2.1 Introduction

The review of literature gives an idea about the research carried out by other researchers in the past. As a backdrop to the study, published literature on various aspects of government schemes and strategies for Development of Health Industry both national and international are reviewed and presented in comprehensive capsule. The literature is reviewed under the various heads as national and international publications, various surveys carried out by the researchers, technical journals, research publication and articles, books, theses, websites and newspapers and publications by various organisations.

The review is presented to bring out and highlight the fact that the present study is unique and the first of its kind. There is a large and growing body of evidence that demonstrates a positive linkage between the development of human capital and organisational performance. The emphasis on human capital in organisations reflects the view that market value depends less on tangible resources, but rather on intangible ones, particularly human resources. Recruiting and retaining the best employees, however is only part of the equation. The organisation also has to leverage the skills and capabilities of its employees by encouraging individual and organisational learning and creating a supportive environment in which knowledge can be created, shared and applied. In this review, we assessed the context in which human capital is being discussed and identify the key elements of the concept, and its linkage to other complementary forms of capital, notably intellectual, social, and organisational.

We will then examine the case for human capital making an impact on performance, for which evidence is now growing, and explore mechanisms for measuring human capital. Our belief is that, on the evidence of this review, the link between human capital and organisational performance is convincing. Empirical work has become more sophisticated, moving from single measures of HR to embrace combinations or bundles of HR practices and in this tradition, the findings are powerful. Such results have led some scholars to support a ‘best practices’ approach, arguing that there is a set of identifiable practices that have a universal, positive effect on company performance. Other scholars argue that difficulties in specifying the constituents of a best practice approach problematic. A general and growing trend in this debate is to see these approaches as complementary rather than in opposition, with best practice viewed as an architectural dimension that has generalised effects, but within each organisation, the bundle of practices will be aligned differently to
reflect the context and contingencies face by the firm. Though there appears to be a growing convergence on this issue, the measurement of human capital remains rather adhoc, and more needs to be done to develop robust methods of valuing the human contribution.

2.2 Human Resource Management- a review
The issue of what contributes to competitive advantage has seen, within the strategy literature, a shift in emphasis away from external positioning in the industry and the relative balance of competitive forces, towards an acknowledgement that internal resources be viewed as crucial to sustained effectiveness (Wright and et al., 2001)\(^1\), (Wright and et al., 1992)\(^2\). The work of (Penrose, 1959)\(^3\) represents the beginning of the resource-based view of the firm (RBV), later articulated by (Rumelt, 1984)\(^4\), (Barney, 1991)\(^5\), (Barney, 1995)\(^6\) and (Dierickx and Cool, 1989)\(^7\). The RBV established in importance for an organisation of building a valuable set of resources and bundling them together in unique and dynamic ways to develop firm success. Competitive advantage is dependent not, as traditionally assumed, on such bases as natural resources, technology, or economies of scale, since these are increasingly easy to imitate. Rather, competitive advantage is, according to the RBV, dependent on the valuable, rare, and hard-to-imitate resources that reside within an organisation. Human capital in a real sense is an ‘invisible asset’ (Itami, 1987)\(^8\). The importance to the strategic aims of the organisation of the human capital pool (the collection of employee capabilities), and how it is managed through HR processes, and then becomes apparent.

‘If the types and levels of skills are not equally distributed, such that some firms can acquire the talent they need and others cannot, then that form of human capital can be a source of sustained competitive advantage’ (Snell and et al., 1996)\(^9\).\(^10\). In terms of inimitability, there are at least two reasons why human resources may be difficult to imitate: causal ambiguity and path dependency. ‘First, it is difficult to grasp the precise mechanism by which the interplay of human resource practice and policies generates value… second; these HR systems are path dependent. They consist of policies that are developed over time and cannot be simply purchased in the market by competitors’ (Becker and Gerhart, 1996)\(^11\). The interdependency between HR practices combined with the idiosyncratic context of particular companies creates high barriers to imitation. Of course, the human
resources must be valuable; they must, as Boxall says, be ‘latent with productive possibilities’ and so human capital advantage depends on securing exceptional talent, or, in the familiar phrase, ‘the best and the brightest’.

This emphasis on human capital also chimes with the emphasis in strategy research on ‘core competencies’, where economic rents are attributed to ‘people embodied skills’ (Hamel and Prahalad, 1996)\textsuperscript{12}. The increasing importance of the RBV has done much to promote human resource management in general and human capital management in particular, and to bring about a convergence between the fields of strategy and HRM.

The resource-based view of the firm strengthened the often-repeated statement from the field of strategic human resource management that people are highly important assets to the success of the organisation. Although Michael Hammer suggested that ‘people are our greatest asset’ is ‘the biggest lie in contemporary American business’, the rise of human resource management, in terms of rhetoric at least, has been spectacular. This was sparked in the 1980s by the examination of the ‘Japanese miracle’, an analysis that showed success built on a distinctive form of people management, and by the eagerly received recommendations from the excellence movement (Peters and Waterman, 1982)\textsuperscript{13}, which urged the development and nature of employees within a supportive strong culture. A more recent, and equally important strand has emerged under the title ‘the knowledge based of the firm (Grant, 1996)\textsuperscript{14}, which emphasizes the requirement of organisations to develop and increase the knowledge and learning capabilities of employees through knowledge acquisition and knowledge sharing and transfer, to achieve competitive advantage.

2.2.2 Human Resource Management capabilities, Knowledge, Skills and Experience

Human capital is generally understood to consist of the individual’s capabilities, knowledge, skills and experience of the company’s employees and managers, as they are relevant to the task at hand, as well as the capacity to add to this reservoir of knowledge, skills, and experience through individual learning (Dess and Picken, 1999)\textsuperscript{15}. From a definition such as this, it becomes clear that human capital is rather broader in scope than human resources. The emphasis on knowledge is important, and through
the HR literature has many things to say about knowledge can be shared among groups and institutionalised within organisational processes and routines.

‘The concept and perspective of human capital stem from the fact that there is no substitute for knowledge and learning, creativity and innovation, competencies and capabilities; and that they need to be relentlessly pursued and focused on the firm’s environmental context and competitive logic’ (Rastogi,2000).

Such a consideration leads to a crucial point: the accumulation of exceptionally talented individuals is not enough for the organisation. There must also be a desire on the part of individuals to invest their skills and expertise in the organisation and their position. In other words, individuals must commit or engage with the organisation if effective utilization of human capital is to happen. In addition, therefore, to human capital, there must also be social capital and organisational or structural capital. These three forms of capital contribute to the overall concept of intellectual capital.

2.2.3 Human Resource Management as Intellectual

The (OECD, 1999) defines intellectual capital as ‘the economic value of two categories of intangible assets of a company’- organisational and human capital. Wright et al., (2001) argues that intellectual capital is a factor that includes human capital, social capital and organisational capital. For (Nahapiet and Ghoshal, 1998), intellectual capital refers to the ‘knowledge and knowing capability of a social collectivity, such as an organisation, intellectual commodity, or professional practice’. There is a lack of clarity surrounding these and related terms, with numerous definitions abounding. In one study, (Gratton and Ghoshal,2003) argue that intellectual capital is part of human capital, that is, human capital subsumes intellectual capital, and also includes within it social capital and emotional capital. For most commentators, however intellectual capital has a broad sweep and includes human capital as one of its key dimensions.

Central to these ideas is that intellectual capital is ‘embedded in both people and systems. The stock of human capital consists of human (the knowledge skills and abilities of people) social (the valuable relationships among people) and organisational (the processes and routines within the firm)’.

Developing human capital therefore requires attention to these other complementarities. If competitive advantage is to be achieved, integration between human, social and organisational capital is required.
2.2.4 Human Resource Management and Social

According to (Nahapiet and Ghoshal, 1998) \(^{18}\) ‘the central proposition of social capital theory is that networks of relationships constitute a valuable resource for the conduct of social affairs much of this capital is embedded within networks of mutual acquaintance’. Social capital, it is argued, increases the efficiency of action, and aids co-operative behaviour. Social relationships and the social capital therein, are an important influence on the development of both human and intellectual capital.

At the individual level, individuals with better social capital- individuals with stronger contact networks-will ‘earn higher rates of return on their human capital’ (Garavan and \textit{et al}., 2001) \(^{20}\). But it is at the organisation level that social capital is highly important. Nahapiet and Ghoshal, (1998) \(^{18}\) argue: ‘Social capital facilitates the development of intellectual capital by affecting the conditions necessary for exchange and combination to occur’.

In social capital, the authors argue for three major elements: a structural dimension (network ties, network configuration and appropriable organisation); a cognitive dimension (shared codes and languages, shared narratives), and a relational dimension (trust, norms, obligations and identification).

All three influence the development of intellectual capital. This approach links well with the prevailing resource-based view, with its emphasis on bundles and combinations of resources. Social capital, with its stress on linkages between individuals, creates the conditions for connections which are non-imitable, tacit, rare and durable. Nahapiet and Ghoshal, (1998) \(^{18}\) argue that social capital is based on the twin concepts of sociability and trustworthiness: ‘the depth and richness of these connections and potential points of leverage build substantial pools of knowledge and opportunities for value creation and arbitrage’.

2.2.5 Role of Organisational capital in HRM

The principal role of organisational capital is to link the resources of the organisation together into processes that create value for customers and sustainable competitive advantage for the firm (Dess and Picken, 1999) \(^{15}\).

This will include:

- Organisational and reporting structures
- Operating systems, processes, procedures and task designs
- Information and communication infrastructures
Resource acquisition, development and allocation systems
Decision processes and information flows
Incentives, controls and performance measurement systems
Organisational culture, values and leadership

The interactions between these dimensions are important if employees are to have the motivation to develop and use their skills and knowledge. Beginning with the last issue first, the culture of the organisation has a large impact on both recruitment and retention as well as in the area of generating commitment. In McKinsey’s War for Talent survey, 58% of employees by far the highest response, said that what they valued the most in organisations was strong values and culture.

A supportive culture with strong corporate purpose and compelling values has been seen as the underlining reason for major corporate success (Peters and Waterman, 1982). A second major influence on human capital is the incentive structure and how performance is measured and managed in general. We have mentioned earlier that studies have shown differentiated reward systems, and clear positive appraisal linked to incentives, can link directly to firm performance.

In terms of organisational structure, ‘the degree that skilled and motivated employees are directly involved in determining what work is performed and how this work gets accomplished’ is crucial (Delaney and Huselid, 1996). To this end, employee participation (Wagner, 1994), internal carrier ladders (Osterman, 1987) and team based working (Levine, 1995) have all been shown to positively link to organisational performance. According to Rumelt, the routines and processes that act as the glue for organisations can either enhance or disable co-operative working and the development of knowledge. This is ultimately the simple point that organisational structures and processes must support the purpose of the organisation and so have requisite variety without creating boundaries between individuals and groups.

2.2.6 HRM knowledge within organisation

The connections between human capital, social capital and organisational capital will produce intellectual capital. This in turn will affect the management of knowledge within the organisation. Knowledge has long been recognised as a valuable resource by economists and has been a focus of significant attention in the human capital literature, in particular the issues of knowledge generation, leverage, transfer and integration, (Nonaka, 1994) knowledge has been concept unlisted and characterized
in a number of ways in the literature but a major point of commonality has been the distinction between tacit knowledge (or know-how) characterised by its incommunicability, and explicit knowledge, which is capable of codification (Polanyi, 1962)\(^2\).

Given the importance of knowledge in the organisation (Grant, 1996)\(^2\) posits a knowledge-based theory of the firm) it becomes crucial that the employees who are the source of knowledge are managed well. This requires that firms ‘define knowledge, identify existing knowledge bases, and provide mechanisms to promote the creation, protection and transfer of knowledge. The fundamental issue with tacit knowledge is its intangibility and (Pfeffer and Sutton, 1999)\(^2\) argue that the knowledge-doing gap (translating knowledge into action) is at least as important as accumulating knowledge in the first place.

In other words, attending to the conditions under which people are prepared to share and act upon their knowledge is a major component of human capital management. As Wright et al point out; in the HR literature there has been a focus on developing individual knowledge through training and providing incentives to apply knowledge. But the human capital literature is as much concerned with the organisational sharing of knowledge, making it accessible and transferable. Leonard-Barton, (1992)\(^2\) has identified four processes for supporting organisational learning and innovation.

- Owning/solving problems (egalitarianism)
- Integrating internal knowledge (shared knowledge)
- Continuous experimentation
- Integrating external knowledge (openness to outside)

The greater the sense of social community within the firm (Social capital), the more likely it is that knowledge will be created and transferred (Coleman, 1988)\(^3\). Similarly, if a combination of organisational processes and boundaries are in place, this may hinder efforts to turn knowledge into action.

**2.2.7 Human Capital and performance**

The link between human capital and performance is based on two theoretical strands. The first, as we have discussed, is the resource based view of the firm. The second is the expectancy theory of motivation which is composed of three elements: the valence or value attached to rewards; the instrumentality, or the belief that the employee will
receive the reward upon reaching a certain level of performance, and the expectancy, the belief that the employee can actually achieve the performance level required. HRM practices that encourage high skills and abilities—e.g. careful selection and high investment in training—can be specified to make the link between human capital management and performance. In this section, we shall outline a chronology of work in the area of HR practice and performance, before moving on to discuss some of the problems with researching the subject.

2.2.8 HRM strategy, schemes and policies in 1960s and 1970s

Initial writing on human capital flowed from economists of education such as (Mincer, 1974)\(^{31}\), and Becker (who won Noble prize for his work in this subject) (Becker, 1964, 1976)\(^{32,33}\) focusing on the economic benefits from investments in both general and firm specific training. This work, based on detailed empirical analysis, redressed the prevailing assumption that the growth of physical capital is paramount in economic success. In reality, physical capital ‘explains only relatively small part of the growth of income in most countries’. The relationship between education and economic growth (Psacharopoulos, 1973)\(^{34}\), productivity, (Denison, 1962)\(^{35}\) and earnings growth all have strong empirical support.

Human capital has been central in explaining individual earnings differences. Employees who invest in education and training will raise their skill level and be more productive than those less skilled, and so can justify higher earnings as a result of their investment in their human capital. With general training, ‘the potential for asset creation exists, so do the conditions for employee turnover because trained employees can market their heightened human capital’ (Steffy and Maurer, 1988)\(^{36}\). Firms may reduce the wages of those on training to offset the costs of training, to increase it again, once employees have completed the training once productivity value increases.

With firm specific training, there is no incentive for the employee to leave the firm. The chief benefit of the training will be to the firm, and so there is no incentive for employees to accept reduced wages in order to offset the costs of training. The firm thus bears all costs of training and ‘if asset creation is to occur, the marginal productiveness of employees during the post-training period must increase enough to offset the inequality between labour costs and productivity value during training’. Efficient and effective training programmes are therefore necessary for
value creation. There are, of course, cost interdependencies, and given the linkages between HR practices, investment and developing capability in one area may lead to reduced costs or need for investment in other areas, just as investing in recruiting and selection may highlight individuals who require little training on arrival into the firm.

In addition to economists, human resource accountants wanted to explain how the contributions of employees added to the asset value of the firm, and set out to establish valid and reliable techniques for measurement of cost and value of employees to organisations (Friedman and Lev, 1974).37 The chief issue within human resource accounting (HRA) is that human assets, unlike capital assets, have a largely uncertain future service life. Measuring the value of human resources has therefore been concerned with the nature of the uncertainty and providing estimates of this, with a number of measures used, including the discounted future compensation model—where the value of an employee is the present worth of their remaining earnings from employment, and the replacement cost method, where ‘cost incurred by recruiting, selecting, compensating, and training employees reflect the expected value of successful job performance’.

For the HRA issue of measuring an individual’s value to the firm is founded on the notion that it is not the individual per se who is valuable, but the individual in relation to the roles he/she plays that is crucial, and he and others (Lau and Lau, 1978)38, (Morse, 1973)39 developed a stochastic valuation model to measure system dynamics and estimate expected services life with known estimated error.

The development of human resource accounting as a field demonstrated the high interest in attempting to value the contribution of employees. However, a number of issues led to interest in the area waning in the 1970s. They point out: ‘public accounting standards were too stringent to allow the direct reporting of human asset value in financial statements’. Second, no generally accepted accounting procedures emerged for human resources and the progress of human resource accounting has been, at best, mixed, with one major review concluding:

‘At the theoretical level, HRA is an interesting concept. If human resource value could be measured, the knowledge of that value could be used for internal management and external investor’s decision making. However, until HRA advocates demonstrate a valid and generalisable means for measuring human resources value in monetary terms, we are compelled to recommend that researchers abandon further
consideration of possible benefits from HRA (Scarpello and Theeke, 1989), (Cascio, 1991).

2.2.9 HRM in 1980 brought managerial scholars

The rise of human resource management in the 1980 brought managerial scholars to the debate on the link between the management of people and performance. A number of attempts were made to put empirical flesh on the theoretical bones of the resource-based view and the specific HRM prescriptions concerning vertical and horizontal alignment and how the systems of HR practice can increase organisational performance.

Early studies at this time examined investment in HR practice and business performance. Using cross sectional survey data (Nkomo, 1987), examined the link between HR planning and business performance, and found no correlation. These results were supported by another survey-based study (Delaney et al., 1988), into HR practices and financial performance, which also found no link.

Work by Ulrich and colleagues on the OASIS research programme (Organisation and strategic information services) used the PIMS database and found positive relationships between specific HR practices and business results. A later study (Yeung and Ulrich, 1990) found that the manner of alignment between HR and business strategy had an impact on organisational performance. This work built on a previous study by whom, with cross sectional data, showed how HR practice varied depending on the business strategy profile (Jackson, et al., 1989). A number of scholars tried to link the effect of certain HR practices to specific organisational outcomes. The adoption of training programmes was positively associated with financial performance (Russell and et al., 1985). Job security, presence of a union, compensation level, culture and demographics have an impact on turnover (Arnold and Feldman, 1982), (Baysinger and Mobley, 1983) while transformational labour relations (involving partnership and involvement) were linked to increased productivity (Katz and et al., 1987).

Within the HR accounting field, utility analysis became a dominant theme (Schmidt et al., 1979) scholars in this field attempted to overcome some of the measurement problems that dogged early HRA formulations examining alternative means of economic valuation. Utility analyst ‘measure the economic contribution of
the personnel activities according to how effective they are in identifying and modifying individual behaviors, hence the future service contribution of employees’. Dollar valuation- analysing the dollar value of certain HR programs, particularly selection and training, and comparing them with the expected dollar value return from other investments- lay at the heart of the method, but problems rest on the choice of the valuation base (ex- ante concepts or ex- post concepts or both) and the generally broad confidence intervals for estimates (Alexander and Barrick, 1987)52. As Becker and Gerhart state : ‘there is some doubt regarding whether managers’ decisions are particularly responsive to information about the estimated dollar value of alternative decisions, particularly as the estimation procedures become increasingly complex and difficult to understand’.

2.2.10 Development of individual HR Practices in 1990
The research approach of focusing on individual HR practices and their link to performance continued into the early 1990s, some relying on single measures of HR practices. Bartel,(1994)53 established a link between the adoption of training programs and productivity growth, while the link between training programmes and financial performance was supported by (Weitzman and Kruse, 1990)54 identified links between incentive compensation schemes and productivity. Terpstra and Rozell, (1993)55 examined the extensiveness of recruiting, selection test validation and the use of formal selection procedures and found to link to organisational profits. In general, selectivity in staffing have been shown to be positively related to organisational performance (Becker and Huselid, 1992)56, Performance evaluation and its linkage to compensation schemes have also been identified as contributing to increases in firm profitability.

However, such reliance on single HR practices may not reveal an accurate picture. The dominant view of human resource practices ‘have limited ability to generate competitive advantage in isolation’ but ‘in combination… they can enable a firm to realize its full competitive advantage’.

In other words, relying on single HR practices with which to predict performance is unlikely to be revealing. Moves had been made within the field, therefore, to examine the notion of clusters or bundles of HR practices and how they impact on organisational performance.
2.2.11 Human Resource Management practices and organisational strategy of the firm

A central tenet of strategic human resource management is that there should be vertical linkage between HR practices and processes and the organisational strategy of the firm. The strategic posture of the organisation will influence the style and approach of human resource activity. Strategies vary, and a number of researchers have investigated how HR practices vary with differences in strategic approach.

Most work in this area uses traditional strategy typologies, such as cost, flexibility and quality strategies (Miles and Snow, 1978)\(^5\) frameworks of prospector, analyser and defender (Delery and Doty, 1996)\(^\text{58}\). The emphasis here is on alignment, or fit, between the external environment, the strategy of the organisation and HR.

The notion of fit has been articulated by writers such as (Venkatraman, 1989)\(^\text{59}\) and benefits of tight coupling to ensure efficiency and effectiveness in achieving organisational aims have been well attested, but some authors (Orton and Weick, 1990)\(^\text{60}\) have argued that such tight links may represent a barrier to adaptability and flexibility. Huselid, (1995)\(^\text{61}\) has found that those organisations that link HRM practices to strategy report higher performance outcomes. In a sample of 1,050 banks, found modest support for a fit with the Miles and Snow typology. Found support for this type of fit in a sample of 97 manufacturing plants. McDuffie, (1995)\(^\text{62}\) in contrast, explicitly rejects this hypothesis, claiming that in his study of car manufacturing plants, he found no evidence that a ‘fit’ of appropriate HRM practices to mass production was able to compete with flexible production.

Hsin, (2005)\(^\text{63}\) his study applies both resource-based view and strategic human management theory to explore two kinds of fit in strategic human resource management for Taiwanese hospitals. The strategic human resource management can be divided into two kinds of fit: vertical and horizontal. To explore the vertical and horizontal fit of human resource management practices, this study adopted an embedded case study design and treated individual department as analysis unit. After interviewing several medical and administrative department leaders, this research finds that the combination of resources will influence the human resource management practices. Rather than viewing HR as a critical driver of organisational strategy and outcomes, most health care organisations see HR as a drain on the organisation's bottom line. Fottler and et al., (2006)\(^\text{64}\) discussed uses the popular Balanced Scorecard approach to align its measures of HR performance to the
organisation's strategic plan. Only by aligning HR with the organisational strategy will HR leaders truly get a seat at the leadership table. HR professionals can overcome impediments and gain a seat at the table by learning the language of business and the ways in which organisational leaders use data to drive their decisions. HR staff must be specialists with strategic HR functions and not generalists who are confined to playing restricted and bureaucratic role.

2.2.12 Human Resource Management ‘Universal’ or ‘Best Practice’ approaches

A second perspective on human resources and performance linkage is the idea of ‘best practices’, or ‘high performance work practices’. This view emphasizes the need for strong consistency among HR practices (internal fit) in order to achieve effective performance. This view has a high degree of empirical support (Ichniowski et al., 1997)\textsuperscript{65}. This view has been championed prominently by Pfeffer, who listed 15 HR practices in 1994 which became seven in 1998: employment security; selective hiring, self-managed teams, high compensation contingent on performance, training, reduction of status differentials, and sharing information. Arthur, (1992)\textsuperscript{66} found that HR practices focused on enhancing employee commitment (e.g. decentralized decision-making, comprehensive training, salaried compensation, employee participation) were related to higher performance. Conversely, he found that HR practices that focused on control, efficiency and the reduction of employee skills and discretion were associated with increased turnover and poorer manufacturing performance.

Similarly, in a study of high performance work practices, found that investments in HR activities such as incentive compensation, selective staffing techniques and employee participation resulted in lower turnover, greater productivity and increased organisational performance through their impact on employee skill development and motivation.

What the view shows are that the more of the high performance HRM practices that are used, the better the performance as indicated by productivity, turnover or financial indicators. Where different types of fit were compared, this was invariably the one that received the strongest support.

Although support for this view exists, there are notable differences across studies as to what constitutes a ‘best’ practice. Nonetheless, several themes emerge across the studies. At their heart, most of the studies focus on enhancing the skill base
of employees through HR activities such as selective staffing, comprehensive training and broad developmental efforts like job rotation and cross utilization. Further, the studies tend to promote empowerment, participative problem solving and teamwork with job redesign, and group based incentives.

### 2.2.13 Configurations of HR Practices in Industry

A third strand of research has emphasised the patterns or configurations of HR practices that predict superior performance when used in association with each other, or the correct strategy, or both. In order to be effective, an organisation should develop an HR system that achieves both horizontal and vertical fit. As McDuffie argues: 'Implicit in the notion of a ‘bundle’ (of human resources) is the idea that practices within it are interrelated and internally consistent, and that ‘more is better’ with respect to the impact on performance, because of the overlapping and mutually reinforcing effects of multiple practices’.

With the configurationally approach ‘the distinction between best practice and contingency models begins to blur’. The configurationally idea is that there will be effective combination of HR practices that will be suited to different organisational strategies. Found some support for the configurationally approach in their respective studies.

In summary, while some authors argue for the idea of external and internal fit, others argue for an identifiable set of best practices for managing employees that have universal additive positive effects on organisational performance. Some maintain that the two approaches are in fact complementary.

The argument that these approaches are not in conflict has also been made by (Guest and et al., 2000)\(^7\). As state, best practices have an architectural nature: for example, the idea of incentives for high performance has a general sable quality. But within a particular firm, HR practices and their mix will be different, depending on context and strategy and so forth. ‘Two companies with dramatically different HR practices arguably have quite similar HR architectures, e.g. although the specific design and implementation of their pay and selection policies are different, the similarity is that both link pay to desired behaviours and performance outcomes and both effectively select and retain people who fit their culture or as Guest puts it : ‘the idea of ‘best practices’ might be more appropriate for identifying the principles underlying the choice of practice, as opposed to the practices themselves’.
2.2.14 Human Resource Management high performance work practices and commitment

High performance management, or high performance work practices, has become an important field. The practices across a number of authors are listed in High commitment management aims to go beyond high performance management to include an ideological component- the identification of the employee with the goals and values of the firm, so inducing commitment (Walton, 1985).68

The work of Wood and colleagues has identified a number of common feature of high commitment management: the development of career ladders and emphasis on trainability and commitment; a high level of functional flexibility with the abandonment of potentially rigid job descriptions; the reduction of hierarchies and the ending of status differentials; a heavy reliance on team structure for structuring work and problem solving; exemplary job design to promote intrinsic satisfaction; a policy of no compulsory lay-offs or redundancies; new forms of assessments and payment system; a high involvement of employees in the management of quality.

Guest and Colleagues’ work for the Institute of Personnel and Development, 2000, surveying 610 organisations in the UK, endorsed that there is a strong link between HRM and performance, but that this link is indirect, through the apparent impact on employee commitment, quality and flexibility.

Patterson and Colleagues, (1997)69 in a major study from Sheffield identified a positive relationship between employee attitudes, organisational culture, and HRM and company performance, concluding that employee commitment and a satisfied workforce are essential to improving performance. Two highly significant areas of HR practice were seen as: the acquisition and development of employee skills (recruitment, selection, induction and performance appraisals); and job design (skill flexibility, job responsibility, team-working).

2.2.15 Difficulties with the link between human resources and organisational performance

There are a number of problems with asserting a linkage between human capital and human resource initiatives and organisational performance.

Do human capital processes lead to increased performance, or is the alternative explanation equally as likely: that higher performing firms will have more resources to invest in better human capital management? If the causal link is to be established,
there is a need to specify the intervening variables between human capital management and performance.

‘The fact that profit sharing is associated with higher profits can be interpreted in at least two ways: profit sharing causes higher profits, or firms with higher profits are more likely to implement profit sharing. However, if it can be demonstrated that employees in firms with profit sharing have different attitudes and behaviours than those in forms without profit sharing and that these differences also translate into different levels of customer satisfaction, productivity, speed to market and so forth, then researchers can begin to have more confidence in the causal model’.

A good deal of work has emphasised alignment of human resources to organisational strategy at a very high degree of abstraction (e.g. to a cost leadership strategy, or a differentiated strategy). But the firm-specific contexts and contingencies surrounding the organisation will make HR alignment much more complex and idiosyncratic, and render generalisations about HR and capital problematic.

If human’s capital is, in real sense, ‘best practice’, why is it that it that some organisation lack human capital processes and yet is successful in their purpose? Or, put another way, why doesn’t everyone adopt human capital principals? A simple answer would be that such firms may be successful now but the possibility of their sustaining their success is reduced by their failure to implement human capital concepts. This is an empirical question, however, and we agree with Becker and Gerhart who state that ‘more effort should be devoted to finding out what managers are thinking when they make the decisions they do. This suggests a need for differ qualitative research to compliment the large scale, multiple firm studies that are available’.

The range of design and research approaches in these studies raises problems in terms of developing a coherent body of knowledge there are a number of problems here.

1. The first is the low level of overlap between HR capital measures included by researchers into studies which make the cumulating of research in the field difficult.

2. Second, practices that are common across studies are often measured in different ways. For example, ‘one study may look at whether business has performance pay (i.e. yes or no) while another measures the proportion of employees covered by such practices, and another looks at how much is typically closed (Richardson and Thompson, 1999)’.
3. Third, the problem of how to measure business performance varies widely, with financial and accounting best measures, time periods, subjective and objective measures, intermediate outcomes such as commitment and flexibility, among others, being used in varying ways.

4. Fourth, the unit of analysis differs widely. In some cases the unit of analysis is organisational level, in others, business unit, and, less often, at the facility level.

5. Fifth, the research method varies from cross sectional surveys, either in single industry or multi-industry, to case study in multiple firms either in single industry or multi-industry settings, longitudinal surveys, and mixed methods incorporating elements of the above.

2.2.16 Impact of human resources in organisations

From the foregoing discussion, we can agree with Delaney and Huselid who state that there is compelling evidence for linkage between strong people management and performance. But how in human capital to be measured? Measurement is obviously important to gauge the impact of human capital interventions and address areas for improvement, but in this field, measurement is a problematic issue.

The process identified by some academics as well as number of consulting firms, is to specify the key human capital dimension and assess their characteristics. It is then essential to measure these practices in terms of outcomes. This outcomes differ along a number of, by now, familiar categories: either (i) financial measures; (ii) measures of output of goods and services-units produced, customers served, number of errors, customer satisfaction) or (iii) measures of time-lateness, absence etc. Locke and Latham, (1997) preference is to adopt a stakeholder perspective, which ‘would give some emphasis to performance outcome of concern to the range of stakeholders’. These outcomes, Guest argues, ‘should reflect employee attitudes and behaviour, internal performance, such as productivity and quality of goods and services; and external indicators, such as sales and financial performance. In other words, if the research is to guide policy and practice, we need to collect a number of potentially related outcomes that extend beyond a narrow definition of business performance based on just financial indicators’.

In the literature, research has tended to focus, in terms of outputs, on employee turnover, productivity, and financial performance. The difficulty in relying on just firm performance is that, apart from ignoring important other measures just outlined,
it may be that within organisations, business units have different objectives. Some
may be focused on market share, others on profit, for example, and the HR practices
may not be the same in both.

If research is at an organisational level, rather than at a business unit level, such
differences may reflect in a poor linkage between human capital and unit
performance. Also point to the problems in variations of accounting practices between
countries, which may render comparisons in financial performance problematic.
The adoption of a stakeholder perspective reflects the concern to have multiple
measures of performance outcome. This perspective is supported by the popularity of
the ‘balanced scorecard’ concept, which is intended to weigh the interests of various
stakeholders. According to Kaplan and Norton, attention should be given not just too
traditional financial measures, but to people, processes and customers.

The measures for people are more difficult to specify than say the financial
aspects, but (Ulrich, 1997)\(^7\) argues for three categories: productivity, people, and
people and process. Huselid,( 2003)\(^7\) believes that the ‘people’ box in Kaplan and
Norton’s original formulations does not say enough about what is required for HR. He
and colleagues propose further nested scorecards, including a workforce scorecard
that is focused on workforce ‘behaviours and deliverables’ and then an HR scorecard,
which addresses the issue of the infrastructure needed to deliver the deliverables.

Utility analysis remains a technique that continues to be advocated. The work
in creating a database of a wide range of HR practices at the Saratoga Institute
provides a benchmark for organisations in terms of industry averages and trends and
allows managers to assess their own practices in terms of cost and utility.
The results of a Conference Board survey into human capital measurement showed
that many HR professionals were developing human capital metrics but this activity
was often conducted in isolation, with organisations choosing not to collaborate with
other firms or consultancies, or with their own organisation’s finance strategy
colleagues. Where HR professionals did use external benchmarks, they were often
inappropriate internally, and they did not tie up the metrics to the business goals.

2.3 HRM measures as cost of Selection, Training and Recruitment
The reporting of intangibles such as human capital is difficult. According to Huselid,
this is because of two major issues: first, there is no common framework for reporting
that goes beyond historical measures (e.g. cost of selection or training) to ‘more
detailed information on workforce quality’. Second, many firms lack database and audited information that can give strong and relevant information to investors. Developing a consistent and coherent internal HR architecture on human capital measurement is a necessary condition for effective external reporting.

Recruitment is the entry step and if required care is not taken then the organisation will have to face adverse consequences. Goyal, (2008) highlight the impact of Internet on recruitment. It also discusses the concept of e-recruitment from the perspective of employers’ and job-seekers, and throws light on the growing world of job portals in e-recruitment arena in India. Information Technology and Internet have changed the face of an organisation. Never more has the concept of "boundary less organisations" been more apt than in today's world. Internet has increased the reach of organisations both in terms of markets and manpower. Campion and et al., (1988) a highly structured employment interviewing technique is proposed, which includes the following steps: (1) develop questions based on a job analysis, (2) ask the same questions of each candidate, (3) anchor the rating scales for scoring answers with examples and illustrations, (4) have an interview panel record and rate answers, (5) consistently administer the process to all candidates, and (6) give special attention to job relatedness, fairness, and documentation in accordance with testing guidelines. Examination of psychometric properties for hiring entry-level production employees reveals high inter-rater reliability and predictive validity, as well as evidence for test fairness and utility. The levels of these properties are comparable to those of a comparison battery of typical employment tests, and correlations with the tests suggest that the interview has a strong cognitive aptitude component. Potential explanations for the effectiveness of this structured interviewing technique are discussed. Mayo, (2004) discussed on, Triumphant Companies have recognised the role of HR in appropriate selection of Employees. World economy has shifted from manufacturing to service and knowledge. The new role of HR is to determine the perfect skill essential for the employees to accomplish the organisation’s strategy.

Training as a core function in theory as well as practice of human resource management. Manishankar C, (2009) explain the actual need for training and its relationship with the development of an organisation, both monetarily and non-monetarily. Training has taken center-stage and is often related to the developmental aspect of an organisation. It is indeed surprising to note that most companies put in place training schedules without even demarcating the long and short-term
implications such programs would have on the individual employee and the organisation as a whole.

2.4 HRM and job satisfaction

Huselid, (1995) in 590 for-profit and nonprofit firms from the National Organisations Survey, we found positive associations between human resource management (HRM) practices, such as training and staffing selectivity, and perceptual firm performance measures. Results also suggest methodological issues for consideration in examinations of the relationship between HRM systems and firm performance.

HRM Practices affects on Job satisfaction found by (Alina and et al., 2008) the purpose of this paper is to investigate the relationship between human resource management (HRM) practices and workers' overall job satisfaction and their satisfaction with pay. After controlling for personal, job and firm characteristics, it is found that several HRM practices raise workers' overall job satisfaction and their satisfaction with pay. However, these effects are only significant for non-union members. Satisfaction with pay is higher where performance-related pay and seniority-based reward systems are in place. A pay structure that is perceived to be unequal is associated with a substantial reduction in both non-union members' overall job satisfaction and their satisfaction with pay. Although HRM practices can raise workers' job satisfaction, if workplace pay inequality widens as a consequence then non-union members may experience reduced job satisfaction.

Hina and Ali, (2007) provides support for some key factors serving as stimulators for employee satisfaction. These factors are pay, job interest, leadership (encouragement, feedback, and performance appraisal), and career growth, working environment, broadly defined job responsibility, organisational objectives and trainings. These factors if not provided, result in dissatisfaction of employees. In addition to this some new factors have been identified which were not made part of the survey initially but came across on employees feedback. These factors include government policies, transport, good innovative projects, company strength, social and economic values, political instability, natural disaster, location, vendor management, weather, and family issues. It is proved that employee satisfaction impacts positively on software quality and productivity. In brief, if the factors highlighted are given proper consideration, the productivity and quality of
organisation will increase. Service climate and job satisfaction is showing positive effect on service quality whereas turnover intention is having negative impact on service quality.

2.5 HRM and Business excellence

HR has evolved from a mere administrative rubber stamp to a more active strategic business partner striving for aligning the HR processes with the core processes for attaining business excellence. Jyotibudhraja, (2008)\(^8\) discusses the latest and emerging trends in HR practices in the contemporary scenario with a focus on Indian context. It also explores the role of HR as an enabler in the ever-increasing business challenges. Most business authorities believe that Talent Management (TM) has emerged as an important global business challenge. In developed economies, employers anticipate many experienced workers to retire, creating a vacuum of talent that will not be easy to fill; in developing economies, talent needs are fueled by explosive business expansion and pending waves of retirements. Typically, Talent Management has focused on attracting, developing and retaining talented people. But that is not enough for the future. Organisations will need next generation talent management.

Sreekumar, (2008)\(^8\) analyses and compares certain critical HRM strategies with respect to the management of knowledge workers and how the knowledge workers and those who manage them can understand their roles better and contribute to the upgradation of human capital of their firm.

2.6 Health Management Information System and HRM

Gupta and Bagga, (2008)\(^8\) the Health Management Information System (HMIS) has been envisaged to not only help the administrators to have better monitoring and control of the functioning of hospitals across the state using decision support indicators but also assist the doctors and medical staff to improve health services with readily reference patient data, work flow enabled less-paper process and parameterized alarms and triggers during patient treatment cycle. Reed and May,(2011)\(^8\) in this study, it was objectively identified hospitals that demonstrated superior and sustained clinical quality year over year for up to nine consecutive analysis years. This report examines the differences between the set of 50 hospitals as compared to the rest of nation’s hospitals in terms of potential lives saved and in
hospital complications avoided. Lastly, set out to learn more about what the top 50 facilities have in common. If all hospitals performed at the level of America’s 50 Best Hospitals, over half a million deaths could have been avoided over the last decade.

Joseph and Don, (1982)\textsuperscript{85} the major failure of hospital quality assurance systems is the failure to influence physicians’ therapeutic decision making in a way that will ensure their ordering necessary and only necessary services. The primary reason for this is insufficient recognition of the "intensive" technology used to treat acute patients, a technology characterised by the interdependence of therapeutic services and the patient's response to these services. In such situations, the appropriate method of achieving quality control is to provide performance feedback to the physician on a regular basis. Westat, (2004)\textsuperscript{86} his survey tool was useful for assessing the safety culture of a hospital as a whole, or for specific units within hospitals. Moreover, the survey can be used to track changes in patient safety over time and to evaluate the impact of patient safety interventions. It supported a wide range of other patient safety research to develop innovative approaches to collecting, analysing, and reporting patient safety data; understanding the impact of working conditions on patient safety, including the sciences of ergonomics and human factors; and fostering the use of information technology to reduce medical errors. Pascale, (2002)\textsuperscript{87} various methods can be used to gather input from health care providers regarding the quality and safety of care provided by their organisations. Interviews, focus groups, and questionnaires are some of these methods. In this study, we chose to use a questionnaire approach in order to collect structured, quantitative information on the work system and various outcomes (e.g. Perceived unit effectiveness and job satisfaction). The data presented provide evidence for the reliability and validity of our employee questionnaire.

Paul and \textit{et al.}, (1991)\textsuperscript{88} stated if a hospital were to collect regularly the type of information described here, it would provide clinicians, management, and trustees with focused, usable information about areas in which care could be improved and in which care excelled. Such information could serve as evaluating important new efforts to improve quality. Such reports can be extremely useful for quality assessment and improvement efforts because satisfying patients’ expectations is an important component of high-quality care and because patients can provide information that is not available from other sources. Hendriks and \textit{et al.}, (2006)\textsuperscript{89} investigated to what extent personality is associated with patient satisfaction with hospital care. A sizeable association with personality would render patient satisfaction
invalid as an indicator of hospital care quality. The Satisfaction with Hospital Care Questionnaire addressing 12 aspects of care ranging from admission procedures to discharge and aftercare and the Five-Factor Personality Inventory assessing a person’s standing on Extraversion, Agreeableness, Conscientiousness, Emotional stability, and Autonomy.

2.7 HRM implications in Developments of Hospital management
Grech, (2002) the management of hospitals has changed considerably over the last two decades. The business processes and patient treatment regimens are unrecognizable from those of ten years ago. Health care in general faces unprecedented challenges internationally as the demand for more medical treatment and services increases together with a parallel emphasis on quality and cost containment. Furthermore external factors such as the ‘greying’ population and growing patients’ expectations increase the burden upon hospital management and staff to provide a quality hospital service. Hospitals are expensive enterprises. Huge investments go into the construction and equipping of hospitals. It is therefore incumbent upon the authorities to ensure that the populace gets an appropriate return on its investment. These developments in hospital care and management, including the increasing importance of focusing care and management decisions around the patient. It will explore the role clinicians should play in management, itself still a topic of controversy. The role of information technology and its indissoluble link with the proper administration of resources will also be critically appraised.

2.8 Human resource in Accreditation of Hospitals
Worldwide, the Standardization of Healthcare Delivery System has become the focus. In India health care delivery system has remained largely fragmented and uncontrolled. The focus of accreditation is on continuous improvement in the organisational and clinical performance of health services, not just the achievement of a certificate or award or merely assuring compliance with minimum acceptable standards. Ensures a Quality Index for Health Consumers: A growing number of hospitals in India are turning to accreditation agencies worldwide to both standardize their protocols and project their international quality of health care delivery. It is 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. *Attract foreign patients:* The process of accreditation is envisaged to result in a process of fundamental change in the technical procedures of service delivery, in the appropriate use of available technologies, in the integration of relevant knowledge, in the way the resources are used, and in the efforts to ensure social participation. Quality Assurance helps improve effectiveness, efficiency and in cost containment, and accountability and the need to reduce errors and increase safety in the system. Gyani, (2005)\(^9\) National Accreditation Board for Hospitals and Healthcare (NABH) Providers comes under the purview of board of Quality Council of India, set up to establish and operate accreditation programme for healthcare organisations. The board is structured to cater to much desired needs of the consumers and to set benchmarks for progress of health industry. The board is functionally autonomous in its operation. Currently it accredits Hospitals and Nursing homes, and is expected to accredit Blood Banks, Diagnostic Centers (Imaging), Dental Centers and Ayurvedic Hospitals/ Clinics in future.

**NABH Accreditation Hospitals:**
1. B.M. Birla Heart Research Centre, Kolkata
2. MIMS Hospital (MIMS Ltd.), Calicut
3. Kerala Institute of Medical Science, Thiruvananthapuram
4. Max Super Specialty Hospital, New Delhi
5. Max Devki Devi Heart and Vascular Institute, New Delhi
6. Moolchand Hospital, New Delhi
7. Narayana Hrudayalaya, Bangalore
8. Dr. L. H. Hiranandani Hospital, Mumbai
9. Fortis Hospital, Noida
10. Sagar Apollo Hospital, Bangalore
11. Columbia Asia Medical Centre - Hebbal, Bangalore

And as per latest figure, 45 hospitals have further applied for NABH Certification.

**Business Process Re-engineering in Healthcare:** Today’s patients have more healthcare information as well as more choices than ever when it comes to choosing and using health care resources, and they are increasingly taking on the role of active and involved consumers. In the present scenario, providers need to offer innovative services and products that are geared toward health care consumerism - encouraging patients to become better educated about their care and coverage and helping employers offer better choices. This is affecting the sector as a whole, though effects
seem to be quite vague as of now which is most probably going to gain momentum in years to come as per the opinions of sector experts.

- A problem-solving approach.
- A top-down approach.
- Emphasizes radical redesign of business process to achieve dramatic improvements in critical contemporary measures of performance such as cost, quality, service and speed.
- The elements of BPR are to be constrained by total service experience and also should focus on seamless service to patients across various functional areas in hospital. Technology is playing a major role in creating awareness. They are becoming more and more aware about new technologies, and the rising income of consumers is contributing to their affordability. Dissatisfaction is creating a climate for change.

Business Process Re-engineering (BPR) is any radical change in the way in which an organisation performs its business activities. BPR involves a fundamental re-think of the business processes followed by a redesign of business activities to enhance all or most of its critical measures - costs, quality of service, staff dynamics, etc.

Gupta, (2011) most healthcare organisations today need to modernize their IT infrastructure, to be able to provide safer, faster and more efficient healthcare delivery. This requires massive upgradation of their existing IT infrastructure and involves huge upfront capital expenditure and sizeable operating expenses. Cloud technology mitigates the need to invest in IT infrastructure, by providing access to hardware, computing resources, applications, and services on a 'peruse' model, which dramatically brings down the cost and simplifies the adoption of technology. Several EMR vendors are offering their solutions as a cloud-based offering, providing an alternative approach to help hospitals better manage the otherwise massive capital IT investments that would needed to support EMR implementations.

However, there is an ongoing debate within healthcare as to the viability of cloud-based solutions given the need for patient privacy and sensitive personal information. In considering cloud computing for health care organisations, systems must be adaptable to various departmental needs and organisational sizes. Architectures must encourage a more open sharing of information and data sources. Many HIS and clinical systems deal with processes that are mission critical, and can make the difference between life and death. Cloud computing for healthcare will need to have the highest level of availability and offer the highest level of security in order
to gain acceptance in the marketplace. Hence there might be a need to create a 'Healthcare-specific Cloud' that specifically addresses the security and availability requirements hospitals. Intensive care unit (ICU) is defined as a specially staffed, specialty equipped, separate section of a hospital dedicated to the observation, care, and treatment of patients with life threatening illnesses, injuries, or complications from which recovery is possible. It provides special expertise and facilities for the support of vital function and utilizes the skill of medical nursing and other staff experienced in the management of these problems. Halpern and et al.,(2004)\textsuperscript{93} highlighted critical care is the specialized medical care of patients with or at high risk for life-threatening, or “critical,” conditions requiring constant monitoring and comprehensive care consisting of complex therapies and interventions. Most hospitalized patients with critical conditions are cared for in ICUs, patient care areas designed to provide extraordinary treatment by specially trained healthcare professionals, often with the use of high-tech equipment. More than three-quarters of acute care hospitals in the United States provide critical care services, and the national number of ICU beds continues to increase each year. Bhutkar and et al., (2008)\textsuperscript{94} they were presented findings of our usability study of Intensive Care Units (ICUs) in Indian hospitals. Our study touches upon its various aspects such as location, layout, signage system, doors, windows, patient information boards, switch boards, power plugs, various medical facilities and equipment. Through this study, we have realized that there is vast scope for enhancement of ergonomics design and usability of an ICU and each aspect needs an individual focus. However, presenting an overview of these aspects will be helpful for appreciating the complexities and challenges faced by the physicians, ICU staff and patients. An example of this complexity was noted in relation to the usability of ventilator system, which is one of the most important pieces of medical equipment used in an ICU. Misra and et al., (2010)\textsuperscript{95} study findings revealed that in majority of the hospitals, there was a shoe change policy and the visiting hours were specified. However, most hospitals did not have any policy on the use of personal protective measures and there was no policy for relatives staying with patients in ICU. Intensive care unit (ICU) is one of the busiest units of the hospital and uses most sophisticated equipment and advanced medical practices. At the same time ICU may also experience higher infection rates due to the severity of illness and frequent use of invasive devices such as intravenous catheters, feeding tubes, airways, etc. Not only are there chances for
infection from patient’s own endogenous microorganisms, there is also a risk of becoming contaminated with another patient’s microbes or with those in the environment if proper measures of hand hygiene and other precautions are not ensured. The reasons behind these convictions may be summarised as follows:

- Increased risk of infection for the patients.
- Interference with the patient’s treatment, increase in the team’s workload and constraints on the efficiency of the ICU.
- Increase in patient’s stress levels.
- Increase in stress levels for patient’s family members.
- Violation of patient’s privacy.

Neupane, (2010) reported that the hospitals and bio medical facilities meant to ensure better health have unfortunately become a potential health risk due to mismanagement of the infectious waste. BMW from hospitals, nursing home and other health centers composed of variety of wastes like hypodermic needles, scalpels blades, surgical cottons, gloves bandages, clothes, discarded medicine, blood and body fluids, human tissues and organs, radio-active substances and chemicals etc. This area of waste management is grossly neglected. It should be made mandatory for the following to be a part of the above mentioned programme in order to increase the awareness among them so as to ensure better treatment of the bio-medical waste in the hospitals:

1. Medical Superintendents/ Hospital Administrators
2. Doctors running their own healthcare facility
3. Hospital Laboratory Services Providers.
4. Hospital Administrators
5. Senior Nurses and paramedical staff
6. Allied Health Professionals
7. Consultants
8. Healthcare Waste Management related industry Owners
9. Quality Managers
10. Hospital House Keeping Officers

Desai, (2010) reported visiting the realities, Healthcare is one of the fastest growing sectors in India; the healthcare spending is set to double every five years till 2020. Hospitals are an inseparable part of the healthcare delivery system. In most hospitals, continuous operations and the latest equipment require uninterrupted power.
supply for suitable functioning. As per the Ministry of Power, Government of India, there is a huge potential of energy savings in hospitals and healthcare institutions. Energy Audit studies conducted across different sectors including hospitals indicate huge energy saving potential. A detailed understanding of the power spend per bed per day brings to light the collective impact we as an industry have on the electricity consumption in this country. It has been observed that if energy conservation measures are adopted and coupled with enabling architectural design to harness natural light and ventilation, it should be possible to bring about a reduction of 10% in electricity consumption. Even this 10% reduction would imply a saving of up to INR 800 Million every year, sufficient to cater to the cap-ex requirement of setting up a 150 bed tertiary care Hospital! Green Hospitals tend to make maximum use of natural light and solar energy. The green buildings should be constructed in specific angle of alignment with the sun which enhances the use of nature light. The major orientation of the building in north and south directions maximizes use of natural light. Shades on the south side block unwanted direct sunlight while reflecting light onto the ceiling of the interior. This further provides natural lighting and controls the internal environment of the hospital. This form of buildings aids in establishing a passive cooling system for the interiors. Windows must be located in such a manner so as to ensure ventilation, and increase access to natural light and reduce heat. Also, using simple operational measures like installing unitary air conditioning systems, sensors, etc. also reduce the wastage of electricity in various departments of the hospitals. Augmenting these efforts with within of solar power should also been courage. Mavalankar and Bhat, (2000)98 studied that in India has limited experience of health insurance. Given that government has liberalized the insurance industry, health insurance is going to develop rapidly in future. The challenge is to see that it benefits the poor and the weak in terms of better coverage and health services at lower costs without the negative aspects of cost increase and over use of procedures and technology in provision of health care. The experience from other places suggest that if health insurance is left to the private market it will only cover those which have substantial ability to pay leaving out the poor and making them more vulnerable. Hence India should proactively make efforts to develop Social Health Insurance patterned after the German model where there is universal coverage, equal access to all and cost controlling measures such as prospective per capita payment to providers. Given that India does not have large organised sector employment the only option for
such social health insurance is to develop it through co-operatives, associations and unions. The existing health insurance programmes such as ESIS and Medi-claim also need substantial reforms to make them more efficient and socially useful. Government should catalyze and guide development of such social health insurance in India.

Murthy, (2007)\textsuperscript{99} reported that after the Consumer Protection Act, 1986, came into effect, a number of patients have filed cases against doctors. This article presents a summary of legal decisions related to medical negligence: what constitutes negligence in civil and criminal law, and what is required to prove it. Public awareness of medical negligence in India is growing. Hospital managements are increasingly facing complaints regarding the facilities, standards of professional competence, and the appropriateness of their therapeutic and diagnostic methods. After the Consumer Protection Act, 1986, has come into force some patients have filed legal cases against doctors, have established that the doctors were negligent in their medical service, and have claimed and received compensation. As a result, a number of legal decisions have been made on what constitutes negligence and what is required to prove it.

Prajapati and Bala, (2007)\textsuperscript{100} in India, computer education is just fifteen years old, but has out grown even the most optimistic estimates. Their role in efficient management of services by organizing, retrieving and using information effectively, has come in a big way to assist us. There is hardly any area today, which has not been influenced by computers, and health care systems are no exception. Health sector, in fact is field where computers could make maximum social impact. There are human beings today who are half computers and half human e.g. patients with Pacemaker, Computerized precision made artificial heart, computerized hearing aid, and computerized dialysis machine. The present day hospitals are able to understand the complex processes and manage materials, money and manpower effectively and efficiently only due to computers. Wide applications of computers in health care include hospital management, patient care, billing, counseling, appointments, curriculum planning, research, study, communication etc. Most of the diagnostic instrument e.g. X-rays, CAT scan, Blood gas analyzers, ultrasound, automatic analyzers are based on computers, and have made the monitoring of patients and interpretation of diagnostic tests easy. It is not uncommon to see qualified professionals being utilized in clerical tasks for maintenance of records etc. at the cost of patient care.

Computers could help solve some of the problems like:

1. Relieving physicians from routine documentation and other clerical functions.
2. Cutting down on the paper work; sparing more time for patient care, reducing errors and increasing accuracy in transmission and storage of data.

3. Establishment of consistent standards and continuous monitoring or transactions Easy and direct access to various information regarding patient through remotely located termination.

**2.9 Role of HRM in patient satisfaction**

Sahin et al., (2007)\(^{101}\) is found that variables of education and type of clinic (surgical vs. Non-surgical) were significant on patient satisfaction. Persons with a higher level of education were less satisfied when compared to those with a lower level of education. Surgical patients are more satisfied with the care they received when compared to non-surgical patients. The education level of patients and the type of clinics had a significant influence on patient satisfaction.

Nguyen, (2002)\(^{102}\) patient Judgments Hospital Quality questionnaire covering seven dimensions of satisfaction (admission, nursing, and daily care, medical care, information, hospital environment and ancillary staff, overall quality of care and services, recommendations/intentions) . Patient satisfaction and complaints were treated as dependent variables in multivariate ordinal polychotomous and dichotomous logistic stepwise regressions, respectively. Patient sociodemographic, health and stay characteristics as well as organisation/activity of service were used as independent variables. The two strongest predictors of satisfaction for all dimensions were older age and better self-perceived health status at admission. Men tended to be more satisfied than women.

Hendriks and et al., (2006)\(^{103}\) they investigated to what extent personality is associated with patient satisfaction with hospital care. A sizeable association with personality would render patient satisfaction invalid as an indicator of hospital care quality. Five-Factor Personality Inventory assessing a person’s standing on Extraversion, Agreeableness, Conscientiousness, Emotional stability, and Autonomy. Patient satisfaction seems only marginally associated with personality, at least at the level of the broad Big Five dimensions. Keywords: Big Five, patient satisfaction, personality. Keatings and et al., (2002)\(^{104}\) the quality of nurse communication was higher on units where nurses had higher education, more autonomy, less hospital experience, and lower role tension. However, the co-ordination of care was more effective on units where nurses had higher education, greater hospital experience, less autonomy and role tension. Functional status and less mood disturbance at
hospital discharge. The role performance variables fully mediated the effect of the structural variables on patient outcomes, lending support for the proposition that nurses’ role performance explains the relationship between structural variables, such as nurse education and autonomy, and patient outcome achievement. Mailam and et al., (2005) overall patient satisfaction is linked with quality nursing care, which, in turn, depends on the quality of leadership practiced at the institution. Transformational leadership behaviour promotes nurse satisfaction, which adds to their work effectiveness and motivates them to provide quality patient care.

González and et al, (2006) they validated inpatient satisfaction parameters to evaluate the health care received by patients admitted to several hospitals. Patient satisfaction was measured by a validated questionnaire with six domains: information, human care, comfort, visiting, intimacy, and cleanliness. Suhonen and et al.,(2007) the results of this study highlight the contribution of individualized nursing care to positive patient outcomes, such as patient satisfaction, patient autonomy and perceived health-related quality of life. Not only clinically important, this model also has implications for further research into individualised care and its relationship with positive patient outcomes. Zineldin, (2006) his study argues that a patient's satisfaction is a cumulative construct, summing satisfaction with five different qualities (5Qs) of the hospital: quality of object, processes, infrastructure, interaction, and atmosphere. Bélanger and Dubé.(1996) five dimensions represented the emotional experience of hospitalization: positive emotions, arousal emotions, pattern of relationships between emotions and satisfaction demonstrates that the fine-tuning of dietitians' interventions as a function of patients' emotional states may be conducive to increased patient satisfaction with food services. Ramsay et al., (2000) studied nine key areas of primary care activity (access, technical care, communication, inter-personal care, trust, knowledge of patient, nursing care, receptionists and continuity of care.

Summary:
Hospital is an industry, organization and premises governed by the noble profession of healthcare. Peoples in India treat doctors as a God and hence hospital must be act as temple for a needy and sick people. So all parameters related to healthcare must be practiced in a professionally, artistic and scientific manner. This is more influenced by using HRM practices and hence hospital management is a skilled operation which helps to build the reputation of the hospital and to develop brand image in the patients’ mind and ultimately profitability.
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