

# Using Kaizen QI Method to Improve the Availability of Revenue Information in Challenging Budgetary Times at Tazewell County Health Department

## BACKGROUND

Tazewell County Health Department is located in Central Illinois and serves about 136,000 residents. The department's revenue consists of checks that come by mail and fees collected on site. Uncertainties surrounding Illinois State budget required frequent monitoring of cash flow. It took an average of 30 days for revenue information to be posted on the TCHD's accounting system after receipted. It affected our ability to get timely revenue information to ensure funds availability to pay vendors on time, our ability to budget, project and close out grants.

## OBJECTIVES

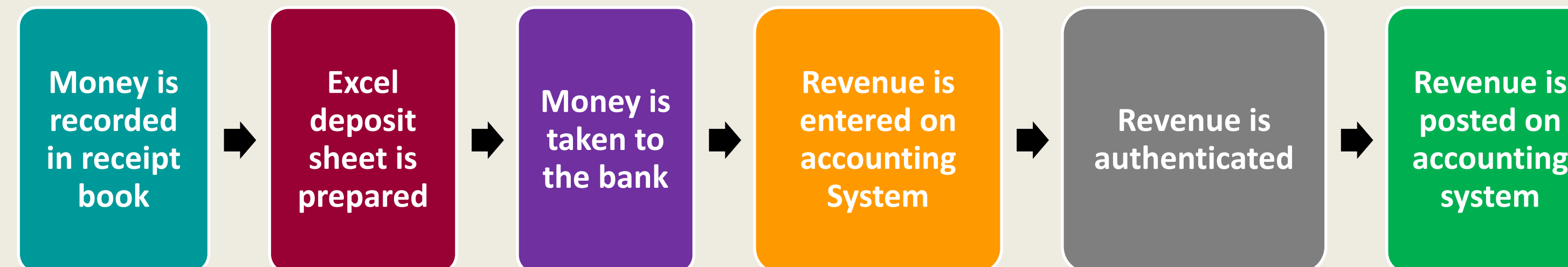
Reduce the mean number of days to post income to the accounting system by 20% using Kaizen QI method.

## METHODS

- A Mini-Kaizen was initiated in Business Operations Division in January 2016 on deposit procedure. The new process went into effect on May 1, 2016.
- Baseline data were collected to determine the mean number of days to post income to the accounting system.
- Other process improvement methods such as: Ranking Matrix, Fishbone Diagram and Action Steps Chart were used.
- The effectiveness of the process's change was evaluated using a control chart and an upper control limit (UCL) measure was set at 2 standard deviations above the mean number of days which corresponds to 8 days.

## PROCESS CHANGE

### Before Kaizen



### After Kaizen

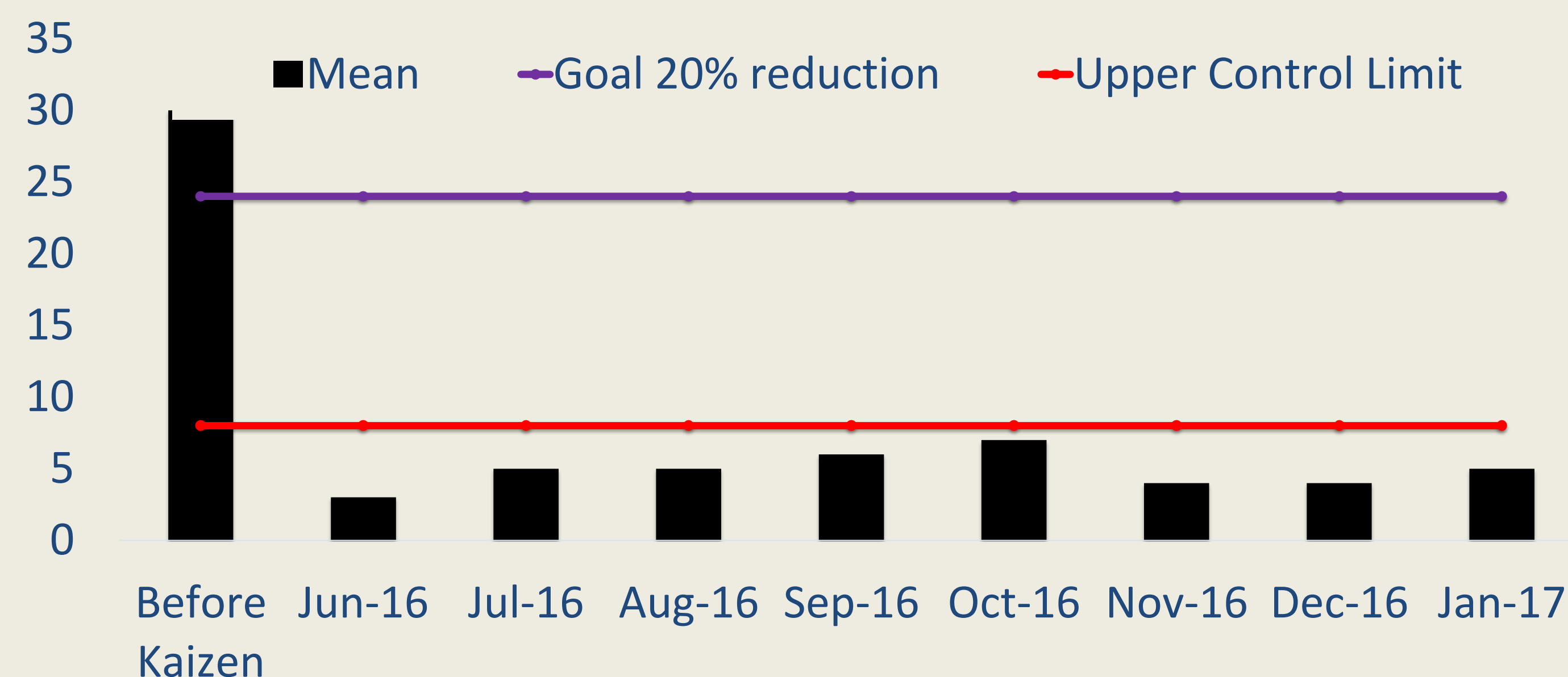


## KAIZEN TEAM



## RESULTS

Before the Kaizen project, it took an average of 30 days for revenue information to be posted on the TCHD's accounting system after receipted. After implementing the new process, the mean number of days was reduced to an average of 5 days, a total reduction of 83%.



## CONCLUSION

The Quality Improvement Team will continue to evaluate the effectiveness of the process's change. The (UCL) measure represents the highest level of variation in the average number of days acceptable for the new process. The team will focus on identifying common cause variations which represent predictable variations in the process and avoid special cause variations that indicate that the process is not consistent and a corrective action is needed. Special cause variations will be investigated by the QI team using QI tools such as cause and effect diagram.

Authors:  
 Azza Mohammed, MBBS, MPH  
[amohammed@tchd.net](mailto:amohammed@tchd.net)  
 Yoko Kato, BBA  
[ykato@tchd.net](mailto:ykato@tchd.net)

