Strategic Alignment and Effectiveness of Governance in Healthcare Informatics

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Background

Informatics governance should be informed by overall organizational strategy, but also by metrics that should be able to measure the success of that governance.(1) Alignment with the organization's goals should be a given, and in order to accomplish that, integration and communication with the organization's administrative structures are critical. This includes the ability to demonstrate the need for what informatics can contribute, as well as the success of its activities. Furthermore, Informatics can and must be a contributor and resource to the organization as it makes its plans to move forward. Three primary functions of governance for informatics exist in any healthcare situation: strategic guidance and alignment; successful implementations of any informatics projects that have been decided upon; and the ability to quantify the success or lack of success of those projects.(1) At this time, in most organizations it seems that Informatics has been consigned to perform the role of project management and support, leaving the other two functions either partly or totally unattended.

Objectives

The goal of this project was to evaluate in depth what actions have been taken, or might have been taken in the past, so as to promote opportunities going forward to improve both the strategic planning and coordination with the health care organization it works in, and for developing, and optimizing their capability for planning and evaluating their own EHR implementations. Specific questions were developed to address these issues covering areas including: Informatics integration with their organization's governance, and how that is aligned; what is the process for decision making and prioritization of informatics activities; how does the organization allocate resources, and how is informatics involved in making those decisions; have informatics leaders focused attention on efficiency and end user satisfaction within their organization; and what metrics have been used or considered to measure the effectiveness and outcomes of what informatics has accomplished.

Methods

A qualitative study was performed incorporating interviews conducted with a targeted panel of key informants and informatics leaders from local healthcare organizations in the Portland area and Pacific Northwest from 2019-2020. Using a standard interview guide with impromptu probing questions, interviews were recorded and transcribed, and the transcripts were entered into nVivo™ for analysis. Thematic development was used in an iterative fashion to address the issues that were raised.

◊**This study was done under the approval and supervision of the OHSU IRB.**

Results

A total of 12 interviews were conducted with 8 senior leaders (C-Suite) and 4 high level leaders (CMIO/CNIO). Time spent in informatics ranged from 9 years through 23 years, with a median of 10 years, although many were either new to their role, or had recently left a similar role elsewhere (at least 5 in the current study). There was a high level of transitioning noted among those interviewed. There was a good deal of overlap in reporting and responsibilities, and reporting lines were varied and diverse. Many of the positions had evolved by history and necessity rather than intentionally. Implementation planning and alignment with the strategic goals of the organization were not well developed in most of the organizations, and integration of Informatics within the organizational structure was often not well defined. Problems with communication of goals, needs, and requirements were common. Programs and systems for distribution of resources were likewise not well developed, and barriers to sufficient resourcing were common. There seemed to be a lack of attention to the efficiencies or, more commonly, the inefficiencies of providers and to end user satisfaction.

When the respondents were pressed, it was possible to identify 15 potential channels for measuring what informatics was doing and which could provide the basis for additional study. Some metrics were already known, others were potential, and some were possible only in research programs at the present time, however all were deemed feasible, and potentially important for measuring what mattered.

A matrix of those metrics was developed in order to facilitate thinking about those metrics, and to create a framework for moving this effort forward for the future. The matrix consists of two axes. On one axis resides the concepts of how broadly the metric can be utilized: for testing on an individual level, a departmental level or an organization-wide level. The second axis regards the type of metric, categorized as something that benefits the organization, that serves the quality or safety of the care provided, or something that measures individual activities or perceptions.

HIT EVALUATION MATRIX

	SYSTEM BASED	QUALITY BASED	INDIVIDUAL BASED	INFORMATICS METRICS??
MACRO Level	Overall Financial ROI	Total Quality Measure Performance	Satisfaction by Organization	? How to Measure Success
	Patient Experience	Data Quality for Research	Satisfaction/Efficiency by Entire System	% Optimized
	Regulatory Burden			Provider Engagement
	Leadership/ Organizational Satisfaction			Communication Success (right information to the right person at the right time)
LOCAL Level	Specific Targets- Improved Transfers, Faster Discharges, Etc.	Departmental Safety or Quality Measures	Satisfaction by Unit- for Providers and for Leadership	Departmental or Program Satisfaction
	Departmental Metrics		Problems; and Did You Fix them– by Clinic/Department/Unit	Informatics Satisfaction?
				Communication Success
MICRO Level	Improved Effectiveness	Data Quality	Individual Efficiency Measures	End User Satisfaction?
	Decreased Burnout?		Improved Proficiency	Successful Customization
	Lower Provider Turnover?		Individual Satisfaction?	Communication Success
	Improved Provider Engagement- Nursing and Physician		Response to Support?	
			Usability	

Conclusions

- Aligning informatics activities with the greater organization is a necessary and critical function, however attaining such alignment is often problematic, both as a result of lack of communication upstream, as well as a lack of metrics that could demonstrate the value of those activities.
- Development of robust governance structures that are deeply embedded in the organization is critical. The results of this study suggest that the development of an integrated structure might be possible.
- Integration of informatics leaders at all levels of the organization, and creation of mechanisms for engagement with other leaders and departments should be developed.

Conclusions (Cont'd)

- Creation of an appropriate means of measuring what Informatics has accomplished, and the ability to demonstrate how it creates value for the health and strategies of the institution are critical. This is fundamentally important, as additional barriers are created if parts of the organization do not understand the value that Informatics provides.
- A matrix of potential metrics was developed in order to facilitate thinking about those metrics, as well as to create a framework for moving this effort forward for the future.
- IN SUM: As the practice of informatics matures, it has become imperative that it become integrated into the life stream of the organization it works within, at all levels. Structures will need to be developed to allow that to happen in a meaningful way. There is a slow growth of recognition of the critical nature of establishing metrics which can demonstrate the results of what is accomplished and prove its importance, not only to the organization, but to the providers and the patients that it serves. This recognition must lead to a more concerted effort on the part of informatics to accomplish these goals.

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