



CASE STUDY

# Sprinting Your Clinic to Success

# After a massive effort to integrate 18 clinics 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 the University of Kansas Health System (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 of UKHS that patients seeking care at its facilities have timely and convenient access to healthcare services. As such, leadership sought to deploy a deliberate performance improvement (PI) effort to make enhancements to patient access, satisfaction, and clinic throughput. To maintain balance, UKHS also wanted to simultaneously determine ways to improve the satisfaction of its providers and staff providing the care.



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When ambulatory leadership initiated this journey, they were 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. Therefore, UKHS partnered with ECG to develop a model clinic sprint process that it could then replicate across its clinics on its own.

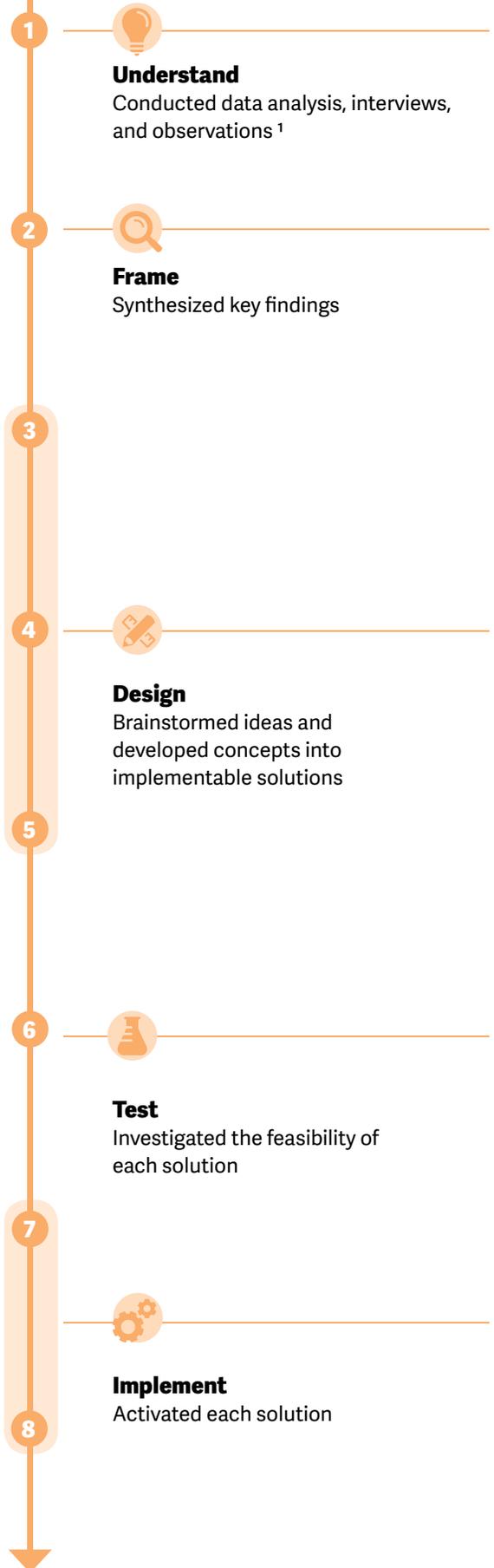
### Building the Right Team

We assembled a cross-functional team of ambulatory program managers and analysts representing revenue cycle, patient access, nursing, clinic operations, and information technology and physician informatics. Additionally, the participating department also selected a smaller team of physicians, clinic managers, and staff to serve on the team as needed. Finally, a steering committee composed of senior leaders from ambulatory operations and the participating clinic was assembled to help guide and advise the team throughout the process.

### Developing a Plan for Success

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. The team divided the work effort between the eight weeks as shown in the schedule to the right.

## 8-Week Schedule



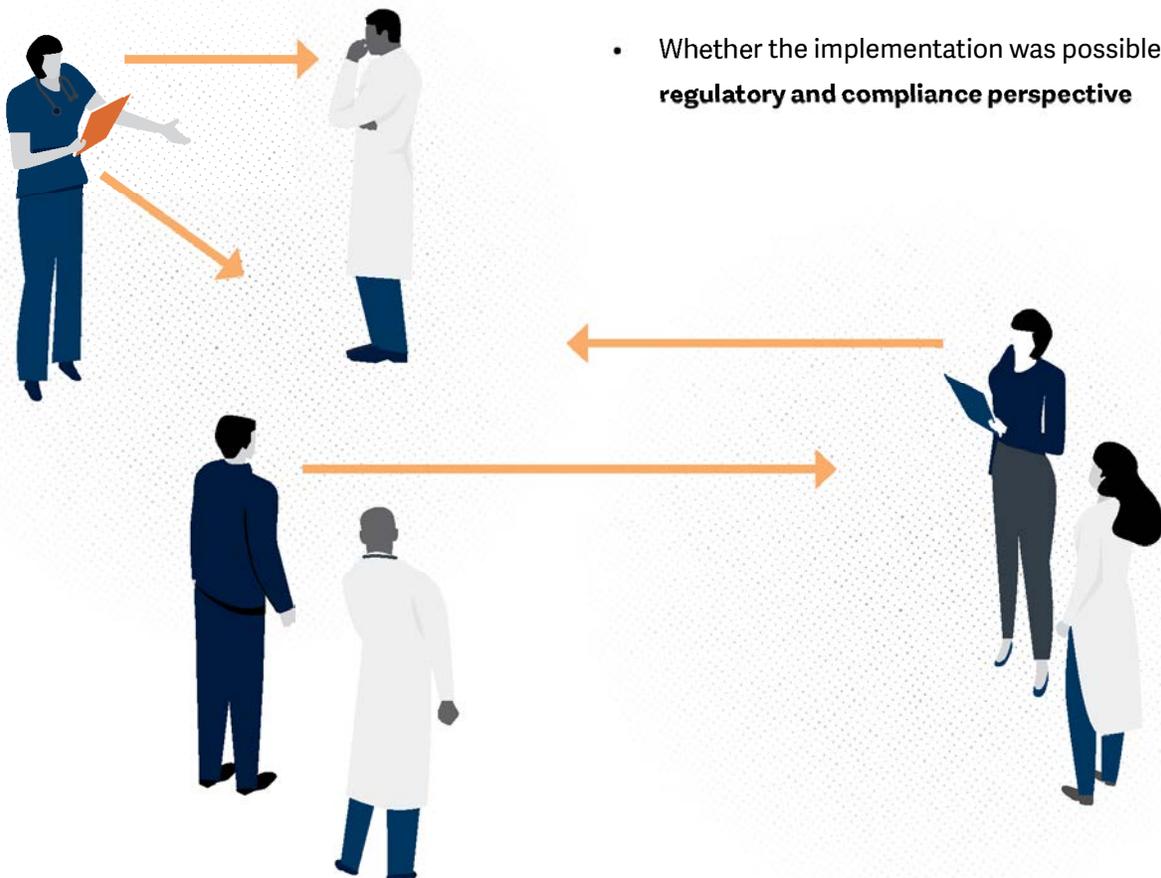
<sup>1</sup> A data request was issued two weeks prior to kicking off week one activities.

Lean management tools played a key role in the sprint. For example, while in the clinic, the team was trained to look for the eight wastes of healthcare.<sup>2</sup> 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 observed. Analyzing performance data and interviewing key stakeholders was also critical for understanding baseline performance and tracking improvements after implementation.

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 focused on to connect the dots across all areas and avoid any inefficiencies and duplication related to implementation efforts. To do so, the multidisciplinary team, clinic 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. Before implementing any solutions, the team investigated the feasibility of each idea with different stakeholders in the organization, taking into consideration the following characteristics:

- The **estimated time to complete** the build
- Whether **similar solutions were already in progress** in the ambulatory enterprise
- The **financial investment** needed to execute the idea
- The **ability to implement the idea in isolation and not negatively affect other areas** (this was also driven by whether the process owner was part of the ambulatory team)
- Whether the required **technology existed and could be implemented**
- Whether the implementation was possible from a **regulatory and compliance perspective**



<sup>2</sup> The eight Lean wastes of healthcare are inventory, motion, waiting, transportation, defects, overproduction, overprocessing, and human potential.



Ideas that passed feasibility testing made their way to the implementation phase. The group kept track of each item going through the implementation via a virtual scrum board and held scrums twice a week to assess progress and troubleshoot. In the end, the team was able to focus implementation efforts on the operational and EHR components of the following areas:

- Referrals and appointment scheduling
- Check-in and checkout
- Provider efficiency
- Staffing workflows
- Patient engagement workflows

After completing work for the first sprint, we solicited feedback from the Sprint Team, the clinic that participated, and steering committee members that sponsored and guided the effort. We used their feedback to make changes to our tools and format. Changes included the introduction of a patient time study and circle of work observations with the nursing staff to gain additional perspectives. We then repeated the process in a nonsurgical clinic.

After conducting this process in two clinics, 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 team conducted a 90-day follow-up with the first clinic that participated in the sprint. For this follow-up, ECG compared updated performance against baseline performance to measure improvements, and clinic leadership (including the department chair) anecdotally shared updates and progress. Though there were many positive results, 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 sign-in to check-in times 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 improved by 3% overall, with satisfaction increasing the most in areas related to workload (30% increase) and technologies available (17% increase) in the EHR.
- The department also restructured its phone tree to make it more patient friendly and lessen the number of menus listed for a patient to get to the service they needed. Specifically, options decreased from 10 to 5 on the first menu presented when calling the clinic. The department also invested in obtaining phone statistics and reports; because this did not exist prior to the phone tree restructure, we were unable to obtain baseline call statistics to compare performance. However, during the 90-day follow-up, department leadership reported that this was an enormous success in making it easier for patients to access the clinic.

## 90-day follow-up results

Average **wait time at check-in** was

reduced  
by 2.8 min.



Portal **enrollment**

increased  
by 23%

Provider **satisfaction**  
related to workload

improved  
by 30%



Enormous  
improvement

in **patient's interaction** with  
the phone system



Overall, this process allowed specific improvements to be driven 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. This allowed UKHS to prioritize those as future enhancements.
- **Light a spark to 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. Stakeholders—including the teams, executives, providers, and staff—were excited about the process and efforts and are subsequently using components of the approach in other organizational efforts, such as in the implementation of management for daily improvement boards.
- **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.



## Best Practices for Organizations with a Desire to Optimize Their Clinics



Investing in an optimization process for your clinics is a win-win for any organization willing to dedicate the time and resources needed to execute this process correctly. Below are some of the key factors and lessons learned that made this initiative successful at UKHS.

- ✓ **Ensure your ambulatory and clinic leadership teams are engaged** in the process.
- ✓ **Use a multidisciplinary team** to bring strengths in various areas and think outside the box.
- ✓ **Engage physicians, leadership, and front-line staff** each step of the way, allowing for flexibility in participation efforts.
- ✓ **Treat each implementation like a mini project**, using both PI and project management methodologies for the best results.
- ✓ **Set expectations.** A sprint cannot develop and implement solutions for each opportunity identified.
- ✓ **Create sustainability plans and touch points** to ensure changes are maintained postimplementation.



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