

**EHR** implementation has come a long way since 1995. Our hospital-owned family practice clinic went live in April of that year on ClinicaLogic, the DOS-based precursor of the Electronic Medical Record product we use today. The good news is that training only took several days and go-live went without a hitch. The bad news is no one had anything resembling an implementation methodology, functionality was primitive, a simple interface for lab results the stuff of dreams. Since then versions have come to pass, upgrades performed and functionality added. Yet the industry still struggles with implementation: software sold yet not deployed, stalled rollouts and unrealized end-user expectations. Still major successes are out there, and a theme has emerged that sounds foreign to many physicians. To state this theme briefly: you don't need a plan for implementation, you need a business plan.

Understanding the basic concept of your practice as a business provides a foundation for decision-making, whether you are a solo doc in a small clinic or an employed physician in a large integrated network. The business plan is the common language for comparing and contrasting not just one business to another, but also processes within a single entity. While a business plan makes obvious sense if one is starting a new clinic, it is invaluable in helping an existing clinic re-engineer its processes, especially if a considerable investment is to be made in EHR.

Most physicians lack business training. This leads to poor assumptions and expectations for the results of their business operations. Many physicians believe, for instance, that the key to operations is to make the office process efficient for them. A forthright examination of the steps involved in the typical outpatient visit reveals, however, the staff accounts for most of the time-and-motion tasks that are performed. Put simply, if the office is more efficient for the staff the provider can be more productive. Focusing on the role of the provider alone misses the most efficiency that can be gained. Yet that is the usual

approach for many physicians when they evaluate EHR. The predominant question: "What can the software do for me?" There is no comprehensive evaluation of their overall business, therefore no effective re-engineering of their clinical workflows.

You don't need a business background to write a business plan. There are many simple self-help books on how to get you started. It begins with a simple statement of the kinds of services one wishes to provide as a business, and a description of the market that might wish to access these services. The formal process of describing in detail services and market characteristics gives one acute insight into what kind of resources one will need in a clinic. If, for example, one of the major insurers contracts for patients lab work to be done at a given facility, one knows their EHR will need an interface with that particular lab and can go on a requirements list. To find out otherwise after the purchase can be frustrating and expensive!

Writing a business plan will identify the workflows you must have, as well as the ones you don't need. As a long-term user of an EMR and a consultant on re-engineering workflows, I am considered a pretty good user of my EMR. Yet I estimate that on an average day I only utilize 40% of what my product is capable of doing. Hopefully we use the software capabilities that enable efficient and effective workflows that empower our particular business plan. Other capabilities of the software might be quite legitimate in another clinic, yet counterproductive in ours. In a family practice clinic, lab interfaces are a key capability. In a dermatology clinic, this is not so much important as might be the capturing of images or getting path reports to the physician's attention.

A specific understanding of detailed workflows enables an estimation of overhead. If most of your services are diagnostic and cognitive, then exam room efficiency and tackling the nursing and front office workflows for a typical office visit will be key components of your business plan. Adding procedures you might want to offer

involves taking a look at further needs such as specialized space, equipment and personnel. The calculations for not just the cost of the machine, but also the time doing the procedure, nursing staff, turnaround time and cleaning and potential reimbursement must all be factored. This must then be compared to what one would be doing if they were not doing a procedure. For example, if I can perform 3 flexible sigmoidoscopies in my office in an afternoon, the costs/benefits for that afternoon should be compared to what other services I might be providing in that time space. This might be the costs/benefits of 10 routine episodic illness visits, for example. By starting with a listing of the specific services one wishes to provide, these choices can be mapped and considered. One caveat here needs to be included: I do not wish to give the impression that the ultimate choices one makes are solely on the basis of cost. We have an x-ray machine in our facility that is used pretty much for chest x-rays and acute orthopedic injuries of the appendicular skeleton. We don't do c-spine or lumbar spine, just your basic family practice "urgent care" films. The cost of the machine was \$30,000 and is a "loss-leader" in that the money from the films we shoot will not pay off the machine. Yet as part of our service profile we felt the convenience for patients and the ability to offer acute care visits was worth the investment. It also fulfills our overall strategy of providing an "urgent care" profile to our services even though we are not an urgent care clinic. Many factors go into our decision making on a given set of services, the business plan helps keep things organized, focused and in proper perspective to the rest of the services a clinic provides.

There exists plenty of data that shows EHR-enabled workflows will lower your costs relative to a paper chart based workflow. But will it do so for your business? A lot of this depends on the working relationship with your EHR vendor of choice. There are many good EHRs on the market these days, with skilled, experienced implementation staff. The thing to keep in mind

is that they are skilled at implementing their software and training staff to use it. They do not necessarily know what are the key workflows for your clinic. At the point of implementation this becomes critical. If one's expectations are that the installing the EHR will automatically improve workflows, you will be satisfied up to a point. There are inherent improvements from just using the software out of the box. A better plan, however, is to have a list of specific workflows in mind and a map for how you would like to accomplish these. Then challenge the EHR vendor to accomplish this using their software. For instance, one wishes to improve their medication refills workflow (and where is this not a problem?), sit down with your staff and map out how you wish it to be done in a perfect world. Then use this scheme as your blueprint. To ask the EHR vendor, "How do you do refills?" misses the point. Working with a clinic I can usually show them several ways to accomplish a given goal with the software I use, once they have articulated the problem they are having and what they perceive as the best solution. Taking this approach to implementation works to a vendor's strengths as they really understand their software's capabilities and can customize to your specific requests.

I argue that implementation success is dependent on understanding what workflows are needed and these spring from the development of a business plan. Your business plan should predict success before you acquire and implement an EHR. It is, I believe, the fundamental difference between the clinics that have been successful with EHR and those that have stalled out at some point during the process.

~~~~~  
*About the Author*

Tom Landholt, MD is a practicing family physician in Springfield, MO and the Medical Director for HIT at MassPRO, a Boston-based quality improvement organization. Dr. Landholt uses GE Centricity Electronic Medical Record System.