

# Designing for Patient Care



## LIFELONG MEDICAL CARE RETHINKS EXAM ROOM WORKFLOWS

As the healthcare industry continues to evolve and place renewed emphasis on patient-caregiver engagement and patient outcomes, LifeLong Medical Care in Berkeley, California, embarked on an ambitious redesign of its East Oakland Health Center clinic. The innovative, nonprofit Federally Qualified Health Center has served northern California communities for more than 35 years, providing medical, dental and social services to patients of all ages at multiple sites. The sites include eleven primary care medical centers, two dental centers, one adult day health center with skilled nursing, four school-based health centers, one supportive housing program and one urgent care center.

The goal of the redesign project was to increase workflow and more effectively move patients through the limited space of the historic facility by standardizing layouts and equipment. The organization decided to work with Midmark Corporation early in the renovation process to evaluate the impact of different equipment and layouts.

### LIFELONG MEDICAL CARE AT A GLANCE:

- Location: Berkeley, California
- Serving for 35+ years
- 11 primary care medical centers
- 2 dental centers
- 1 adult day health center with skilled nursing
- 4 school-based health centers
- 1 supportive housing program
- 1 urgent care center

## FLEXIBILITY, WORKFLOW + PROVIDER SAFETY

“I was very familiar with Midmark and its IQ Digital Diagnostic System because I worked with them before and LifeLong had recently picked them to help with our vitals integration,” said Ryan Hensler, EHR project manager with LifeLong. “During the vitals integration meeting with Midmark, the conversation turned to provider ergonomics and workflow, and we quickly realized that there might be an opportunity for Midmark to play a larger role in the redesign project. We saw a chance to partner with the equipment provider at the onset of the project to gain a better understanding of the impact all the exam room equipment can have on our workflows.”

From that discussion, the redesign project began to unfold with attention given to the unique challenges presented by the facility. The clinic features 12 exam rooms and is in an older, historic facility. Space is at a premium, with the exam space in particular being smaller than the size typically needed to adequately care for patients. Also, given that much of the equipment in the nonprofit’s facility is donated, the organization was dealing with a wide array of equipment that often was not ideal for the limited space and sometimes negatively impacted caregiver comfort and ergonomics. “We had a vision of where we wanted our facility to go; flexibility, workflow and provider safety were major themes we wanted to incorporate,” said Dr. Edwin Munich, medical director for health information technology. “For instance, with the current exam room layout, our providers often found themselves

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**Ryan Hensler**  
EHR Project Manager,  
LifeLong Medical Care

boxed in against the wall. We wanted our caregivers to be in the center of the room with the patient and everything configured around their work. We decided to set up three of the exam rooms as testing areas where we could bring in equipment and work through different scenarios and room layouts. This helped us realize our vision and make modifications before proceeding with the redesign of the entire facility,” said Dr. Munich.

LifeLong worked with Midmark to set up the three rooms and test various types of workflows using Midmark equipment. During a three-week

period, providers saw more than 150 patients in the three test rooms and provided feedback on what they liked or did not like about the layout and equipment used in each room.

### LIFELONG EAST OAKLAND EXAM ROOM BEFORE REDESIGN



### LIFELONG EAST OAKLAND EXAM ROOM AFTER REDESIGN



## TESTING CONCEPTS

"At the onset of the project, we weren't completely sure what we needed except for an ergonomic solution," said Hensler. "The testing period with the three rooms allowed us to go in-depth with each exam room configuration. We were able to bring in different pieces of equipment and try out numerous workflow models to find out what really worked within our given space. It was more than just choosing which room we liked. We were able to converge useful elements from the different rooms to arrive at a configuration and list of equipment that worked best for our given space."

As feedback was gathered, Midmark technicians were on-hand to help change configurations, offer suggestions and discuss additional equipment solutions for consideration. Hensler acknowledges that they learned a lot from this collaborative approach, citing numerous examples where the teams worked together to improve the layout of the facility.

"Our providers share exam rooms, so it was important that they be able to easily adjust and customize the room accordingly at the beginning of their shift. Midmark showed us how we could use the right type of equipment and room layout to ensure our providers had the flexibility they needed," said Hensler. "For instance," he continued, "we were able to replace our old, large metal desks that occupied 20 percent of the room space with carts and mobile

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workstations that could be moved around the room, and free up more space while still providing ample writing room for the physicians. The company also shared research it had conducted on vitals workflow to show us how we could reduce time during vitals acquisition."

## CONCLUSION

The result of this collaborative approach was that LifeLong Medical Care gained a better understanding of its workflows and how the combination of right equipment and room layouts can help improve efficiency and, ultimately, patient care. The organization also now had a proven blueprint for its existing and new facilities to help ensure exam room standardization throughout the organization.

The redesigned clinic opened in November 2012. LifeLong Medical Care was so pleased with the level of involvement and input provided by the Midmark team, the organization plans to continue to work with the company

as they translate the standardized template to existing and new facilities.

"On average, we found that the vitals intake workflow improved in accuracy and efficiency, thanks in part to Midmark's IQ Digital Diagnostic System," said Hensler. "Prior to vitals integration, blood pressure was taken manually and providers were often taking a second reach to double check accuracy. Now providers are confident in the accuracy of the data, eliminating the second reach and adding time back to the patient visit."

Also, since the completion of the redesign project, LifeLong Medical Care has built a new 25 exam room facility that utilized the new standardized template and is completely outfitted with Midmark equipment.

"We quickly realized the value of bringing in Midmark early during the project. They helped us re-examine workflow and uncover areas where we could increase efficiencies," said Dr. Munich. "Midmark stands behind their products, and they helped us realize our vision of creating an efficient facility designed to enhance patient-caregiver engagement."