and community surveys. Since this is a continuous process by which the hospitals will be benchmarked, the internal pressure to perform could be higher. As a result there will be a qualitative improvement in the services and supplies. By this development the poor is assured of better services in the same hospital where it was not available in the past. To that extent the issue of equity gets resolved. The net effect would be reduction in the out of pocket expenses for the poor. And naturally the number of rural poor selling off their assets to settle down the medical bills will gradually decrease.

settle down the medical bills will gradually decrease.

Once the results of the performance are available to the community, the community participates either directly or indirectly through media and press. The direct involvement through elected representatives will be an important measure of community participation. The likely benefit that could accrue as a result of implementing the BSC is as under:

Table 5: Benefits of Balance Scorecard

	Before BSC	After BSC		
Supplyside	Unavallable Diagnostic services Obso lete technology issues Low morale of the staff Supply chain break-downs	Technology up-gradation Less breakdowns Less interrupted supply New services Recognition of good work		
Demandside	Low retention rate Low patient satisfaction	High retention Improved patient satisfaction		

**Fiscal issues:** A performance management cell (PMC) in the directorate will be set up to be headed by an officer in the level of Deputy Director in the state. He will be assisted by a team of staff drawn from the finance and statistics department of the state. The PMC will have necessary hard and software for collecting and analyzing the data. The expenditure for PMC will be very minimal and could be met from the flexi pool of NRHM funds. However, qualified auditors registered with "Quality Council of India" – QCI will be appointed on contract basis for collecting the data from the hospitals. One auditor for three hospitals or more depending upon the reach and contiguity will be appointed. Their salary and allowances will be additional expenditure. It is estimated that about one crore may be required for a state per year.

Cost- effective analysis: The cost include the recurring cost towards the auditors, training, producing information booklets, advocacy materials are

Introducing
Performance
Management
in Secondary
Government
Hospitals in
Kerala and Tamil
Nadu using the
Balanced Scorecard
Framework

estimated not to cost more than one crore per year. However, the benefits to the community will be manifold. Once the system is introduced the efficiency and effectiveness of the institutions will also improve. Efficiency refers to optimal use of resources to produce maximum possible results and whereas effectiveness would mean to what extent the institutions has been effective in achieving the objective of providing quality care. This will be reflected by the reduction in disease prevalence, reduction in the personal expenditure for the poor etc. By introducing the operational cost as one of the perspectives, the way hospital spends its budget will be also is monitored. Therefore public resources may not be wasted as much as now.

Similarly, once the clinical appropriateness improves as a result of internal business process perspectives the clinical outcome is expected to improve. The average length of stay being one of the success indicators the chances of faster turnaround of beds is quite high leading to more and more people may get their turn to get admission in to the hospitals.

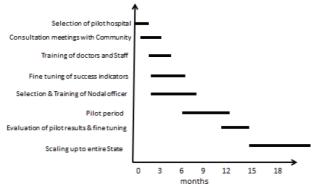
With community actively involving in the process, the preventive health may get popular and hospital will be compelled to spread awareness about disease and disorders. Eventually, disease prevalence and degree of personal hygiene will improve in the community. In the long run, level of public health may also improve by involving those department managing water supply, sanitation and education. Benefit to the providers could also be summarized as follows. As of now no effort is made to identify the best from the rest. Through this evaluation, departments will get focused on their performance. Therefore this will act as incentive for better performance. To that extent it will introduce a healthy competition between departments leading to overall improvement in the service standards.

## (b) Implementation Analysis:

This project will be implemented through a cell created in the Directorate of Health service and contracted qualified auditors. Implementation will be done in two stages: first at some of the selected institutions an later at the state level covering all the secondary healthcare institutions. The implementation schedule is depicted in fig -5.

**Selection of Institutions for piloting**: Institutions with a 100 beds (considered medium sized) hospitals with a full range of services like maternal, pediatric, surgery and physician service including Intensive care unit will be selected. If there are large number of vacancies of doctors, efforts will be initiated to fill-up these posts. All other physical infrastructures will be evaluated to ensure their adequacy during the piloting stage. It is proposed to select at least three institutions in a state for the pilot.

Consultation meeting with community through PRI: A consultation meeting with the community will be organized to elicit the views of the community on the quality



Introducing
Performance
Management
in Secondary
Government
Hospitals in
Kerala and Tamil
Nadu using the
Balanced Scorecard
Framework

Figure 5: Implementattion schedule

of service and associated issues. These views and opinions could also be factored in to the evaluation system. The inputs will be used to develop patient's survey forms.

Awareness meeting with Doctors and Staff& fine tuning of indicators: All the doctors and staff of the selected institutions will be trained on the methodology of assessment. The success indicators and the performance perspectives will be explained to them. In the process good suggestions will be incorporated and their genuine complaints redressed. Efforts will be made to take all staff in to confidence. It is proposed to allow at least a month for the providing community to react to the new changes proposed. If needed, success indicators will be modified to incorporate their views.

**Collection of Data:** A qualified auditor appointed for collecting data will be trained on the functioning of the hospitals and how to obtain the data. He will also be trained to conduct exit poll from patients as well as community survey periodically. Necessary forms and equipments will be procured for this purpose during the prepilot stage.

**Pilot, fine tuning of scales and scaling up:** Once the above steps are completed, the project will be launched. The pilot period will be for six months with two evaluations: one in the middle and towards end. The preliminary results will be discussed with doctors, staff and community. Difficulties if any, in getting the data or confusion on the details will be sorted out. The results will be publicized. Thereafter the project will be scaled up to all the secondary care hospitals in the state.

#### 4. ASSESSMENT OF THE POLICY ENVIRONMENT

(a) **Stakeholder analysis:**The stakeholders could be grouped as follows: firstly, government as owner, secondly the service providers – Doctors, Para-medicals

and other staff of hospitals, thirdly, service seekers – patients and community and fourthly, people representatives, politicians, press and activists. Political executive as part of the government will support this project to get popularity. They will claim the public money will not be wasted anymore and quality of service will improve in the government. The second group is likely to resist any more to bring in scrutiny. They will complain against the higher ups and government for not providing necessary facilities and equipments as in private sector. They will also complain of over work comparing with their colleagues in the private sector. However, once the government digs its feet, they are likely to come around. The third group – service seekers will welcome this move. The social activists will build public opinion on this. The politicians attached to the trade unions in the hospitals will criticize the government to protect their clientele in the provider group. The press may play a neutral role, initially highlighting the need to the system and at the same time pointing out the deficiencies in the hospital.

Once the results of the pilot are published, the views of the politicians (Trade unions) and the press will change in support of the project. Community will reiterate their view and participate in the process more intensely. The doctors and staff will take some time to turn around, as initial reports are likely to criticize the performance of the hospital. Nevertheless, genuine grievances of the doctors and staff will get the attention in the process.

- (b) **Communication issues:** The need to communicate the objectives and results periodically to the community and other stakeholders cannot be over emphasized. Communications will be in the form of internal order to providers, press releases for the community. Publicity material will be prepared for awareness generation and press releases. Advocacy material will be developed for the stakeholders so as to involve them in the policy implementation. The general IEC material informing about the BSC Framework, why it is needed and how people should get involved in this project will be prepared. The advocacy tool will be aiming at informing the importance of introducing BSC framework in PHI and how it will assist to do improvement in the quality of service delivery. The stakeholders' surveys, as a process to arrive at workforce satisfaction and patients' satisfaction shall be conducted every quarter.
- (c) **Political Context:** Health being an important public service, the ruling political party will support the project and subsequently claim credit. The opposition party will criticize the move citing lack of basic infrastructure and facilities for the doctors. With public opinion developing in support of this project, even the opposing political parties will change their position and support the project. If this becomes a successful intervention, the ruling party will go to the electorate as an achievement and the opposition parties will out do the ruling party by including this in the political manifesto. This could become a matter of public and political debate in due course. By this, budgetary allocation to health sector could see a quantum jump benefitting the sector further.

#### 5. CONCLUSIONS

Introducing a performance evaluation system in secondary hospitals will bring in to focus the underlying factors contributing to performance. Hospitals could be incentivized through financial outlays depending on their performance. The efficiency and effectiveness of hospitals will directly contribute to the wellness of the community to which it serves. As a result, prevalence of disease in the community could come down. Even out of pocket expenses will be much lower than the present level. To a large extent the issue of equity will be redressed as participation of the community is monitored in the programme. Individuals in the hospitals will be become aware of their obligation to the community by way of increased responsibility and accountability.

Introducing
Performance
Management
in Secondary
Government
Hospitals in
Kerala and Tamil
Nadu using the
Balanced Scorecard
Framework

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