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## EHR implementation missed the mark?
How to hit the bullseye with optimization projects

# What's at stake?

**Regulatory pressure**

In recent years, shifting dynamics in the health care industry have caused organizations to take on costly initiatives to survive in a regulated and competitive environment. For example, the Health Information for Economic and Clinical Health (HITECH) Act, as part of the American Recovery and Reinvestment Act (ARRA) of 2009, promotes the adoption and meaningful use of information technology in health care.

Eligible professionals and institutions need to show they are using certified electronic health record (EHR) technology in meaningful ways that can be measured in quality and quantity.[1] The Act includes a number of incentives for successful adoption, as well as penalties for failure to do so. HealthIT.gov lists the incentives for eligible professionals as up to $44,000 through the Medicare EHR Incentive Program and up to $63,750 through the Medicaid EHR Incentive Program.[2] Professionals who do not meet meaningful use requirements may see payment reductions between 1% and 5%.[3]

In addition to HITECH requirements, providers have been taking on more risk through accountable care organizations (ACO), implementing more complex coding (ICD-10), preparing for the move to value-based reimbursement, and developing Clinically Integrated Networks. As a result, health systems have invested heavily in resources and technology to meet these demands and support the organization's strategic imperatives, with the optimization of the EHR rapidly becoming a top priority for many health care executives.

In 2013, the Office of the National Coordinator for Health IT reported that 44.4% of acute care hospitals had implemented an EHR. Up from a 12.2% adoption rate in 2009, this a staggering increase considering that EHR implementations can cost well above $100 million depending on the size of the organization.[4] Coupled with the financial pressures of decreasing revenue and margins, an EHR implementation has limited room for error.

**Missing the mark**

Unfortunately, providers often find that implementations have not met expectations and resulted in larger than expected decreases in productivity and revenue. Physicians have also voiced disappointment in the level of financial benefits realized against what they expected with an EHR system.

Several studies found the following:

- 3 out of 4 physicians surveyed believe that EHRs increase practice costs, outweighing any efficiencies savings.[5]

- 51% of physician respondents stated that the financial benefits did not outweigh the costs.[6]

- Only 36% of respondents indicated that they were satisfied with their organization's efforts to measure the value delivered by their EHR system.[7]

- Institutions report an average 80% increase in their respective IT budgets because of EHR implementations.[8]

- One study found that most organizations do not measure the overall success of their EHR conversion.[9]

There is uncertainty in measuring a true ROI since it involves more than financial measures. Clinical applications that affect quality of care delivered and patient safety are a component in the overall value of an EHR system and important measures in meeting regulatory and competitive demands.

**Implementation weariness**

While many implementations start with the noble goal of transformation, health care organizations might actually find themselves building an EHR that mimics paper order sets, performs redundant documentation in the patient chart, and is based on a more generic vendor "model." The approach may have its merits—namely acceptance by key clinicians and speed to go-live to meet regulatory timelines. Organizations usually plan for transformative workflow and content design during an optimization phase post-live. However, the effort and resources often feel depleted and efforts are often focused on bringing up other facilities within the system.

To actually realize the intended benefits of the EHR, organizations should quickly transition from less efficient workflows and content to those that are clinician supportive and transformational. It is this entry point that organizations can use an enhanced EHR, with transformative process change, to drive behavior change in users. Effective governance is at the heart of this change.

# Our take

**Governance**

**Transforming governance**

In order for health care systems to optimize the EHR, they should adopt sound governance practices driven by clinical users and operations that encourage behavioral changes. Simultaneously, organizations should leverage a disciplined approach to managing optimization projects that will allow them to accelerate the pace of deploying enhancements to end users while meeting strategic and tactical goals.

Successful optimization projects happen by design. The governance committee is typically composed of the senior leadership team as well as key stakeholders within an institution. While it may have many of the same members as the implementation steering committee, their focus is different.

The governance model needs to demonstrate desired thinking and behaviors, provide insight and leadership, and empower front line operational and clinical staff to make decisions in optimizing workflows. Figure 2 depicts an example of a governance model successfully used during EHR optimization efforts. It incorporates key criteria necessary with an emphasis for the early stages of optimization in the highlighted areas.
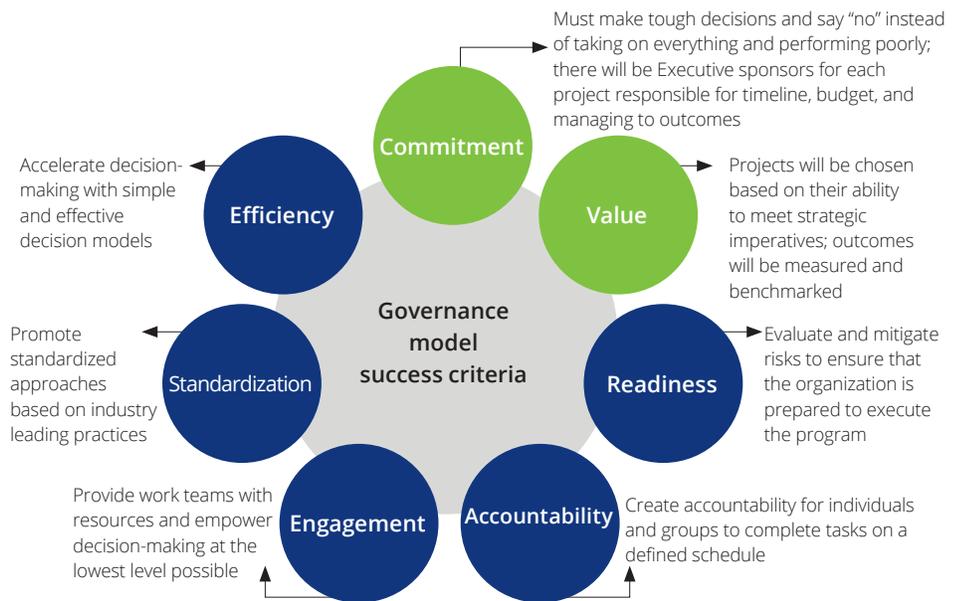
Similar to the implementation phase, there is a need to recognize, evaluate, and mitigate risks to ensure that the organization is prepared to employ the necessary changes for clinical and operational enhancements.

The governance model sets the parameters and guidelines and then empowers the clinical and operations staff to communicate, plan, and execute the approved project.

**Figure 1.** These five steps begin the optimization process



**Governance**
Form your governance structure and define the guiding principles.

**Communication**
Describe how strategy drives what projects the organization takes on.

**Prioritization**
Collect issue lists, proposed projects, and end user suggestions. Document how they benefit the organization.

**Execution**
Assign project to an accountable operational owner. Align organization leaders, as they will supply resources to complete the projects.

**Monitoring**
Evaluate the project against organizational strategy and goals utilizing a defined format.

**Figure 2.** Governance model success criteria



Must make tough decisions and say "no" instead of taking on everything and performing poorly; there will be Executive sponsors for each project responsible for timeline, budget, and managing to outcomes

Accelerate decision-making with simple and effective decision models

Projects will be chosen based on their ability to meet strategic imperatives; outcomes will be measured and benchmarked

Promote standardized approaches based on industry leading practices

Evaluate and mitigate risks to ensure that the organization is prepared to execute the program

Provide work teams with resources and empower decision-making at the lowest level possible

Create accountability for individuals and groups to complete tasks on a defined schedule

**Commitment**

**Efficiency**

**Value**

**Standardization**

**Governance model success criteria**

**Readiness**

**Engagement**

**Accountability**

## Communication

Historically, EHR implementations have been fueled by a "Let's get it up and running" goal primarily controlled by IT. Optimizing an EHR system requires a radically different approach. Optimization requires an in-depth knowledge and understanding of departmental current state operations. This background will form the basis for the design of optimized, future state operations able to take full advantage of the EHR's capabilities.

As more patient data is captured in EHR systems, clinical and revenue cycle departments should lead this effort. IT continues to have a very important role, but it is more in providing in-depth knowledge of application capability and expanding to understand more fully the interdependencies between applications. Clinical, operational, and IT staff might previously have worked in application silos (e.g., pharmacy, orders, clinical documentation, etc.), but each is now compelled to speak the language of the other and recognize the complexity of interaction across processes of care and across applications.

Furthermore, when considering optimization leadership, an organization should also consider the inherent interoperability between the applications and systems. A decision made within any department's specific application has the possibility of affecting other applications as well. For example, ensuring that the end-to-end patient experience exceeds expectations is usually an important goal of optimization efforts. Leadership teams of key clinical and revenue cycle operations people collaborating with relevant IT application people are best suited to achieve that goal.

Leadership drives the cultural changes necessary to model the thinking required to achieve operational and clinical goals. They need to communicate these objectives clearly.

This includes:

- Focusing on organizational strategic priorities rather than departmental or individual requirements

- Securing commitment of resources and time from stakeholders

- Listening to feedback

- Providing regular updates to stakeholders

While optimization projects can benefit from the knowledge of staff who were part of the implementation, these individuals may demonstrate defensive behavior; interpreting optimization as a criticism of the implementation. To elicit their help, model language to the organization that optimization is not about any issue with the implementation, but rather part of an expected evolution to move to higher performance.

Stakeholders may need frequent reminders that if a request does not align with organizational strategy, it may not move forward. An important tool to keep strategy at the forefront is to organize and prioritize potential projects in a transparent process.

## Prioritization

EHRs have become a key component in the workflows of a variety of clinical users who have distinct responsibilities in providing care for diverse patient populations. For instance, physicians may find themselves struggling to use their computerized order entry workflows, while nurses may be spending a greater amount of time on documentation than interacting with their patients.

Naturally, the difficulties those users face, and their priorities for optimization, might vary significantly. To add to this complexity, health care organizations face exogenous pressures such as the movement toward value-based care, lower reimbursements, and swift changes in the regulatory landscape, all of which might require them to pursue competing projects.

Identifying and prioritizing optimization projects can thus be a difficult task. It is imperative for health care organizations to have a transparent system to evaluate projects. Previously, such evaluations might have occurred within peer workgroups, in which optimization projects are discussed, triaged, and evaluated. The collegial nature of peer workgroups might have historically made them an adequate forum. However, the emergence of highly integrated care-coordination tools and practices obviates the historical approach and necessitates insight that goes beyond expertise in a single department or a function.

With an implementation project, there is little option but to move forward with the selected solution. With optimization requests, the emphasis is on wisely choosing what the organization should take on. To achieve a transparent approach for evaluating project pipelines, organizations may consider establishing a cross-functional committee composed of key leaders representing physicians, clinicians, operational staff, and IT. A diversity of perspectives can help ensure that the evaluations occur in a manner consistent with broader strategic objectives of the organization.

A list of 20 to 25 projects is common. To provide guidance to the committee when selecting the projects to pursue, establish a hierarchy of decision criteria. It is most effective to publish the criteria used, the links to strategy, and the metrics and benchmarks for measuring success in meeting the criteria. Assign relative weights to each criterion based on the perceived impact on each project. This type of scoring methodology provides a rank ordering of proposed projects.

Figure 3 depicts sample criteria used within a scoring methodology for project prioritization. An organization would adjust to meet their specific strategic initiatives.

Once the criteria are established, assign a score of "high," "medium," or "low" for each category. Use a numeric value based on the project's effect on the criteria evaluated. The total net score for each project will provide an objective rank ordering of the projects, aiding in selecting the projects to pursue.

This scoring methodology is just one aspect of project prioritization. It is more important to have fewer successful projects, than many projects approved that cannot be successful. Figure 4 depicts other aspects to consider.

Implementation is so large, that it may feel like trying to "boil the ocean." Optimization projects benefit from a "less is more" approach. It is better to do one thing well then to do many things poorly. Choose no more than six to eight projects to execute concurrently. This number is driven by financial and resource constraints. As an "Active" project completes, start the next highest priority project on the "Pending" list. Regularly reevaluate the list to see if prioritizations changed.

Once selected, it is time to begin the project.

**Figure 3.** Sample criteria for scoring methodology
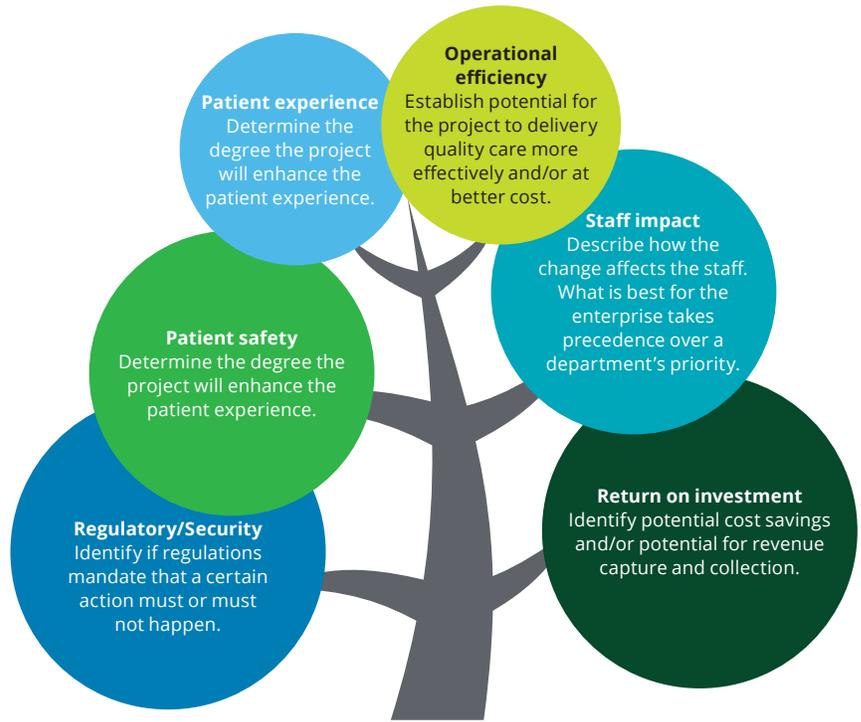


**Figure 4.** Additional criteria for scoring methodology
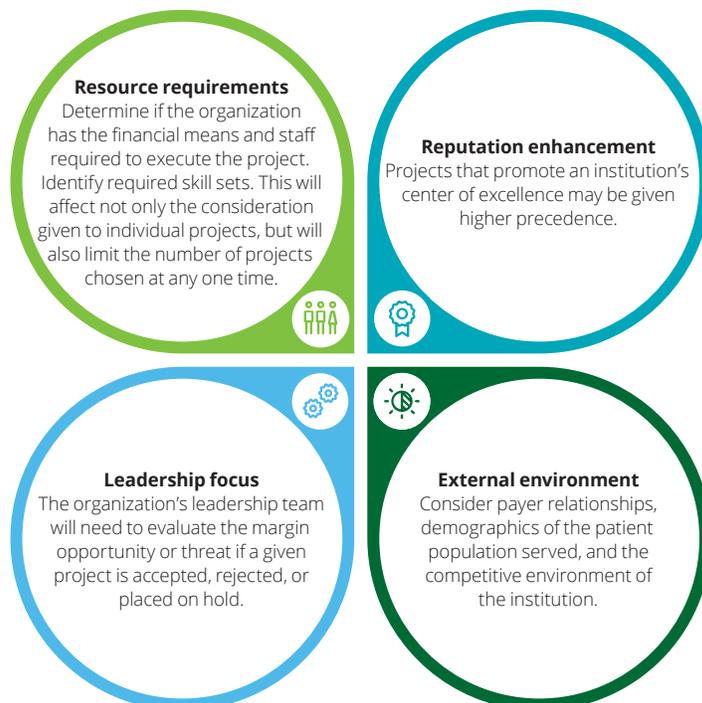
### Execution

Organizations generally have some projects that are "low hanging fruit." These projects support strategic initiatives, but can be completed quickly or with minimal effort. These are important projects to create visibility and enthusiasm.

For other projects, which require more time and resources, it is important to define a consistent methodology with which people can become proficient. One such methodology is the Rapid Acceleration Approach. It is designed to streamline the steps and tasks necessary for successful project completion. This approach consists of six structured, all-day work sessions, allowing enough time between to complete homework. Each session has a defined goal or outcome. For example, Session 1 defines the future state workflow of a selected project.

**Figure 5.** Project sessions example

| | Session 1 | Session 2 | Session 3 | Session 4 | Session 5 | Session 6 |
|---|---|---|---|---|---|---|
| | Future state process | Metrics and benchmarks | Policy | Roles | EHR modifications | Readiness |
| Objectives | • Operational and clinical staff define problem and present analysis<br>• Create Charter<br>• Provide brief training<br>• Identify Stakeholders<br>• Tailor to leading practice<br>• IT provides input into capabilities and limitations of system | • Refine future state process based on information gathered<br>• Define metrics and process for collection of before vs. after optimization | • Finalize future state process<br>• Identify policy changes and draft revised policies | • Identify role changes and modify job descriptions, performance evaluations, and competencies | • Identify workflows, documentation, forms, and required modifications.<br>• Develop requirements | • Create training materials<br>• Draft communications<br>• Create implementation tools<br>• Develop Testing plan<br>• Determine Pilot date |
| Homework | • Observation of current state<br>• Search for evidence or solutions<br>• Develop reports<br>• Identify roadblocks to future state | • Socialize revised future state process with stakeholders<br>• Compile comments and suggestions | • Follow approval process for future state process and revised policies<br>• Begin collection of baseline metrics | • Follow approval process for revised role documents | • Review requirements with application team | • Communicate training and live plan<br>• Complete testing and training |

A critical success factor is developing a project management playbook—defined agendas, pre-work, design processes, facilitation skills, testing procedures, training options, etc. and a clear "gateway" approval process for moving to the next step. The governance committee is critical in this process.

### Monitoring

A key differentiator between implementation and optimization projects is identifying what, when, and how benefits measurements occur. Optimization projects may have fewer milestones than implementation, but they are equally important.

Project teams present their progress to the governance body at pre-defined points or "gateway" checks of the project. For example, completion of future state design may be the first gateway to move to the next phase of build. The project team would not only describe the future state design, but would emphasize how that design meets the strategic imperative. If the design does not pass muster, do not move forward. Correct what did not work and move on.

In parallel, as baselines are collected and projects complete, incorporate key performance indicators (KPIs) into existing operations/dashboards not only to measure the success of the project, but also to become a part of ongoing performance improvement.

### In summary

Once an organization establishes an effective governance program, the user community should begin to see their priorities and requirements addressed and understand when they are not. This will likely underscore and result in a need to transform organizational behaviors.

# The path forward

## Transformation
### Transforming behaviors

Successful organizations recognize that transitioning from system implementation to optimization is a competitive imperative. However, that transition requires a paradigm shift. To be successful, the organization should not use the same process used for implementation.

Consider changing behaviors to: 1) support ongoing optimization for truly transforming care delivered to patients and 2) support physicians/clinicians in their complex and integrated processes delivering that care.

**Figure 6.** Implementation vs. optimization behaviors

| Implementation behaviors | Optimization behaviors |
|---|---|
| • System drives operations | • Operations drives system |
| • Departmental design decisions | • Enterprise, integrated decisions |
| • Milestones communicated to project team | • Benefits of change communicated to clinical and operational stakeholders |
| • Application based, classroom training | • Workflow training with multiple formats and channels |
| • Reactive issue resolution with one-off solutions and workarounds | • Proactive and structured solutions |
| • Anecdotal decision making | • Data driven decision making |
| • Longer-term marathon | • Shorter-term sprints |
| • We've always done it this way | • Leading practice indicates we should do it this way |

As organizations move from implementation and stabilization of EHRs to optimization, the focus of projects is shifting away from getting a large number of basic features up and running to enhancing cross-functional processes through EHR workflow and content enhancement to support users who see a variety of patients and have an assortment of clinical responsibilities.

Furthermore, as organizations move toward adopting integrated care teams, the workflows of one department or function start having a greater impact on other users' workflows. The EHR project list transitions from one in which many generic items need to be ready for a go-live date, to one where interdependencies are paramount and the date for go-live is more fluid.

# Bottom line

## Ready, set, go!

The EHR is up and running, but the promised benefits are falling short of expectation. The critical steps to take to achieve EHR optimization include:

• Create a governance structure

• Let the organization know what is happening

• Prioritize projects based on strategic imperative

• Rapidly execute the desired change

• Measure the change against baseline and benchmarks

By making alterations in governance and approach, organizations can realize benefits that may have eluded them after the implementation

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