The ABC of Health Communication: Critical role in the context of Specialty Healthcare in India

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Abstract

Rising per capita incomes in a fast developing economy like India has resulted in consumers expecting highest level of services from all sectors with healthcare being no different. This change has led to the rapid growth of specialty hospitals and healthcare providers who are focusing on both chronic and lifestyle related diseases. In such an evolving landscape health communication has assumed a role critical as never before. While communication has several associated objectives to achieve, this paper elaborates upon 3 of them in the context of specialty healthcare in India. Healthcare has historically been one of the sectors where the gestation periods are very high for any organization to start showing profits. For this reason all stakeholders, including hospitals, healthcare clinics, health insurance providers, third party administrators and consumers expect the communication of facts or relevant information to be high on
accuracy.
From a provider perspective, communication needs to be in-line with the
brand
objectives of the organizations. Hospitals are focusing a lot on this aspect to ensure that prospective consumers easily relate to the health care areas where the provider is striving to achieve excellence. Last, but the most important aspect for health communication is a consistent focus on
consumer mindset
. There are multiple examples where organizations have been more successful because their communication strategically revolves around the changes in expectation and mindset of the prospective consumer. Accuracy, alignment to the Brand objectives and focus on the Consumer mindset are the most essential basics for a healthcare stakeholder to be successful from a communication perspective.

INTRODUCTION

Nobel Prize winner George Bernard Shaw has quoted that, "The single biggest problem in communication is the illusion that it has taken place." [1] This quote or statement holds an even greater significance when reviewed in context of the healthcare domain. Across the globe, various healthcare domain stakeholders including providers and consumers face myriad types of challenges to understand each other's perspectives. Within a fast evolving environment, communication is of paramount importance not only for successful interactions between consumers / patients and providers but also between the different healthcare providers [2]. This paper reviews a similar critical role being played by communication in the context of rapidly growing Speciality Healthcare in India. It also analyses the synergies and support which health information systems can provide to meet the communication objectives. Rising costs, fierce competition and an increasingly aware end-consumer has forced Indian specialty healthcare providers to give significant importance to maintaining a robust communication channel with all the stakeholders.

REVIEW OF THE LITERATURE

United States Department of Health and Human Services first included a chapter on health communication in the Healthy People 2010 objectives [3]. This indicated & emphasized the growing significance of communication for consistent and well rounded improvements in the healthcare domain. With the unprecedented evolution of social, mobile & digital media, information technology and systems will

continue to play a very strategic role in the success of health communication. Health communication processes when aligned to fully leverage the health information tools and systems have the potential to [4] –

1. Increase accuracy, thus improving overall health care quality,

2. Support brand objectives of the provider, thus aligning to health service delivery commitments, and

3. Focus on consumer mindset by enabling clear decision making

In other words, benefits of focusing on health communication can be significant when the communication is accurate, clearly articulates the provider's brand objectives and is consistently aligned to the consumer mindset. In turn, health information systems can support the communication process to achieve these 3 characteristics on a consistent basis. Based on two combined pilot studies –

1. personal unstructured interviews with a sample size of 40 doctors, and

2. two focus group discussions of 20 participants each from information systems management domain;

Eight critical successful factors for a health information system were identified [5]. These critical success factors are (in alphabetical order) – (a) brand building (b) consumer mindset (c) data access controls (d) decision making support (e) health information networks (f) healthcare provider mindset (g) hospital resource planning and (h) knowledge discovery databases. An information system intervention's success can thus be determined by evaluating or observing the performance of these factors. An improvement in these 8 factors and an appropriate interplay with each other would help in achieving not only the health communication objectives but also contribute towards provider's measurable business metrics like reduction in average length of stay (ALOS) in the hospital and an overall increase in patient occupancy rates. The linkages between health information system intervention, high performance of the 8 critical factors and resulting effective health communicated can be depicted by Figure 1.

Figure 1

Figure 1: Health Communication linkage with HIS
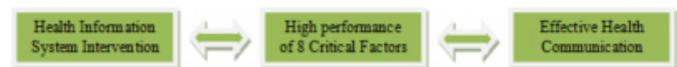
The 8 critical success factors, business metrics & goals mentioned above are assuming greater significance with each passing day for the providers in the Indian specialty healthcare domain, in which currently, corporate hospitals hold a significant market share. These single, allied, super or multi-specialty hospitals boast of maintaining latest medical care facilities with high hospitality standards to meet ever increasing patient or consumer expectations. Some of the prominent corporate specialty hospital groups in the National Capital Region of Delhi are Fortis Healthcare, Max Healthcare, Indraprastha Apollo Hospitals and Artemis Health Institute. These corporate specialty hospitals can provide in-depth treatment with respect to the ailments or diseases they focus on [6]. Since the number of specialties or healthcare focus areas may vary from 1 to several (as the provider evolves), it is relatively easier for these hospitals to manage logistics. Superior infrastructure & specialized focus enable these hospitals to attract the best medical and administrative talent available in the country. Since these hospitals are more inclined to proactive well-being in the longer term, they also work towards increasing patient awareness levels towards the increasing lifestyle diseases. A study with 60 medical practitioners has also confirmed that information system interventions in specialty hospitals is easier, has a higher probability of success and empowers the providers to share the low cost benefits with end users / patients [7].

In summary, for a healthcare provider organization, intervention of information systems ensures consistent successful performance. This can be validated or confirmed through a visible improvement in the performance of the 8 identified critical success factors. This intervention and the interplay of 8 critical factors ensures that Health Communication standards are consistently met while maintaining focus on business goals like reduced average length of patient stay and increased occupancy rates. It would be helpful to understand the linkage of 3 key health communication objectives to the 8 identified critical success factors of the health information systems.

HEALTH COMMUNICATION OBJECTIVES

Through the course of this paper, accuracy, focus on the brand and alignment to consumer mindset have

interchangeably been referred to as attributes, characteristics or objectives of health communication. Irrespective of the type of reference, these 3 remain important to the success of health communication in context of the Indian specialty healthcare domain. In fact, when these 3 are mapped or linked to the 8 critical success factors of information system intervention, they indeed appear to be clear objectives or goals of communication within any healthcare provider organization. Consistent attainment or focus on these 3 health communication objectives ensures that the information system intervention has been successful and the healthcare provider (hospital) is on track to meet the other business goals as well.

Accuracy – The new millennium's empowered patient or consumer expects that communication from the healthcare provider or doctors should not only be timely and precise, but, also accurate on a consistent basis. While accuracy appears to be a very simple and easily defines objective, it does include other components which are well supported and enabled by cutting edge information system / technology intervention.

Data Access Controls – Communication accuracy is well supported and achieved when appropriate controls for data / information access have been defined. These controls help in maintaining confidentiality around patient data, support clinical research and ensure organization's ability to consistently meet global quality standards.

Decision Making Support – Decision making systems include closely linked information systems [8], business intelligence tools and online information analytical capabilities to keep patient information current and communicable in an easy to understand format.

Health Information Networks – Strong health information networks would normally comprise of a local intranet which allows various departments to remain closely connected. With growing need to communicate faster, concepts like e-consultation, e-opinion and e-prescription have also gained significant importance across global healthcare communication streams [9].

Hospital Resource Planning (HRP) – Hospital Resource Planning comprises a broad spectrum of functions like planning, scheduling, quality and regular control audits [10]. While effective hospital resource planning ensures accurate and timely communication with patients, it is equally important for providers or hospitals to communicate with

each other specifically in cases where medical expertise and resources need to be shared for critical patient admissions to the hospital.

Knowledge Discovery Databases (KDD) – KDD is the process of bringing clarity in data relationships and ensuring better understanding of inherent complex data or information patterns [11]. It also ensures that irrelevant information is filtered out thus making the communicable content very accurate, precise and meaningful.

Brand – Through the brand, service providers across different business domains communicate their high level goals and associated organizational strategies [12]. This is no different for the Indian specialty healthcare providers as to the probable consumers; they want to clearly communicate the niche healthcare services on offer.

Brand Building – According to a web definition, brand building is the process of enhancing a brand's equity through direct marketing campaigns or sponsorship of community events [13]. By providing cutting edge tools and capabilities to providers for reaching the appropriate patient segments, information systems have ensured a new normal for the healthcare brand building process. Consequently, brand communication is consistent across channels and supports the long term organizational goals.

Healthcare Provider Mindset – Brand building and related communication is a true demonstration of the inherent healthcare provider mindset. Healthcare provider mindset goes through multiple transformations based on number of specialties which need to be offered in the hospital. Business relationships with health insurance providers, third party claim administrators, technology vendors and corporate clients also play an important role in specialty healthcare provider mindset evolution.

Consumer Mindset – Due to the continuous evolution in the space of information technology, communication and direct marketing, the patient has now transformed into a prospective consumer for any specialty healthcare provider. Some of the parameters which prominently shape the mindset of a consumer in need of healthcare services are, cost of treatment vis-à-vis service standards on offer, quality and accessibility of the medical staff, and perception of healthcare provider mindset as communicated by the brand marketing initiatives. Most of the time it is very difficult to determine which of the 3 aspects comes first, but it very clear that brand building activities, healthcare provider

mindset and consumer mindset all go hand-in-hand. Based on the situation and the stakeholders involved, one of these may depend on the other two for ensuring overall success.

In summary, despite overlapping importance of the information system critical success factors, they can be mapped against the 3 key objectives or components of communication in context of the Indian specialty healthcare. This mapping is depicted in Table 1 below.

Figure 2

Table 1: Health Communication objectives linkages with 8 HIS CSFs

Health Communication (3 Key Objectives)	Health Information Systems (8 Critical Success Factors)
Accuracy	Data Access Controls
	Decision Making Support
	Health Information Networks
	Hospital Resource Planning
	Knowledge Discovery Databases
Brand	Brand Building
	Healthcare Provider Mindset
Consumer Mindset	Consumer Mindset

RESEARCH METHODS

It is clear from the literature review that a single method of research will not provide meaningful or actionable results for the topic under discussion. To address this challenge, a combination of quantitative questionnaires and qualitative interviews has been leveraged as the research method [14]. While the questionnaire highlighted the role of 8 critical success factors in reducing average length of stay or increasing occupancy rates for the specialty hospitals, interviews confirmed the linkages of the 3 key communication objectives to the 8 factors as depicted in the Table 1 above.

The questionnaire leveraged a 7-point Likert's Scale [15] to determine the role of each success factor in reducing average length of stay or increasing occupancy rates. On this scale, a response of 7 indicated the role to be extremely critical, whereas 1 indicated the role to be not critical at all.

Figure 3

Illustration 2: Questionnaire used for assessing the role played by each of the 8 HIS CSFs in reducing average length of stay or increasing occupancy rates

Role of each Factor in Reducing Average Length of Stay (ALOS)								
Brand Building								
Extremely Critical	7	6	5	4	3	2	1	Not critical at all

Similar questions were asked for the other 7 factors to determine the significance of their role in reducing average length of stay

Role of each Factor in Increasing Occupancy Rates								
Brand Building								
Extremely Critical	7	6	5	4	3	2	1	Not critical at all

Similar questions were asked for the other 7 factors to determine the significance of their role in increasing occupancy rates

The administration of this questionnaire was in person, thus making it easy to conduct parallel unstructured interviews for confirming the linkages between the health communication objectives and 8 CSFs of information systems. The unstructured format was opted for to ensure that discussions with survey respondents were open-ended and provided unsolicited experience-based inputs in addition to the main research objectives. The survey and interview participants included healthcare professionals associated with the specialty hospitals of the National Capital Region of New Delhi. The interviews were also helpful in obtaining expert inputs in the context of face and content validity of the 16 critical success factor questions (8 each for the 2 objectives for reducing average length of stay and increasing occupancy rates). Since the healthcare professionals now experience or leverage cutting edge information tools and systems in their routine jobs, they were able to reasonably appreciate the relevance of 8 information system critical success factors and their possible linkages with health communication objectives. At a high level, they agreed that information system interventions do provide traction to brand building activities, better planning of hospital resources, secure patient data reports and ability to network across other hospitals focused on similar healthcare objectives. Furthermore, based on the interview inputs, the benefits mentioned here are more indicative rather than a complete list of advantages which information systems bring to the table.

RESULTS

Based on responses from 26 survey participants of corporate specialty hospitals in the National Capital Region of Delhi, the 3 key health communication objectives have different levels of importance for the 2 organizational goals of reducing average length of stay or increasing occupancy

rates. These responses can be better understood by a detailed analysis of the scores in Table 2. In this table, for each of the 8 HIS CSFs, the score indicates the average of 26 respondents. For example, Hospital Resource Planning has an average score of 6.00 across 26 respondents in terms of reducing average length of stay. Further, the score of each communication objective is obtained by taking the average of final scores of each constituent HIS critical success factor. For example, a score of 4.79 for Accuracy in terms of increasing occupancy rates is the aggregate of the 5 HIS CSFs listed in the table. A review of these factors and communication objectives follows for reducing average length of stay and increasing occupancy rates.

Figure 4

Table 2: Average Scores for Health Communication Objectives & 8 HIS CSFs

	Reducing Average Length of Stay	Increasing Occupancy Rates	Average
Accuracy	**5.14**	**4.79**	**4.97**
Data Access Controls	4.50	4.44	4.47
Decision Making Support	5.26	4.70	4.98
Health Information Networks	5.12	4.50	4.81
Hospital Resource Planning	6.00	5.83	5.92
Knowledge Discovery Databases	4.84	4.46	4.65
Brand	**5.11**	**5.75**	**5.43**
Brand Building	4.34	5.93	5.14
Healthcare Provider Mindset	5.88	5.57	5.72
Consumer Mindset	**5.09**	**5.63**	**5.36**

For Reducing Average Length of Stay – Accuracy of communication is most important followed by Brand and Consumer Mindset. Within Accuracy, in the HIS critical success factors, Hospital Resource Planning assumes greatest importance followed by Decision Making Support and Health Information Networks. It is very clear from the responses that Communication in reference to the Brand depends greatly on the Healthcare Provider Mindset. While Consumer Mindset is important, it is 3 [rd] as per the numbers for reducing average length of stay.

For Increasing Occupancy Rates – The order changes a bit which is obvious as Brand assumes greatest significance followed by Consumer Mindset and Accuracy. Interestingly, within the Brand Communication objective, the activity of Brand Building becomes marginally more important than Healthcare Provider Mindset. However, within Accuracy, the significance of each of the 5 HIS CSFs remains in the same order as for reducing average length of stay.

CONCLUSIONS

It is clear from the survey responses that there is a very little difference in average scores for the 3 communication objectives or the 8 HIS CSFs within each of the objectives. Interestingly, the minimum score for any of 8 HIS CSFs is 4.34 (for Brand Building with respect to reducing average length of stay). This score of 4.34 is 62% of 7, the maximum value on the scale used within the questions, thus showing a significant agreement to the 8 factors. Furthermore, as mentioned earlier, based on the inputs from unstructured interviews, the 3 Health Communication objectives or focus areas connect well to the 8 HIS critical success factors. In other words, improvement in the 8 critical success factors indicates that the information system intervention has been successful. Once the performance or outcomes related to a critical success factor like Hospital Resource Planning improves, it is bound to support the health communication objective of accuracy.

In summary, there has already been an intervention by information systems in the day-to-day operations of healthcare providers. However, over time, the role played by these information systems is not restricted to the perspective of automated billing, admission procedures, etc. The role of information systems is more strategic now, thus contributing to other organizational activities like resource planning, brand building and decision making support. These activities, in turn, are able to consistently ensure that health communication between all involved stakeholders (providers, consumers, third party, etc.) is accurate, aligned to the healthcare provider brand and gives due importance to the mindset of consumer who is always on the look-out for best-in-class services for each penny being paid to the provider. As the consumer expectations with respect to quality of care and communication increase, information systems and tools will play an ever increasing role in ensuring consistent support to the organizational goals and business objectives.

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