



Implementing Quality Improvement Tools to Address Four Challenges in Houston

The Houston Department of Health and Human Services (HDHHS) trained their employees in quality improvement (QI) tools and techniques and built their internal capacity to teach QI by hosting the QI Star TraK (Training, Resources, and Knowledge) Train-the-Trainer (TTT) series for 25 employees. Employees from six divisions and every level of the organization participated in the interactive training which occurred over several weeks. Participants learned core QI tools and techniques before splitting into QI project teams. The project team assignments were randomized so that employees worked with new people on a project not directly related to their daily roles. The four groups were assigned a topic based on issues that participants knew existed within the health department; they were asked to come to the training with potential opportunities for improvement. During discussion, HDHHS administrators picked four topics on which to begin QI projects:

- Offering new employees a health department orientation within their first week of employment
- Implementing a cost-recovery schedule for major lab tests to defray lab operating costs
- Reducing the length of time an HIV case is on *pending* status
- Decreasing the vital statistics customer wait time

Results from the Vital Statistics Team

Issue: Many members of the public only interacted with the health department when obtaining a birth or death certificate, and they faced a long wait-time.

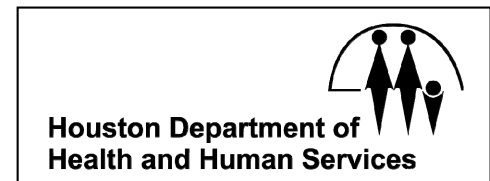
Problem: Customers waited nearly a half-hour from when they received a ticket number to when they exited with a certificate.

QI Tools Used: *SIPOC+CM Form* to understand the major suppliers, inputs, process, outputs, customers, constraints, and measures of the process; *Cause and Effect Diagram* to identify the root cause of the long wait time; *Kano Model* to list the customer needs, wants, and desires.

Solution: The cause of the lengthy wait-time was that not enough cashiers were available to complete financial transactions. The team recommended opening and staffing another window and adding more staff during the lunch-hour rush.

Pilot Test Results: The wait-time decreased by 50%.

Future Plans: The pilot test results were very promising, but they occurred when all employees in the vital statistics office were present. When multiple employees called-in sick, the customer wait-time rose again. The QI team is currently applying other QI tools to the problems related to under-staffing to further improve the customer experience.



Workforce Development

The TTT series exemplifies the Chinese proverb “*Give a man a fish and he will eat for a day; teach a man to fish and he will eat for the rest of his life.*” HDHHS is investing in their employees and teaching them how to utilize QI in their individual, departmental, and organizational roles—building a culture of quality improvement. This building process takes time, but with leadership support and invested employees, HDHHS will build the capacity of their workforce which leads to improved processes and health outcomes.

Lessons Learned

- Having a hard deadline helped the improvement teams move quickly through the process
- A culture shift begins with a few people, 25 in Houston’s case
- Share the QI success stories broadly so that all employees can understand the value, importance, and benefit