HAYES
MANAGEMENT CONSULTING
Optimizing the business of healthcare

Steps to Clinical Optimization

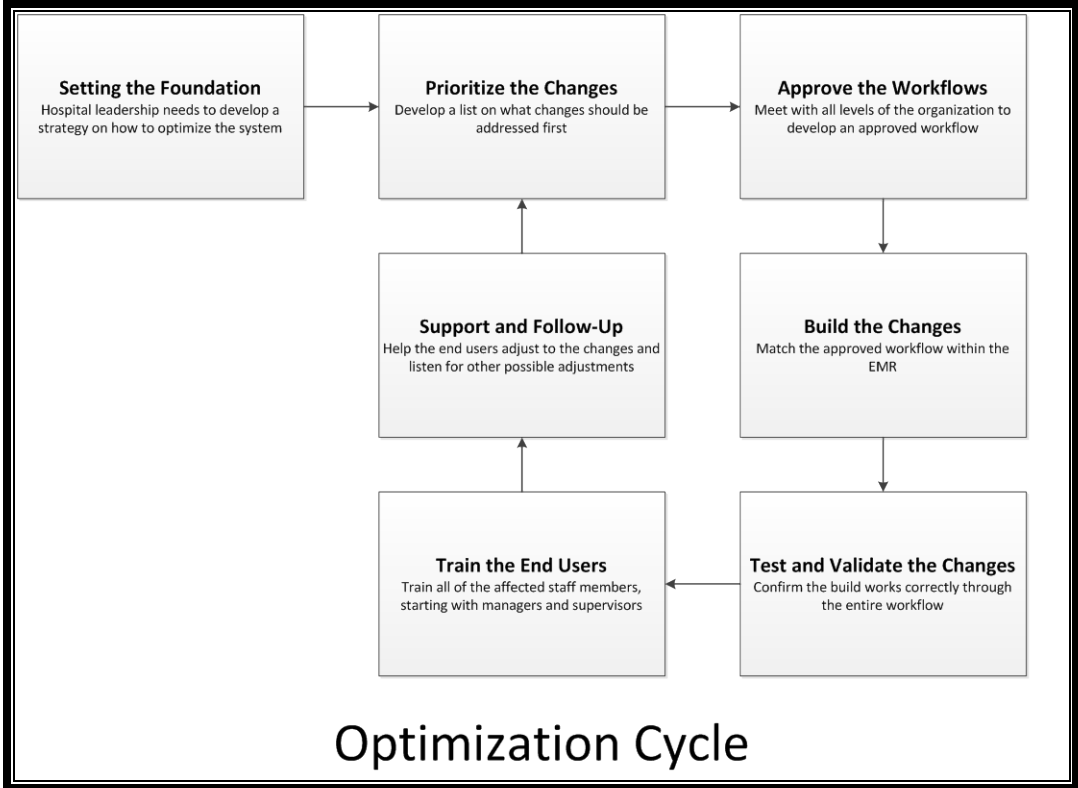*Improve productivity, user satisfaction and access to data.*

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Background

Clinical optimization refers not only to improving the functionality of your organization's electronic medical record (EMR), but also to making your workflows and processes more efficient. There are two major challenges: 1) developing workflows for your organization to best treat your patients and 2) incorporating those workflows within the EMR. If either of those two aspects is not performing effectively, the entire organization will suffer.

This optimization process is an iterative progression as an organization discovers better ways to treat and care for its patients.

Setting the Foundation
Hospital leadership needs to develop a strategy on how to optimize the system

Prioritize the Changes
Develop a list on what changes should be addressed first

Approve the Workflows
Meet with all levels of the organization to develop an approved workflow

Support and Follow-Up
Help the end users adjust to the changes and listen for other possible adjustments

Build the Changes
Match the approved workflow within the EMR

Train the End Users
Train all of the affected staff members, starting with managers and supervisors

Test and Validate the Changes
Confirm the build works correctly through the entire workflow

Optimization Cycle

Approach

1. Set the foundation

When the leadership at the hospital or physician practice decided to purchase an EMR, they had specific goals and objectives. During the optimization phase, these objectives should be revisited. This will help develop a unified vision for optimization.

Before starting any optimization activities, a healthcare organization must develop a governance structure and a thorough strategy. It is best to plan for optimization at the onset of implementing an EMR, but to execute it after go-live when users become familiar with the system and start thinking of ways to improve it.

2. Prioritize the changes

Management and the clinical optimization team will need to prioritize all of the suggested changes. The best way to find which optimization will have the most

impact is to develop a priority ranking system based on defined criteria. These criteria are unique to each organization, but should include:

- Number of users and patients who will benefit
- Length of time it will take to change the process (build, testing, validation, and training)
- Required resources to complete the process
- Improvement over current system
- Number of people involved in the process

Here is an example of a simple priority ranking table:

	Benefit the Users (50%)	Length of time to change (35%)	Improvement over current system (15%)	Total Priority Ranking
Change A	10 x 0.5 = 5	3 x 0.35 = 1.05	3 x 0.15 = 0.45	5+ 1.05 + 0.45=**6.5**
Change B	8 = 4	6 = 2.1	6 = 0.9	4 + 2.1 + 0.9 = **7**
Change C	4 = 2	10 = 3.5	8 = 1.2	2 + 3.5 + 1.2 = **6.7**

In this example, there are three suggested changes, A, B and C. First, define your criteria. In the above chart, I have listed three possible criteria and have given each a percentage of importance. Second, I rated each potential change based on the criteria, with 1 being the worst and 10 being the best. Then, I multiplied the rating by the percentage assigned to that criterion, and totaled the columns. The goal is to create a calculated priority list for all potential clinical optimization changes. This list will help leadership determine resources needed.

As you can see, Change B would be the best change to make first, as it benefits users and can be completed quickly. While Change A will have the most benefit to the users, it will require the most time and have little improvement over the current system.

3. Approve the workflows

The next step is to develop and approve the current workflows within the entire organization. A major hurdle in any EMR project is overcoming the mindset that the new EMR will fix all issues in the organization. While it can bring many positive attributes, an EMR system will not fix broken internal workflows. Final workflows will need to be completed and approved by the organization before continuing on to the later stages of optimization.

A system-wide validation session is a good starting point for discovering the status of the current workflows and how they are incorporated into the new system. These sessions should involve all levels of the organization. This is the time to discover broken workflows and see if all areas of the organization are on the same page. This is not a time to troubleshoot or fix the issues, but rather an opportunity to uncover as many major concerns as possible.

Any workflow that is not complete or does not work within the EMR system is an immediate candidate for optimization. One suggestion is to incorporate some of the EMR's model workflow to minimize build, but there should be a discussion to include everyone's input. It is important to remember that this is the best time to fix broken workflows. Trying to fix them later will be more difficult. Lastly, there should always be a solid reason for each completed workflow, such as improving efficiency or patient safety. The reason should never be "because it has always been done this way."

4. Build the changes

Building the changes into the EMR should only be started once a priority list is complete and the workflows have been finalized and approved. Some changes may affect other areas of the organization without your knowledge, so it is always best practice to contact all teams when dealing with large, integrated build tasks. All changes made to the system will need to be documented. This will decrease confusion and time spent troubleshooting in the testing phase. During the build phase, it is important to keep leadership and the end users informed on the progress.

5. Test and validate the changes

Any new build will have to go through extensive testing before it is ready for the live environment. Testing should not be rushed nor taken lightly. Any changes done to the current system has the possibility of affecting numerous applications downstream in the workflow, as well as patient safety and training.

The first area to test should be within the application that made the changes to the build. This includes testing the new workflows, and more importantly, ensuring that the pathways within the EMR – including all of the buttons and tabs for all users and departments – work correctly.

Once all of the application testing is complete, contact the other areas that might be affected. The building team should explain to other teams what was changed and have them check to see if those changes work within their build and workflows. The testing process will get more difficult as more teams are involved. Make sure to include teams that are further along in the workflow, such as hospital billing and medical records. Those areas might not be affected by the change to the workflow, but heavily affected by a change in the build.

The next stage is to validate the new changes to the workflow within the system. Once the build is complete and tested, it is important to verify that the finished product coincides with the original idea. Present the changes to the leadership, end users and others affected by the changes. It is best to show the changes in a real-life scenario. This will give the audience a better understanding of how the new changes will impact their jobs and responsibilities.

6. Train the end users

When changes are made to the system, focus on training the managers and supervisors first, and confirm that they fully understand the changes and why these changes were made. It is important that these end users buy into the changes and promote the benefits of the new build and workflows. These are the people who will be using the system on a daily basis and will help support other staff members if any questions arise. During the training phase, make sure to document any and all concerns. It is possible that unforeseen issues or errors have gotten through the testing and validating phase. This documentation also helps to focus training efforts. This is the last step before going into the live environment, so it is the last chance to make any final adjustments.

7. Support and follow-up

Once all of the users are properly trained, it is time to move the changes into the live environment. The final phase in the optimization cycle is to support the end users. It is important to conduct site visits as soon as possible when making changes to the system. Have the validated workflow in hand to confirm any questions and to document any tweaks that need to be made. Remember to stay calm during this stressful time and do not expect to get everything completely

right the first time, as it is impossible to test and validate all possible scenarios. Continue site visits and keep an open line of communication with all users on a weekly basis until the workflow and build is complete.

Continue to Improve

Clinical optimization is a continuous process. The best strategy depends on communication and gathering ideas from everyone affected by the changes. Before starting optimization, make sure that leadership is in agreement as to what is expected in the final product. Creating a new workflow that works for one department but is incompatible with other departments will waste valuable time and resources. Since most EMR systems are integrated, it is best to fully understand the problem before starting the process. Do not rush these optimization stages. Instead, research and discover the source problems and fix the causes. The best suggestions for optimizing the system will come from the end users. Always perform on-site visits to gather as many unbiased opinions as possible. Simple questions and interactions with the end users can lead to many great ideas and potential future optimizations. If done well, clinical optimization will continue to improve patient care, productivity, and many other benefits.

About Hayes

Hayes Management Consulting is a leading, national healthcare consulting firm focused on healthcare operations. This includes strategic planning, interim leadership, revenue cycle optimization, clinical optimization, project management, IT consulting, and preparation for federal initiatives such as ICD-10, Meaningful Use, and HIPAA compliance. We also provide software such as MDaudit and other proprietary tools to ensure our clients are operationally efficient. Hayes has received multiple Best in KLAS awards since 2005, has been listed in *Healthcare Informatics'* Top 100 and Inc. 5000 and has been ranked multiple times in *Modern Healthcare's* "Best Places to Work in Healthcare."
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