

COPPHI Kaizen Event Program Results

Program Purpose

The objective of the COPPHI Kaizen Event Program was to promote rapid and measurable improvements in public health work processes and outcomes.

Program Components

10 health departments provided

- Foundational QI & “kaizen event” training
- A personal QI coach
- 10 kaizen events conducted onsite with coaching and co-leading

Program Structure

- Managed by NNPHI
- Training and expertise provided by Continual Impact
- Funded by the Robert Wood Johnson Foundation (RWJF)

For additional information:

- NNPHI, Liljana Johnson ljohnson@nnphi.org
- Continual Impact LLC
 - Chris Bujak chris.bujak@continualimpact.com 610-762-4635
 - Pam Vecellio pam.vecellio@continualimpact.com 484-866-1139
 - Chris Schucker chris.schucker@continualimpact.com 484-866-6986



COPPHI Kaizen Event Program Results

Project Results

Health Department	Goals	Baseline	Target	Results (through May 2014)	Status	ROI (1 Year Return on every \$ spent)
FL Dept. of Health in Seminole County: Requisition Process	Increase correct & complete forms / submitted forms, Per requisition to bus. office to Tallahassee	50%	75%	82%	Above	\$1.23
		10%	90%	93%	Above	
	Increase negotiated savings when price is lower than current preferred vendor price		\$4500 / qtr	\$7764 (1 st qtr.)	Above	
	Increase new negotiated vendors on the preferred vendor list		5 new negotiated vendors/ qtr	3	Below	
	Decrease total employee labor time (Form completion to submission to State)	415 mins.	25%	27% (302 mins.)	Above	
Johnson County DOH: Supply order process	Decrease cycle time (from identification of need to item received and P-card reconciled)	93 mins / trans.	50%	78%	Above	\$3.01
	Decrease errors between program order and packing lists		90%	100%	Above	

COPPHI Kaizen Event Program Results

Health Department	Goals	Baseline	Target	Results (through May 2014)	Status	ROI (1 Year Return on every \$ spent)
Tazewell County HD: Decrease food inspection admin. time and costs	Decrease time to complete a food inspection (excluding the inspection)	7 hrs / inspect.	33%	80% (1 hr 20 mins / inspection)	Above	\$8.17
	Decrease Food inspections materials	\$870 / yr	50%	99%	Above	
DeKalb County BOH Issuing death certificates	Decrease cycle time from receipt of death data to certification processed	22 mins.	30%	56% (9 mins.)	Above	
	Decrease defective certificate requests received from Funeral Directors (as submitted the first time)	90%	< 45%	55%	Below	
Three Rivers District HD: Shared drive usage	Increase utilization: Survey response knowing how to access T drive		> 50% from baseline	35%	Below	
	Increase ability to find: Survey response knowing how to find desired files		> 50% from baseline	240%	Above	
	Decrease Search time: Time to locate file		< 30 sec.	3-8 sec.	Above	

COPPHI Kaizen Event Program Results

Health Department	Goals	Baseline	Target	Results (through May 2014)	Status	ROI (1 Year Return on every \$ spent)
Washington County PH: Childcare Facility Inspections	Improve individual visit satisfaction surveys		20%		To be determined	
	Decrease Inspections not performed to agreed commitment		</=1 per quarter		To be determined	
	Cumulative annual savings in labor and expenses Sum of demonstrated savings in labor and materials		< 25% reduction Total savings of \$8K for 2014		To be determined	
Chicago DPH: STI Reporting	Decrease cycle time of low-priority chlamydia and gonorrhea report (receipt to closure average)	86 days	30	77 (Mitigation: Working through backlog; Down 1 staff member; Smaller batch sizes to be considered)	Below	
Clackamas County PH: Increasing client feedback	Increase the # of client feedback forms received	5 / mth	128 / qtr. (~5% of mthly contacts)	21 (Mitigation: Update phone tree)	Below	
	Increase the # of customer driven improvements implemented	0	>3 / year	3	Above	

COPPHI Kaizen Event Program Results

Health Department	Goals	Baseline	Target	Results (through May 2014)	Status	ROI (1 Year Return on every \$ spent)
El Dorado County HHS: Phone Mgmt	Improve customer's satisfaction with provided information and service	70%	85%		To be determined	
	Increase warm transfers	28%	50%	60%	Above	
	Increase frequency of calls returned within 1 working day	5%	70%	100%	Above	
	Increase calls completed within one transfer	11%	80%	70%	Below	
	Decrease calls requiring >3 min to research and process calls	30%	15%	12%	Above	
Fond du Lac County HD: Child development screenings	Decrease invalid screen received	29%	0%	34% (Mitigation: technology-aided mistake proofing on the input)	Below	
	Increase the # of completed screens	5 / mth	10	8-10	At	

COPPHI Kaizen Event Program Results

QI Leader *“This training and kaizen preparations have put me out of my comfort zone and is now helping me gain confidence.”*

The growth and transformation of many QI Leaders is outstanding. Many QI Leaders began their kaizen events quite nervous and concerned with the magnitude and speed required to lead the teams through the varying QI methods and techniques. For some, their team member change management was significant. By the end of each kaizen event they have walked about with an improved and standardized process, rapid results, team members with a new/renewed passion for QI, a wealth of learnings, and additional kaizen appropriate improvements.

Knowledge & Skills	Overall Average movement 1-7 scale
QI Leader knowledge improvement following training	Δ 3

Kaizen Event Teams Members

Team members have engaged in the kaizen events as expected. Across the health departments, team members came with a desire to learn new QI methods, see the QI leader learn their event facilitation skills, and improve their job and the health department. Many were surprised to learn that the week included the ‘Doing’ (creating materials, job aids, training material, and beginning rollout). Once this was realized, the engagement grew.

This table provides the overall INCREASE in knowledge and skills growth results from the end of event surveys. Many rated their knowledge increase from a 2 to a 7 on the 1-9 scale.

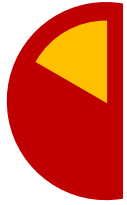
Knowledge & Skills	Overall Average movement 1-9 scale
Understanding of Kaizen Event Process	Δ 6
Identifying waste in the work process	Δ 4
Ability to determine the true root causes of problems	Δ 4
Ability to test, learn, and create standardized work material in rapid fashion	Δ 4
Ability to communicate improvement activities and results	Δ 3

Benefit	1-9 scale
Benefits to work process	7
Benefits to you personally	7

The power of kaizen to increase the culture of quality while achieving results at the same time is most telling in these end of event survey questions. This table represents a high degree of benefit gained (7 out of a 1-9 scale) to both them personally and the health department.

COPPHI Kaizen Event Program Results

Event Observations & Feedback



People

"It is nice to see how proud people are and how they own these improvements and new process."

"This kaizen event was a roller coaster, after I got off I'm ready to do it again!"

"We dealt with a lot of personalities, emotionally trying but very successful"

"We've never been asked our opinion before, we're just told what to do. I have much more capability than people realize but feel looked down on because I'm just an operator. ...Kaizen changed that!"

"...the change that we are making to our organization to empower people, get them more involved in the day-to-day decision making, is going to get us better results"



Results

"Customer calls completed within one transfer went from 11% to 80%. At the same time % of calls requiring >3 min to research and process calls improved from 30% to 15%."

"Nothing has ever happened this quickly in the department before. We solved a 16 year old problem in 5 days."

"We exceeded our goal through our kaizen! Process cycle time reduction of 80% vs. targeted goal of 33%."

"We reduced our total employee labor time from 415 to 225 minutes / Requisition"

"We decreased defective requests from 90% to 0 the month after the event."



Kaizen Process

"Kaizen shocked us, we thought that we were going to spend a week to remove 10 minutes...instead we identified how to remove 190 minutes."

"Going from current to future state blew my mind – you have to experience it."

"Did not realize before the waste in our process (and the different components)."

"Nice having facilitated educational tool and great facilitators"

"I couldn't have done standardization without Kaizen."

COPPHI Kaizen Event Program Results

Program Scorecard

COPPHI Kaizen Event Program Scorecard

Category	Measures	Measure definition	Measure calculation	Measure data source	Target	Timing	Measure Owner	Status	Trend	Action Plans / Comments
Learning	Foundational QI training	QI Leader knowledge improvement following training	Improvement survey questions on a 7 point scale	Training survey	1 pt	30-Nov-13	Vecellio	Above	1.4 pt avg.	
	Kaizen training	QI Leader knowledge improvement following training	Improvement survey questions on a 7 point scale	Training survey	1 pt	31-Dec-13	Vecellio	Above	3.2 pt avg.	
	QI Training	Logistics & overall training gain assessment	Survey questions on a 5pt scale w open ended questions of strengths and areas for improvement	NNPHI meeting/ training evaluation	10 report satisfaction (agree)	30 -Nov-13 31-Dec-13 30-Jun-14	Johnson	Above	100% agr or str agr	
	Kaizen team method application	Kaizen event team member assessment of kaizen method utilization	Survey questions on a 9 point scale (include ability to test and apply in rapid fashion)	Event survey	2 pt increase	Last day of each event	Bujak, Schucker, Vecellio	Above	4.3 pt increase	
	QI Coach evaluation	QI Leader knowledge, skills, and abilities evaluated post the event	Personal development form on a 9 point scale	QI Coach evaluation sheet and QI Leader's lessons learned	>5	30-Apr-14	Bujak, Schucker, Vecellio	Above	6	QI Leaders left with a personal development plan
Applying	Completed kaizen events	# of projects that have completed the pre-event actions and conducted an on-site kaizen event	# of on-site kaizen events conducted	Project schedule	10	4-Apr-14	Vecellio, QI Leaders	At	10	
	Rapid improvement cycle with a kaizen event	Time to complete project improvement cycle	Total time to complete all 4 phases of the improvement cycle (sum of all weeks from completion of training to Event completion (elapsed)).	QI Leaders tally sheet	use to establish baseline	30-Jun-14	QI Leaders, Bujak, Schucker, Vecellio		14	Times are longer due to the gap between training and event. Future elapsed time is expected to be approx 5 weeks (4 wk prep, 1 wk event; Go Live would add 0-2 wks).
	Kaizen event goals achieved	# of projects that achieved their project goals within the program timeframe	# of projects with goals achieved	QI Leader project measures	> 8	31-Jul-13	Vecellio, QI Leaders	At	7 (w/ 1 not reported)	Based on primary event measure
	Future kaizen event application	# of future kaizen events identified by the QI leaders	# of future kaizen events identified by the QI leaders	QI Leader final report	>5	30-Jun-14	QI Leaders	Above	12	To be provided June 11, 2014
Sharing	Project presentations in the public health community	Project approach, results, and learnings shared	# QI Leaders presented their Kaizen project # Attendees in Open Forum for QI in Public Health kaizen presentation sessions and Public Health Improvement Webinar	Session & Webinar attendee counts	> 6 QI Leaders > 25 HDs	30-Jun-14	Johnson	Above	10	
	Program Lessons Learned & Actions	Kaizen event approach lessons learned shared, directions discussed and actions taken	# of actions completed, derived from the project and program lessons learned	Project and program lessons learned shared during the June 2014 close out session	> 4 actions taken	30-Jun-14	Johnson, Russo, Bujak/Vecellio	Above	39	
	PHQIX Submissions	Kaizen project submitted in PHQIX.org.	# of submitted submissions	Project schedule	> 10	30-Jun-14	Johnson, QI Leaders	At	10	