

# FAKTOR KRITIS SUKSES PERENCANAAN RKE

## Deskripsi:

Perbedaan organisasi akan mengkonstruksi model jalur migrasi yang berbeda atau boleh memilih untuk menggunakan tool yang berbeda pada rencana RKEnya. Bagaimanapun secara luas pandangan pada RKE dihadirkan, factor-faktor kritis sukses perencanaan RKE mencakup:

- Creating the vision
- Identifying the planning horizon
- Gaining agreement
- Developing a financing and acquisition strategy
- Mapping workflows and processes
- Developing functional, data, and technical strategies
- Carrying out a vendor selection process
- Planning the implementation
- Conducting benefits realization

Creating the vision, identifying the planning horizon, and gaining agreement have been emphasized throughout the initial chapters of this book. The other factors are introduced in this chapter, with in-depth discussion provided in the remaining chapters.

## **Financing and Acquisition Strategy**

The **financing and acquisition strategy** refers to how the EHR is paid for and acquired. This includes whether the organization designs and builds its own system or acquires one from a vendor or set of vendors. It also addresses financing options such as purchase, lease,

or various partnering/codevelopment options. Despite capital being difficult to acquire in difficult economic times, many organizations must finance at least some of their EHR investment—through bank loans or more directly in capital markets. Some vendors offer a discount when organizations are willing to implement a prototype of a new version of an EHR and assist in further refinement. Some vendors also have linked up with pharmaceutical companies, medical device suppliers, hardware vendors, and other suppliers to provide reduced prices in exchange for using their products, obtaining data, or even allowing pop-up advertisements as the EHR is used. Major employers in the area may be a source of funding if they are interested in negotiating reduced costs of care. The M.U. incentives are a factor to consider in seeking loans or other external financing options. Although some of these options may provide significant benefits, they should be approached with a full understanding of what the organization must do to obtain the funding support.

Other policies considered in the financing and acquisition strategy include the purchasing requirements that stipulate the stability of the vendor business, the number of other installations it must have, the size and type of clients, and so forth. Some organizations are more willing to assume risk than others. The financing and acquisition strategy must reflect the degree of risk-taking a healthcare organization is willing to accept.

Although financing and acquisition strategies should be addressed early in strategic planning, they generally are not carried out until after functional, data, and technical strategies have been identified. Hence, financing with ROI is discussed in chapter 11 and EHR selection is discussed in chapter 12.

## **Workflow and Process Mapping**

Mapping workflows and processes is a means for understanding how current work is performed to begin the change management process and support the functional, data, and technical strategies.

Mapping current workflows and processes provides an opportunity for the organization to fix broken processes before attempting to automate them. Automating broken processes often leads to bigger problems after the EHR is implemented. Even when a paper process will not be fully changed until automation takes place, there are often issues with the paper process that can be improved upon prior to automation. The evaluation of the paper process helps expected users of the EHR recognize the need for process improvement through automation. Process maps guide functional specification where a certified EHR may not fully address all functionality an organization may need or want. Understanding current processes and flow of data throughout the continuum of care also helps stakeholders visualize the need for standardized data structures, which in turn leads to gaining a better appreciation of how the EHR must be used at the point of care and what types of technical tools will best accomplish that.

Compiling a view of how a workflow and process should look with an EHR aids system configuration during implementation, provides scenarios for testing, and gives new users an explicit training guide on how the workflow will be changed with the EHR. A “to be” process map guides monitoring for successful adoption and can pinpoint areas where further changes or adjustments need to be made after implementation.

Workflow and process mapping is not a new technique, but one that many healthcare organizations do not routinely use. Many who have implemented EHR identify process

improvement as a critical success factor they wished they had performed or performed better. Chapter 7 provides a full description of how to perform workflow and process mapping.

## Functional Strategy

The **functional strategy** describes how the EHR system performs with respect to its users and in relationship to its boundaries with other systems. There are essentially two levels of functional strategy. The first supports the overall migration path. Executive management approves this functional strategy.

A more detailed level of functional strategy defines the specific, detailed functions to be performed and generally serves as a set of functional specifications for vendor selection. This level of functional detail may require process mapping to be performed. A process map documents operations and workflows to identify process improvements needed prior to EHR implementation and establish the functional requirements necessary to support improvements in processes through an EHR. Process mapping is discussed fully in chapter 7.

Functional needs assessment entails studying the various groups of processes and translating that discussion into a statement of functional needs that can be taken to a vendor or IS designer for development. Functional needs assessment is discussed fully in chapter 8.

One way to distinguish processes from functions is to consider that functionality is what is “bought” in an EHR; processes must be built into the functions of an EHR. Processes are unique to the organization; functions are provided by a vendor.

## Data Strategy

The **data strategy** refers to the overall manner in which the organization plans to use data standards and build its data infrastructure. Although most EHRs are built on a data repository, not all are. A few EHRs have been constructed through a tightly integrated set of systems and applications. Whatever the data infrastructure is going to be, however, strategic-level decisions must be made about the infrastructure, adoption of standards, and the degree to which narrative vs. structured data will flow throughout the migration path. Data infrastructure is discussed in chapter 9.

## Technical Strategy

The **technical strategy** describes what technology will support the EHR and how it will be structured. The technical strategy at the highest level describes, for example, whether the EHR will run in a client/server environment, use web-enabled technology, include a wireless network, and so on. At a minimum, the technical strategy should identify the hardware, operating system, programming languages, and database structures that will be used. Specific technical standards to be used should be identified (for example, all intraorganizational communications must adhere to Health Level Seven [HL7]).

Finally, the technical strategy should be flexible enough to allow for the rapid pace of technological change and, as far as possible, should be built on **open architecture** so as not to limit choice. (The term *open architecture* refers to the fact that elements of different information systems work together through the use of standards that are not proprietary.) Technology infrastructure is discussed in chapter 10.

Although functional, data, and technical strategies may seem beyond the scope of an executive management strategic planning session, certain philosophical issues need to be understood and addressed at that level. For example, one organization developed a comprehensive vision of the EHR and gained acceptance for it from the user community, only to find that its primary **hospital information system (HIS)** vendor could not currently support such a system. Many healthcare organizations have many application systems from many different vendors and could potentially add a new EHR vendor to the mix; others have highly consolidated systems. Healthcare organizations have invested a huge amount of money over time to gain a tightly integrated information structure predominantly from a single vendor, even though it may not be cutting edge. (These older systems are often referred to as **legacy systems** [Keener 2000]). The organization then must decide whether it will replace its legacy system, attempt to interface with the system, persuade the vendor to move toward a more sophisticated vision of an EHR, or withdraw from its original goal for the time being.

## **Vendor Selection Strategy**

Many larger hospitals and clinics are very likely to be on a pathway toward their EHR today and do not need to conduct a vendor selection process. However, smaller hospitals and many physician offices and clinics still face the need to select from among hundreds of vendor offerings on the market. As of July 1, 2011, the federal government's Certified Health IT Product List included 381 complete ambulatory EHR vendors and 68 complete inpatient EHR vendors. This is a daunting number of choices to be faced with when first approaching the marketplace.

A thoughtfully constructed process to obtain information about products, perform thorough due diligence in selecting the vendor right for the organization, and negotiate favorable terms in a contract is, indeed, a critical success factor for EHR planning. The vendor selection process, itself, can take some organizations as long as 6 to 18 months to accomplish. Strategies for vendor selection are more fully described in chapter 12.

## **Implementation Strategy**

The **implementation strategy** describes the sequence in which an organization undertakes discrete project tasks, such as infrastructure building, new application system implementation, and organizational change. These tasks are prioritized based on clinical and strategic need. Issues of dependency and precedence are also considered in developing an implementation strategy. For example, some organizations believe that all elements of the technical infrastructure should be built or acquired at once and the applications phased in over time. Although this approach may seem ideal, the rapidly changing pace of IT and system upgrades—especially because the M.U. criteria will change over time—may mean installing out-of-date applications or retrofitting new applications to an older platform.

Another strategy is a phased approach, where pieces of infrastructure are implemented in accordance with a particular application requirement. Although this offers distinct advantages, some organizations find that it results in a piecemeal approach in which no application is fully implemented.

Each organization must weigh the risks associated with each implementation approach and select the one with which it is most comfortable.

The implementation strategy also addresses the philosophy of how rapidly users are trained and expected to be fully operational when using new applications. A slower-paced implementation, where all system functionality is fully tested and users fully trained, and a more rapid implementation, in which some system issues are addressed while users are still learning, both offer benefits. Yet another approach is to fully implement a system but allow users to learn various parts of the applications on their own, which could extend full adoption for a fairly long period of time.

Another aspect of the implementation strategy is cutover. Will everyone be required to use the new system at a certain date, or will people be allowed to phase in use over time? Providers have different philosophies about this and also change their philosophies based on economic factors.

Chapter 13 describes the components of EHR implementation and provides more detail on various implementation options.

## **Benefits Realization**

Finally, even though formal benefits realization studies have not been the norm and are often difficult to conduct, some process to establish whether goals are being met is a key component in EHR success. At a minimum, an organization needs to monitor if it is earning the M.U. incentives as expected, especially if the incentive monies were put up as collateral on a loan. Finally, benefits realization is necessary for ongoing operations, system maintenance, and staging future enhancements. Chapter 5 defined the basic construct of a benefits realization study. Chapter 11 describes benefits realization in more depth and relates the benefits realization study to ROI.