

Abstract

The computerization of healthcare has been evolving over the past decades from its origins in financial and administrative systems to clinical departments and now onto the providers' desktops. The nation's healthcare system is undergoing a transformation in an effort to improve quality, safety, and efficiency of care. To help facilitate this vision, the Health Information Technology for Economic and Clinical Health Act, or the "HITECH Act" established programs under Medicare and Medicaid to provide incentive payments for the "meaningful use" of certified Electronic Medical Record/Electronic Health Record (EMR/EHR) technology. Hospitals, clinics and physician practices are selecting, purchasing and installing EMR/EHR technology to take advantage of reimbursement incentives included in the American Recovery and Reinvestment Act (ARRA).

Clinical software applications alone will not guarantee a successful transformation to an EMR/EHR. An effective governance structure for the clinical implementation project is essential in achieving acceptance, adoption, and all the benefits of an EMR/EHR. The transformation will be successful once a healthcare organization has obtained a sustainable and successful governance structure which monitors decision-making, roles, responsibilities, budgets, policies, and processes.

Dell Services offers its view on Healthcare Governance to executives seeking a greater appreciation and understanding of software implementation governance. It describes the core pillars of good governance and why governance fails in the absence of proper execution.

Our view looks at current trends and best practices through the 2010 Dell Services' governance assessment and survey of industry leading organizations. Based on this survey of hospital executives on the topic of IT governance, 66% of respondents thought their organization had an effective governance structure in place. The majority of all survey respondents are from non-profit institutions in major metropolitan hubs with rural healthcare systems being minimally represented. Recommendations are offered to healthcare leaders on sustainment of long-term IT governance models, protecting strategic investment in information technology projects, and transformation of organizations with technology.

Executive Summary

Successful EMR/EHR transformations do not occur without effective governance models. Governance drives accountability, ownership, and the commitment needed to bring about sweeping change. Organizations that have successfully implemented an EMR/EHR and are on the path of using technology in a meaningful manner have a working governance model in place and as surveyed, most organizations rated their IT implementations as good, while nearly 30% thought their IT implementations were either excellent or very good. Most survey respondents represented C level or Director level roles, with VPs and Managers the second largest group.

Dell Services' ADOPTS Methodology is a structured approach to EMR/EHR implementations developed to provide a comprehensive framework for healthcare IT projects, and facilitate healthcare transformation. ADOPTS represents the major phases of any Dell Services' EMR/EHR project: Assess, Design, Optimize, Prepare, Transform, and Sustain. The six domains, or pillars of the ADOPTS methodology, are; Governance and Leadership, Process Redesign, Change Management, Clinician Participation and Adoption, Benefits Realization, and Technology Enablement. Governance and Leadership is the first domain addressed in any clinical project and influences all phases of the project timeline It emphasizes the imperative for senior management involvement in information technology initiatives. The majority of governance committees have a broad representation of members including CFOs, CNOs, CEOs, VPs, clinicians, and directors from across the organization. This paper focuses on the Governance domain.



The Healthcare Transformation Methodology has been designed to include six domains that promote the alignment of people, process, and technology to achieve on-going and sustainable transformation:



Characteristics and Structures of Winning Governance Models

Governance models need to be mature enough to compensate for the inherent stress that team members face when addressing risks and problem resolution. Mature governance bodies have experience in teamwork and sustaining a culture of mission, vision, and strategic goal attainment. While mapping performance in achieving IT strategic goals, fewer than 50% of survey respondents rated their performance as good, while fewer than 25% said their performance was very good. Governance structures evolve and become dependable in decision making, as does the ability to sustain project equilibrium during rocky patches. The organization's empowerment structure enables decision making, credibility, authority, and influence, and facilitates formation of partnerships. Additionally, representation and involvement of key stakeholders and champions lead to improvement of the process through lessons learned and past experiences. This results in sustaining a project's momentum. In this manner, strong governance fuels successful transformation.

Leadership, commitment, and communication support winning governance model, as described with the following characteristics:

Leadership

- Executive Sponsorship demonstrates commitment of the entire organization to adoption and sustainment of initiatives
- Clinician Champions advocate for the cause of enhancing utilization of technology to improve patient care
- Stakeholder Management regular and frequent communication to key stakeholders drives success
- Solid Organizational Change Management a sound methodological approach drives quality outcomes

Commitment

- Evidence-Based Best Practice (patient safety & quality of care) drives clinical adoption and quality care outcomes
- Repeatable and scalable methodologies (i.e. ADOPTS Methodology) provide a structural framework for successful governance
- Return on Investment Financial and operational imperatives integrated into the mission and vision of the organization show long-term commitment to quality
- Regulatory and Quality Oversight through partnerships with national forums, organizations, and professional societies demonstrate a higher level of organizational sustainment. Most survey respondents rely on current literature and professional organizations as sources to gather trends in healthcare. Conversely, very few relied on their vendors or regulatory bodies to help them stay current with trends

Communication

- Clear, routinely scheduled communication of strategic initiatives this is how most organizations demonstrate commitment to strategic directions. A governance structure wishing to promote a spirit of "togetherness" allows for membership participation in decision making and therefore promotes proactive communication
- Involvement focused and consistent organizational communication is critical to success
- Visibility branding of the methodology, desired outcomes, integration with the mission, and vision of the organization facilitates adoption
- Inter-departmental collaboration at the facility level reinforces the importance of teamwork, processes, and successful outcomes within the organization

Governance structures are components of a complete governance framework and, although they operate holistically, they are composed of individually functioning entities:

- Executive Leadership/Steering Committees provide program vision, guiding principles, catalyst for cultural changes and impact
- Project Champions/Sponsors manage integration/coordination of all schedules and deliverables; provide program or project representation to executive leadership/steering committee
- Business Leadership/Owners various stakeholders within the program who will embed future state changes into their ongoing operations
- Project Management Office (PMO)/Project Management Teams provide project controls and manage inter-project dependencies
- Collaborative Consulting Teams partner with all stakeholders to bring proven methods, experience, and resources to augment the project team
- Clinical Advisory Councils/Clinical Work Teams support program initiative for clinical impact, outcomes, key performance indicators and benefits realization

Typically, a collection of projects necessitates the establishment of a Portfolio Manager or Project Management Office whereby governance structures encompasses all components of project management. The escalation process follows the governing hierarchy, and a winning governance structure covers the entire initiative and addresses the need to make adjustments for sustainability to any of the various parts. It is never more fully employed than in environments where there is more than one project running concurrently.



The Pillars of Good Governance

The Institute of Internal Auditors defines governance as "the combination of processes and structure implemented by the board in order to inform, direct, manage, and monitor the activities of the organization toward the achievement of its objectives." Because of the complex nature of healthcare environments, governance is stratified into four entities:

Organizational Governance

- Board of Directors delegate operational power to executives
- Functional division of operations into subset of governing directors

Physician Governance

- Medical Staff organization into committees that provide oversight and endorsement to all aspects of patient care
- Ad hoc membership in special projects

Clinical Governance

Departments/cost centers governed by scope of practice and regulatory/licensure mandates

Project Governance

- Directed powers to manage specific portfolios, programs, or projects
- · Projects are limited by time, resources, and scope

There are many different approaches an organization may choose in forming and operating the governance component of a clinical information system and implementation project. An approach to foster innovation is the use of governance structures to facilitate decisions. Very few organizations rely on competitive analysis for their innovation approaches, but some will use education and training to foster innovation. However, among the variations in approach there are common threads woven into governance structures of these successful projects. These common threads within well-built governance structures are "the pillars of good governance". (McFarlane) There are four key pillars of a strong governance structure.

- 1) Identify priorities, goals, and targets: The first thing a governance structure does is set clearly defined project priorities, goals, and targets. The need for a successful governance structure to establish these elements is to ensure all actions are geared toward them. Governance structures also ensure project objectives are aligned with the organization's guiding principles. Every action performed should be done within the parameters of project priorities, goals, and targets, and therefore ensure the facility is staying true to their purpose.
- 2) Identify and establish decision-making bodies: This involves identifying executives who make decisions at the top level, such as the Executive Steering Committee and Clinical Leadership Advisory Committee, as well as staff who make decisions on all other levels, such as the Project Manager (PM), deployment lead, etc. The goal is to ensure the appropriate person is making correct decisions affecting the project. Hand in hand with establishing the right authoritative figures is establishing their scope of decision making. By determining the right people to make the right type of decisions, appropriate accountability results for each decision.

- 3) Identify decision-making processes: Governance structures that establish policies and procedures for decision-making processes are less likely to end with biased decisions. By ensuring each decision made is formed by specific guidelines, chaos is minimized and turnaround time is improved. (Wager, 2005)
- 4) Constantly monitor and communicate: Another element of a good governance structure is a method of monitoring project progression and providing feedback. This ensures early problem identification and remediation. This enables the project staffs' ability to promote process improvement, identify obstacles, and adopt methodologies that facilitate project progression.

Clinical implementation projects with strong governance structures which include the four pillars have a greater probability of success. Strong governance includes thoughtful processes for decision making and allows for problems and risks to be forecast ahead of time and mitigated. This fosters project completion that is on time and within budget. Furthermore, a strong governance structure promotes open communication and goal-oriented actions aligned with the facility's guiding principles and helps foster trust within a cohesive project group and a strong public image. By encouraging creativity, effective governance structures will create an environment of pride and respect and can use rewards and recognition programs to build team cohesion.

Current Trends in Governance

Whether operating a small business, providing transportation services, managing an academic institution, or running a local or national government, effective governance and its policies, processes, and regulations are mission-critical to success. A literature review of these business types reveals similar governance definitions, emphasizing the inclusion of boards, management, and a variety of stakeholders.

Dictionary definitions of governance denote the exercise of authority, control, and direction. The United Nations Economic and Social Commission for Asia and the Pacific define governance as "the process of decision making and the process by which decisions are implemented" (United Nations ESCAP). The Corporate Governance website refers to "both the structure and the relationships which determine corporate direction and performance." Richard P. Chait and colleagues simply describe "the concept of governance as leadership" (Richard P. Chait et all 2004).

The trend in governance has expanded in the last few decades to focus on IT governance within corporate governance due to the increased use and importance of technology in all businesses. Articles about IT governance stress that it is not a separate entity from corporate governance, but an integral part of it. Information technology direction and systems need to stem from the overall business objectives and strategies. It needs to support the financial success of the business, manage risk, and provide the information needed for operational management.

The IT Governance Institute (2005) provides detailed rationale for aligning IT with business at an executive level and offers guidelines for making this happen. All industries strive to achieve quality, safety, and efficiency, and the majority of industries have regulations governing what they do and how they do it. Healthcare providers are no exception since they have regulatory and accreditation standards to meet, as well as the safety and well being of patients to ensure. The IT Governance Institute stresses the need for information technology to be aligned with the business objectives and strategies in order to support the executive direction. With clinical information systems, this alignment grows to include physicians and other clinicians.

The current trend in healthcare IT governance focuses on clinical IT governance. The major difference between corporate or IT governance and clinical IT governance lies in the relationship of physicians to the healthcare facilities in which they provide care. In most businesses, the governance resources are employed by the business. An exception might be Board members who are not direct employees of the business, but have a vested interest in its success. In healthcare facilities, especially hospitals, the majority of physicians are not employed by the organization. The major issue confronting hospitals is physician adoption of clinical information systems implemented to meet the objectives of improving quality care, reducing errors, and meeting regulatory reporting requirements.

In order to foster an environment of physician use and adoption of clinical information systems, the clinical IT governance structure needs to include the non-employed physicians. Inclusion with executives, nursing leadership, risk management, and legal representatives will foster a shared vision and structure to meet the business objectives and strategies, as well as those of the clinical information systems. When physicians are involved in the governance process, they will become key drivers in promoting the use and adoption of the systems to other physicians. The biggest influences on project success is said to be the presence of a project champion (often a physician) followed by effective communication and a strong corporate culture

Why Ineffective Governance Leads to Failed Project Implementations

Successful projects are the result of well-executed plans, constructed using established project methodology and endorsed by the sponsor's governing body. Governance defines the legal accountability or duty to perform in the best interest of the organization (healthcare entity). A project's executive sponsor delegates authority to manage the project to a project manager and project team. It is the responsibility of the project governing body/sponsor to accept or reject the project deliverables. A project fails when deliverables are delayed or deemed unsatisfactory. Surprisingly, most organizations allow project deadlines to be extended when circumstances create issues in meeting project milestones. None of the respondents in our survey stated that their organizations would add more resources to a project in order to meet timeline objectives. The cause of the delay is the governance structure, allowing unmitigated risks to negatively influence timeline, schedule, and project quality.

One of the most damaging failures of project governance is caused by excluding the executives in the stakeholders' matrix for communication and risk management. A poorly organized implementation project will have a sponsor who is removed from the C-suite and therefore ineffectual in communication. Status reports and decision documents are not routed to the proper decision makers. Some tactics used to communicate how roles and responsibilities on a governance committee are disseminated include meeting with each employee, team leadership meetings, and written or electronic communications. To prevent the project from having anemic governance, assure the role of the project sponsor and executive communication is included in the Project Charter or included in the Project Plan.

Another area of failure in the governance structure is caused by not incorporating an escalation plan for risk management in the communication plan. Using a governance model of managing problems downstream and reporting only successes up the chain will result in the project demise. An effective governance structure will demand cyclic reporting of all aspects of the project's status: risks, issues, and contingencies. The most effective way organizations use to foster a collaborative working environment is to involve staff with decisions that affect them. Very few organizations rely on surveys or other forms of feedback to gain collaborative groupthink.

The project life cycle is another critical area that can determine a projects success or failure. The Project Management Institute defines the project life cycle as a collection of sequential project phases whose name and number are determined by the control needs of the organization or organizations involved in the project (PMBOK® Guide 2004). Lack of funding or time, or inadequate scope, is cited most often for project failures. How the governing body recognizes, categorizes, and mitigates the risks during each of the project life cycle phases determines the success or failure of the implementation.

There are a few strategies, which can be employed to ensure appropriate project governance and thus foster project success:

- Contractually require the client, vendors, and service provider(s) to abide by a particular project management methodology, identifying governance structure, and reporting matrix.
- At a minimum, ensure a sponsor has signed the Charter and Project Plan.
- · Establish a record of known risks and prioritize them according to severity and probability.
- Add contingency funds as a line item to the implementation plan budget to accommodate unknown risks at the time of plan development.
- Report risks to the project implementation sponsor directly, as well as in a written status report.
- Ask for written evaluations of project implementation performance at the time of major project deliverable sign-offs and at specified times in the project life cycle.

Evolving Governance and How to Optimize Best Practices

Hospitals in the 1970s purchased patient care systems to reduce lost charges and improve cash flow, usually maintaining a manual patient care process. In the 1980s, clinical systems were marketed as having the potential to evolve to an automated medical record as well. In the 1990s, more patient care systems evolved from the original patient accounting systems, which were the driving force of any patient care system. As we entered the 2000s, the effect of regulatory agencies began driving patient care systems and the advent of EMR/EHR systems.

The implementation and use of automated patient care systems has been more complex than most organizations anticipated. New system implementations can present a disruption to existing clinical workflow patterns, at times changing workflow to meet the system functionality instead of clinician thought and work processes. Effective and efficient workflow is the key factor in achieving acceptance of clinical IT systems by caregivers. The learning curve is often steep for clinicians who make patient care their top priority. Today's industry best practices mandate that the new system should drive improved outcomes and be the result of a shared vision for the organization.

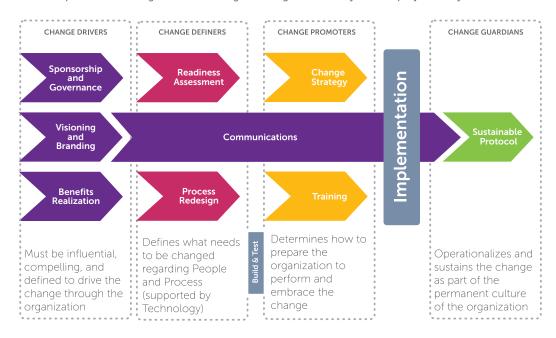
In a recent article published by Healthcare IT News titled "Is HITECH really the only way forward?", the authors cite a McKinsey & Company study, where they conclude that "achieving such a positive return on investment . . . requires distinctive changemanagement skills among hospital leaders, better governance, and sustained engagement from key clinicians."

The Dell Services' ADOPTS methodology framework is comprised of a Change Management model (CATALYST for Change) which provides a disciplined approach to enhancing the speed, adoption, and sustainment of an organization's transformation by focusing on human motivational, capacity, and performance factors on an individual and organizational level. The word CATALYST is an acronym for Change Acceleration and Training Acceleration for Leading Your Sustained Transformation. The CATALYST for Change model identifies key success factors: change drivers, change definers, change promoters, and change guardians. Governance is the first and most important success factor that drives change throughout the organization as indicated in the graphic below.

Today's winning governance model is different than yesterday's model. It is engaged, driving, and visible. It creates a compelling vision and brand; it defines benefit goals; it communicates clearly and compellingly; it ensures that what is changing is well defined and supports change strategies for addressing barriers to change; it provides appropriate resources for training; and it ensures the future state becomes embedded in the ongoing operations of the organization. Today's governance is not just concerned about allocating resources and implementing projects on time, within scope, and within budget. Today's governance is concerned about achieving and sustaining long-term expected benefits and effecting the cultural changes that often accompany strategic transformational initiatives.

CATALYST for Change OCM Model

The Dell Services Organizational Change Management (OCM) model describes the essential components of change that are managed throughout and beyond the project lifecycle.



Sustaining Long Term models of Successful Governance

We make the assumption that executive level leadership for clinical systems implementations and transformation will remain in place long after the project is completed.

The "sustain" phase confirms the structure, practices, and mechanisms for monitoring ongoing success are in place to continue the governance as the project transitions from project accountability back to the organization's operations management.

The intended results of the governance structure include establishing the roles and processes for the organization to maintain a self-regulating process and system for continuous improvement. To achieve this level of sustainment, some governing activities will include, but not be limited by, the following:

- Ensuring the governance structure remains in place
- Involving senior managers and key stakeholders
- · Assigning ownership and accountability
- Aligning goals with the organization's strategy, objectives, and performance goals
- · Establishing need for ongoing resources for improved workflow/technology and upgrades
- · Reviewing and evaluating performance measurements on a designated and routine basis
- · Maintaining a communication plan post implementation for ongoing performance improvement decisions

It is imperative that governance teams continue to measure an IT implementation's success or failure for an ongoing period after go live. Organizations that do not continually measure performance will not realize the benefits or ROI of a project.

Conclusion

The key to creating and sustaining a winning governance model for successful transformation is the use of proven methodologies, designs, tools, templates, and plans under the direction of a fully developed project team who seeks and receives ongoing review and endorsement by the sponsoring stakeholders.

Governance of clinical IT implementations is the responsibility of an organization's healthcare executives who commission the work through program or project plans. The healthcare governance structure is established prior to the project's inception, with a top-down reach of accountability via department or service line directors. Project participants are assigned delegated power to act on behalf of the healthcare organization for the length of the implementation and sometimes beyond.

Dell Services is proud to participate in the efforts to drive and maintain our clients' success. Through collaborative partnerships with our client hospitals and healthcare organizations, we have been instrumental in delivering successful IT implementations with winning

governance and leadership models. We offer proven clinical implementation methodologies and support the mission-critical element of effective governance.

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