



## **Full Abstract Sample: Community Project & Educational Program**

### **The Opportunity Board: A Tool for Engaging Residents in Identifying Opportunities for Clinical and Program Improvement**

Authors: John Y., MD, MPH and Betty X., MD

#### **PROJECT DESCRIPTION**

ABC Family Medicine Residency is a community-based residency serving patients and training residents in Cityville, Kansas. We have developed and implemented an interactive tool to harvest ideas for clinical and program innovation from front-line clinicians, primarily residents. The tool we have developed, our “opportunity board,” facilitates observation and discussion among clinicians about opportunities to improve our operations while also providing a means of accountability so that novel ideas or solutions are not lost to follow-up. The opportunity board is unique in our hospital as the only idea board primarily operated by physicians. We believe interns and residents, early in their clinical careers, provide a valuable perspective as fresh eyes observing often long-established clinical systems and processes. Moreover, the opportunity board serves as a wellspring of opportunity for applied quality improvement curriculum.

#### **OBJECTIVES**

We sought to engage residents in identifying front-line opportunities to improve the efficiency and quality of care we deliver, as well as opportunities to improve teaching and learning opportunities in our residency program. In addition to empowering and engaging residents in this process, we also sought to demonstrate quality improvement principles and give opportunities for residents to apply QI cycles in their own projects.

#### **METHODOLOGY**

We re-purposed a large bulletin board in our residency’s main conference room, where residents and faculty gather each day for educational and business meetings. The board was sectioned off to provide areas where new opportunities could be posted on opportunity cards. Each card queries residents to identify “the pebble in your shoe,” an idea that could address the problem, a means of measuring the impact of the solution, and a timeline for approval of the idea and progress notes. Blank “opportunity cards” are available on the board and residents are encouraged to post their ideas as they arise in the course of daily practice.

Once a week, before our weekly business meeting, we “run” the opportunity board as a group, with a quorum of residents and faculty present. New ideas are discussed in open forum and if the group agrees to pursue an idea, it is moved to a timeline to chart its weekly progress. Old ideas “in progress” are reviewed and progress discussed with clinicians assigned to carry the idea forward. Facilitated group discussion helps anticipate pit-falls as well as provide ideas for creative solutions or key networking contacts to facilitate execution of proposed interventions.

As interventions are completed, they are moved to a “completed” section of the board as visual reinforcement and motivation that residents can and do affect change in their clinical and professional settings. After four weeks (for “easy” opportunities) or six weeks (“hard” opportunities), uncompleted proposals are moved into an “escalate” box where the group is challenged to either involve additional personnel/resources or consider whether the proposal should be discarded or recycled at a later date.

## **APPLICANT'S ROLE IN PROJECT**

Dr. Y is a second-year resident interested in clinical process improvement and transformation. He began applying lessons learned in his own clinical environment, including the opportunity board. Each week he facilitates "running" the opportunity board and encouraging follow-through with his colleagues throughout the week. He is increasingly enlisting colleagues to practice "running" the board, facilitating dialogue amongst clinicians.

Co-author X is also a second-year resident interested in clinical improvement. Along with Dr. Y, she has become a vocal leader in championing and "running" the opportunity board with her colleagues. Additionally, Dr. X identified an opportunity for standardizing exam room supply cabinets/drawers and improving stocking rates of these supplies. Her development and execution of a clinical intervention serve as a model in applied QI training and are representative of the opportunity board's potential.

## **RESULTS/EVALUATION**

In its first month of implementation, the opportunity board generated nine posted opportunities. Early adoption was aided by encouraging residents and faculty to post ideas on the board when they naturally arose in the course of business meetings or informal gatherings.

Over the first five months of implementation, 19 opportunities and accompanying interventions have moved through the opportunity board and reached the "Completed" box. These interventions encompass a broad range of application. Some examples include 1) Changing the timing of certain weekly lectures in order to facilitate better AM rounding and lecture attendance; 2) Deploying patient education videos in our waiting room; 3) Standardizing exam room cabinets/drawers to improve supply stocking. Eight opportunities remain in process while three have been discarded and three have been placed in the "Holding" box awaiting better timing or resources for execution.

One challenge we encountered was having dedicated/protected time for running the board each week, as business meeting agendas are often full, leaving little room for running the opportunity board. Our solution involved encouraging residents and faculty to arriving 15 minutes before each business meeting. We never initiate opportunity board discussions until a "quorum" of residents and faculty are present. Attendance at this earlier meeting time has been high when residents and faculty are reminded that the opportunity board will be run prior to business meeting, which we interpret as a positive reflection of clinicians' engagement.

In surveys, residents and faculty alike report high satisfaction with the opportunity board. As one intern noted, "the opportunity board gives us a forum in which to propose changes to our clinical operations. Without this structure, it was difficult to know where to go with ideas I had. It was also difficult to get the collective will to carry them out."

A faculty member reported: "We have tried various programs to teach quality improvement over the years, with varying degrees of interest and participation from residents. The opportunity board has generated a substantial amount of interest amongst our residents and faculty, by empowering each of us to identify and lead change, while also demonstrating PDSA cycles in an applied format."

## **CONCLUSIONS**

Resident physicians occupy a unique perspective in healthcare delivery systems, bringing fresh eyes to often ingrained clinical or administrative processes. Residents can serve as a continual wellspring of innovation in the delivery of care but may feel disempowered as trainees in large clinical organizations. By developing and implementing a tool that actively queries residents and faculty for innovative solutions to everyday problems, we have provided an infrastructure that not only is solving long-standing inefficiencies in our program but is also demonstrating and teaching applied quality improvement methods to our residents.