# Sprinting Your Clinic to Optimization

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The University of Kansas Health System (UKHS) is a nonprofit academic medical center located in Kansas City, Kansas. The system supports over 80 facilities providing inpatient and outpatient care.

ECG is a national consulting firm focused on offering strategic, management, and financial advice to healthcare providers. We focus on creating customized, implementable solutions to meet our clients' specific challenges in both community-based and academic settings.

## Rationale for the Improvement

After a massive effort to integrate 18 departments into a new health system—including the standardization of front-end workflows to support the migration of all clinics onto one EHR platform—ambulatory leadership at UKHS wanted to assess the state of clinic operations and improve performance. As a world-class academic medical center and destination for complex care and diagnosis, it is a priority that patients seeking care at UKHS have timely and convenient access to healthcare services. As such, leadership sought to deploy a deliberate performance improvement (PI) effort to increase patient access, clinic throughput, and satisfaction. There was also a desire to maintain balance by simultaneously enhancing the satisfaction of the providers and staff supplying care.

When ambulatory leadership initiated this journey, they focused on identifying specific solutions that could be implemented to achieve the desired goals in eight weeks. Additionally, UKHS had a strong desire to use its own team of experts for the improvement efforts but needed help with organizing and developing a process to execute this. Realizing this was part of ECG's wheelhouse, UKHS partnered with ECG to develop a model clinic sprint process that it could then replicate across the clinics on its own.

### Initiative
Optimize clinical workflows and Epic functionality across our clinical environment.

### Focus
Patient, provider, and staff experience, as well as access and throughput

### Format
Eight weeks to plan, design, and implement

### *AIM*


## Methodology

We assembled a cross-functional team of ambulatory program managers and analysts representing revenue cycle, patient access, nursing, clinic operations, information technology, and physician informatics. Additionally, a steering committee composed of ambulatory operations and clinic leadership was assembled to help guide and advise the team throughout the process.

As with any successful PI initiative, it was imperative that the team spend enough physical time in the clinic to learn which opportunities were available for improvement before initiating implementation. As such, the team was charged with sprinting through a surgical clinic over the course of eight weeks to focus on achieving the desired goals.

Lean management tools played a key role within the sprint. For example, while in the clinic, the team was trained to look for the eight wastes of healthcare. Armed with an interview and observation toolkit, the team observed actual performance of core processes and compared them to the organization's standardized processes, noting whether any waste was present.

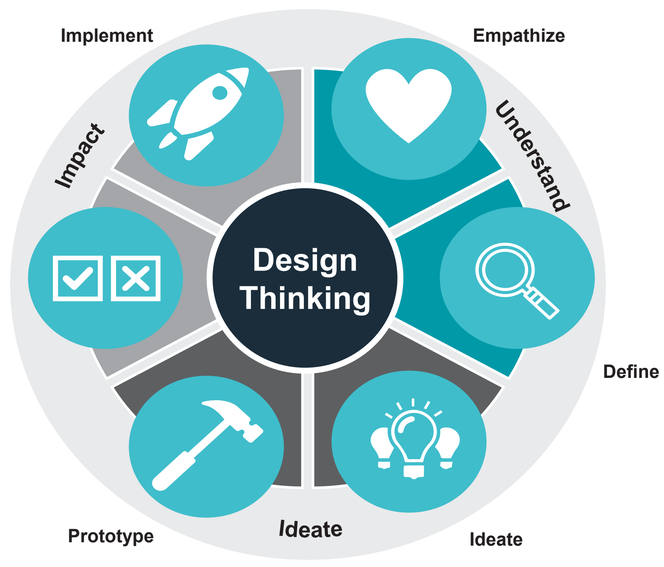
Though each member of the team had a focus area within the clinic, it was important for the entire group to understand what everyone else was working on to connect the dots across all areas and avoid any efficiencies and duplication related to implementation efforts. To do so, the team and administrative and physician clinic leadership, spent several hours together debriefing observation findings and developing potential solutions through human-centered design techniques, including brainstorming, clustering, synthesizing, and ideation.

## Subset of Ideas Implemented

1. Standardized ancillary and clinic appointment time spacing
2. Implemented Televox 8 a.m. procedure reminders
3. Implemented the sign-in button and redesigned the front desk process
4. Created/expanded the appointment scheduling guide
5. Designed and implemented a huddle board
6. Held a "lunch and learn" that focused on quality
7. Implemented patient paper questionnaires within the EHR
8. Built out efficiency tools for providers in Epic
9. Operationalized the usage of Epic for educational handouts
10. Enhanced patient labels
11. Launched an electronic check-in pilot
12. Developed and implemented MyChart sign-up strategies
13. Reorganized the main line phone tree

*Team collaboration around our idea board*


### *Lean and Innovation Approach*




## Observations and Conclusions

Overall, this process led to specific improvements in the participating clinics and brought additional benefit to UKHS by allowing the organization to:

- Identify common challenges and opportunities across two different types of clinics.
- Create mini pilot sites for enterprise-wide initiatives. As a result, UKHS was able to identify quick wins and challenges that weren't feasible or were beyond the scope of the project. UKHS can now prioritize those as future enhancements.
- Advance the culture of PI and innovation throughout the clinics and organization. Many of the ideas that were implemented were inspired by the healthcare clinics of tomorrow and refined through PI methodologies.
- Establish a collaborative problem-solving culture in which individual subject matter experts, who mainly worked within their respective areas, came together in one room to listen to one another and brainstorm and troubleshoot together.

## Implications and Next Steps

After completing work for the first sprint, we solicited feedback from the sprint team, the participating clinic, and the steering committee members who sponsored and guided the effort. We used this feedback to make changes to our tools and format. We then repeated the process in a nonsurgical clinic.

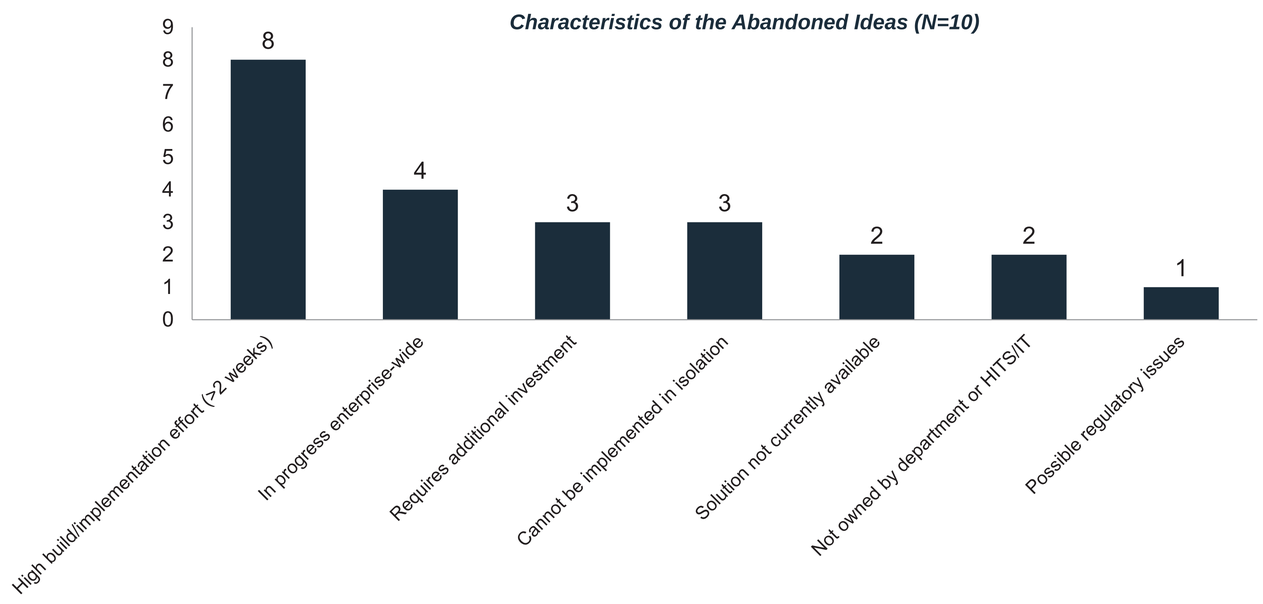
After conducting this process in two clinics (i.e., surgical and nonsurgical), the team emerged with common themes that were affecting both clinics. Rather than continue with a sprint team, UKHS opted to develop a "spread team" to make more focused changes across the ambulatory enterprise in a shorter time frame. The selected items were common opportunities identified in the two sprints.

## The Eight Wastes of Healthcare

Variation · Waiting · Defects/Rework · Overproduction · Inventory · Human Potential · Searching · Motion/Transportation

## Implementation Feasibility

Before implementing any solutions, the team investigated the feasibility of each idea with different stakeholders in the organization, taking into consideration several characteristics.




## Results

The team conducted a 90-day follow-up with the first clinic that participated in the sprint (i.e., the surgical clinic). During this follow-up, the team compared updated performance against baseline performance to measure improvements, and clinic leadership anecdotally shared updates and progress. There were many positive results, of which we've highlighted a subset below.

- The team digitized the sign-in sheet and trained front-office staff on how to use the EHR to manage patient wait times prior to check-in. Prior to this implementation, the departments had been using a paper-based sign-in tracking sheet, which made measuring the time between sign-in and check-in highly manual and managing patients in the waiting room less efficient. As a result of this effort, the average wait time at check-in was reduced by 2.8 minutes.
- Efforts to improve enrollment in the patient portal included staff education on portal functionality and agreement on consistent messaging within the department. As a result, portal enrollment increased by 23%.
- Provider satisfaction, as measured by a pre- and post-survey, improved by 3% overall, with satisfaction increasing the most in areas related to workload (30% increase) and technologies (17% increase) available in the EHR.

**About the Authors**

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