

# IMPLEMENTING A QUALITY MANAGEMENT SYSTEM

## **The Orange Approach**

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Orange County Health Department

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# History

- The OCHD began the quality journey in 2003
  - Quality Manager was entirely focused on form over function
  - Senior Management tried to implement with no structured approach
- In 2006 the new Quality Manager was entirely people focused and Senior Management was still trying to implement a quality culture
- In 2009 the current Quality Manager brought balance to achieve process improvement, Senior Management agreed with the Lean Six Sigma approach and approved training to make it possible.
  - In 2 years we have completed six projects, four are currently in progress, and three are in the queue

# Goal

Connect disparate functions into a cohesive and seamless operation where information is freely shared, and acted upon, to facilitate continuous process improvement and eliminate waste to meet ever increasing customer demands.

# Quality Method

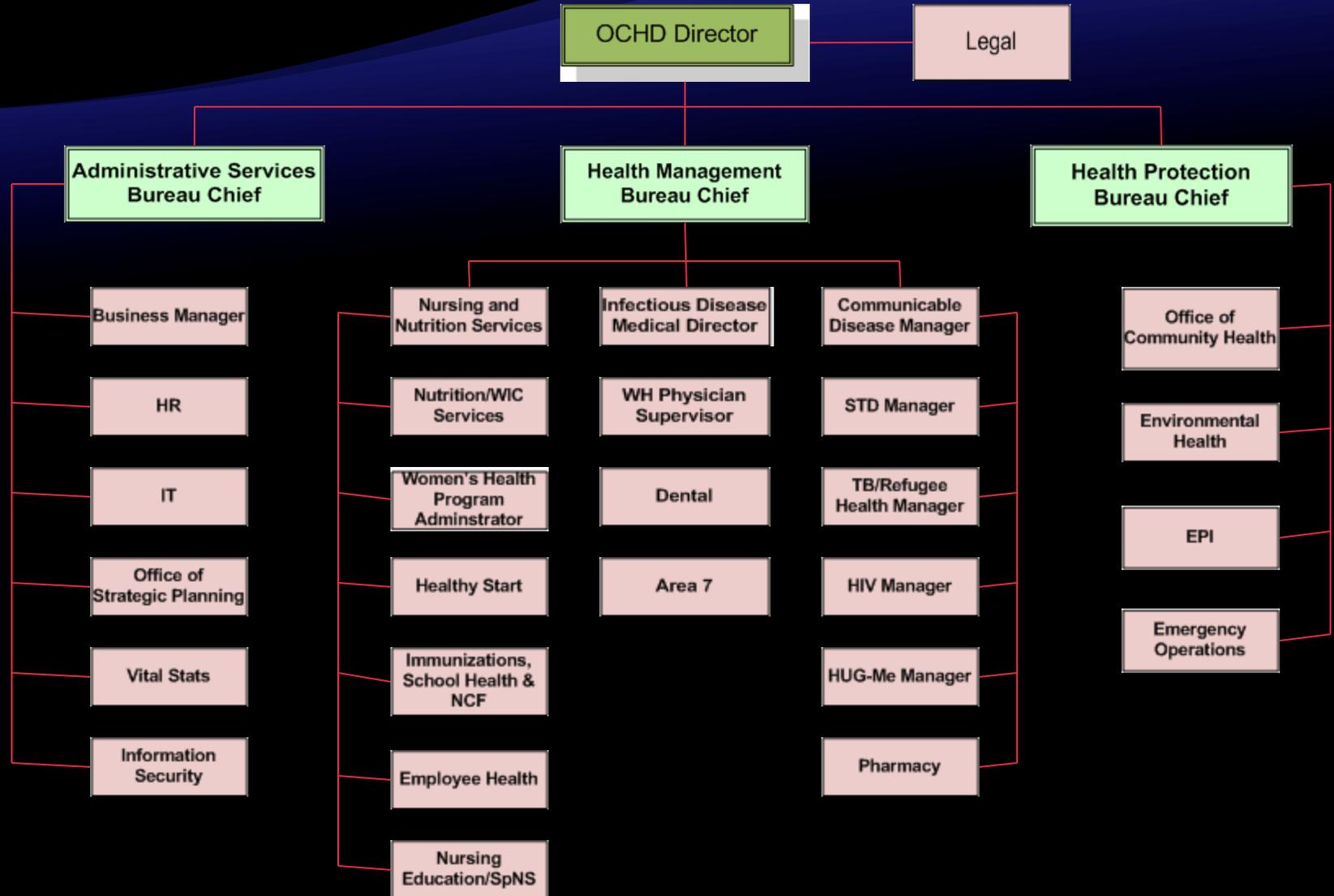
## Lean Six Sigma:

- Systematic approach to identify and eliminate waste and non-value added activities that inhibit flow by improvement in all processes. Maximizes the efficiency and effectiveness of a process, while reducing the resources and effort required.
- Six Sigma is a rigorous statistical approach to solving business problems via process and quality improvements which address the corporate bottom line. In short, it uses statistical analysis to reduce process/product variation.

# Project Management

- **MS Project:** Tool to assist project managers develop plans, assign resources to tasks, track progress, manage budgets and analyze workloads.
- **SharePoint:** A collaborative tool that makes it easier for people to work together. People can set up Web sites to share information with others, manage documents from start to finish, and publish reports to help everyone make better decisions.

# OCHD Organization



# Quality/Project Principles

- Strategic Plan goals can only be accomplished by instituting a quality management system that is supported by senior leaders and staff
  - Lean Six Sigma and Project Management principles are blended
    - Cost (PM)
    - Schedule (PM)
    - Scope (PM)
    - Define (LSS)
    - Measure (LSS)
    - Analyze (LSS)
    - Improve (LSS)
    - Control (LSS)
- Triple Constraint**
- Enhanced PDCA Cycle**

# Quality Training

- In 2009 we recognized that training was needed to advance quality initiatives within the OCHD
  - Retained the services of Grace Duffy to train 14 people in preparation for Green Belt certifications
  - Grace also served as a coach, guiding Alberto through the process to become a certified Black Belt
- In 2010 we discovered that training alone is not sufficient to implement needed quality initiatives
  - A large segment of the OCHD is highly resistant to change of any kind
  - We now employ guided discovery techniques so program managers and staff perceive change and quality improvement activities as their ideas
- In 2011 we challenged all staff to question all processes and submit improvement suggestions

# Quality Tools

- Team Tools:
    - Nominal group technique (NGT)
    - Force field analysis
    - Multi-voting
    - Affinity diagrams
    - Tree diagrams
    - Prioritization Matrix
    - Pareto charts
    - Cause and Effect diagrams
    - Process and Value Stream maps
    - Failure Mode Effects Analysis
    - 5S (Sort, Straighten, Sweep, Standardize and Sustain)
- Decision Making**
- Planning**
- Analysis**

# Project Teams

- Quality Manager or other trained staff typically serve as facilitators
  - Keep project meetings on schedule
  - Introduce appropriate analysis tools
  - Train team members on proper use
  - Manage the project task list and resources
  - Manage risk
- Team Lead comes from the clinic or office primarily affected
- Team members come from other areas that may be affected (**cross-functional**)

# Quality Management System

- Quality Council sponsors all process improvement projects and assigns champions
- Each project team is required to submit the following to the Quality Council for approval:
  - Project Charter
  - Scope of Work
  - Project Timeline with milestones
  - Change requests or modifications
  - Final Report documenting lessons learned and best practices
- Project teams are required to report progress to the Quality Council at least quarterly

# Quality Management System

- The set of procedures for determining and implementing the intentions of the organization regarding quality.
- The QMS is governed by a Quality Manual based on ISO 9001:2008 which specifies six compulsory documents:
  - Control of Documents
  - Control of Records
  - Internal Audits
  - Control of Nonconforming Service
  - Corrective Action
  - Preventive Action

# Challenges

- Program managers/supervisors
  - Not involved
  - Think they know the solution but have no data
  - Don't allow team members to participate, therefore prolonging the process
- Programs implement changes before a baseline is established and metrics have been developed
- Decreased support from senior management and program managers as time passes
- Keeping the goal firmly in sight
- Scope creep

# Questions?

Jim Pate – Strategic Planning Manager

Alberto Araujo – Quality Manager

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# Lean Six Sigma Success Stories

Advancing Quality Improvement  
One Project At A Time



# Project Preview

- Onsite Sewage Treatment/Disposal System Permitting Process Action Team II (PPAT)
- HUG-Me Transition Project
- Immunization Data Project
- Billing Project
- Training Project

# Onsite Sewage Treatment and Disposal System Permitting Process Action Team II (PPAT)

Project Manager: Alberto Araujo

Champion: Lesli Ahonkhai

Orange County Health Department  
Office of Strategic Planning

# Onsite Sewage Treatment and Disposal System Permitting Process Action Team II (PPAT)

- Project Team:

Lesli Ahonkhai

David Overfield

Scott Chambers

Kim Dove

Project Sponsor

Team Champion

Team Sponsor

Team Sponsor

- Team Players:

Alberto Araujo

Chris Collinge

Mary Howard

Yelitza Jiminez

Drew Burns

Dennis Morris

Melissa Hulse

Gary Smith

# Objectives and Goals

- Utilize Lean Six Sigma to identify and reduce the most common permitting errors in the OSTDS Program
- Maintain or improve quality of OSTDS permits by applying quality assurance tools to the process
- Meet state requirements and recommended guidelines for permitting time frames
- Continue to increase customer satisfaction
- Document and track the permitting process
- Decrease backlog of pending OSTDS permits by implementing re-check file

# Project Approach

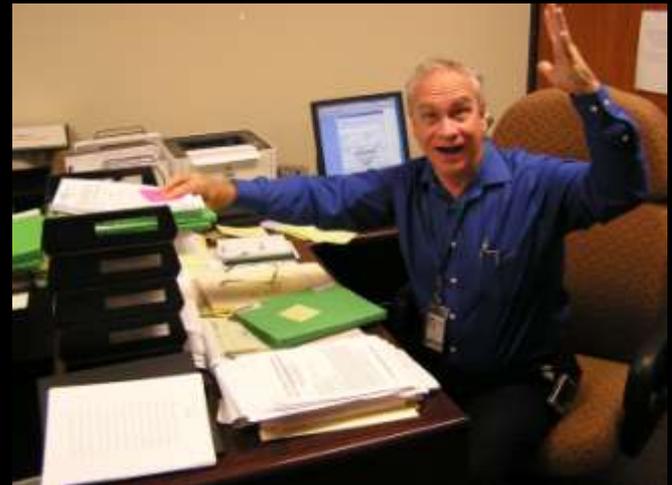
- MS Project was used as the tool for tracking tasks, time and resources.
- MS SharePoint was used for collaboration.
- Different Six Sigma tools were used to find out problems and their root causes.
  - Process and Value Stream maps
  - Fish Bone diagram
  - Pareto charts
  - FMEA and 5S
- Types of Office Waste (**Lean**)
  - Data and information waste
  - Workflow waste
  - Employee waste
  - Material resource waste

# Process

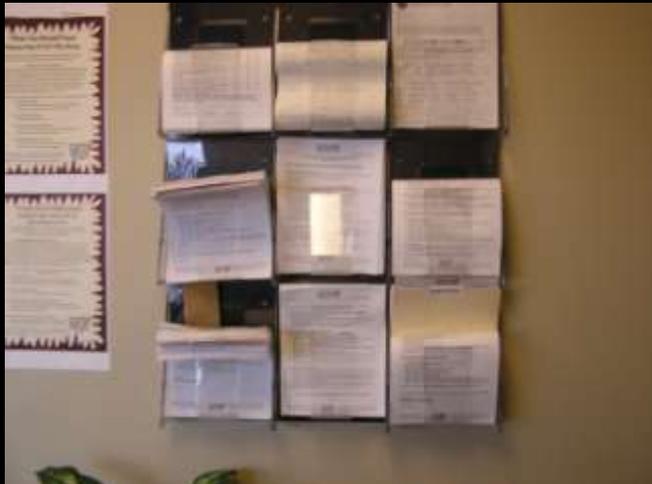
- Identify the Problem:
  - Overall program evaluation score of 76%. Several areas scored less than 76% requiring a corrective action plan.
- Target:
  - Map the process
  - Implement the 5S's
    - Sort
    - Set in order
    - Shine
    - Standardize
    - Sustain



# Before 5S's



# 5 S's In Action



# 5 S's In Action

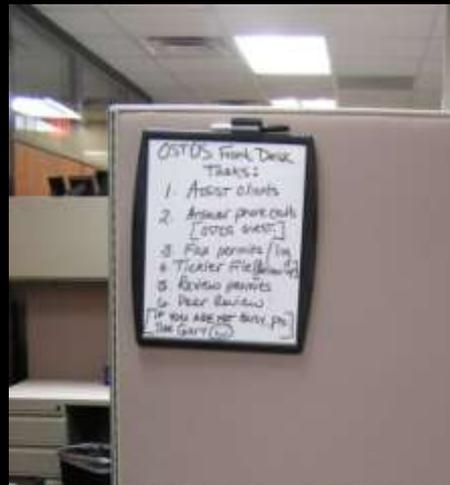
OSTDS DAILY WORK PLAN

ROB  
INSPECTOR

5 / 7 / 10

1. 712 (SITE)/FINAL/REVIEW/RE-INSP/ATU/IM-INSP/PAPERWORK
2. 717 SITE/FINAL/(REVIEW)/RE-INSP/ATU/IM-INSP/PAPERWORK
3. 493 SITE/(FINAL)/REVIEW/RE-INSP/ATU/IM-INSP/PAPERWORK
4. 615 SITE/(FINAL)/REVIEW/RE-INSP/ATU/IM-INSP/PAPERWORK

#	Location	Type of work	Inspector	Assigned to	Status
702	1414 Wash. Wash	E		Brady	Review
698	5260 Round Lake	E			Review
700	5909 O'Sullivan	E			Review
714	651 Oakdale	A		Nancy	Review
10-422	13915 Laurel	R	Bonnie	Helen	Review
10-715	5270 P.oto	R			Review
10-653	2104 Verdun	N		AGB, MGR	Review
10-622	102 Floral	A		MGR	Review
10-712	4435 Harmony	R		Rob	Review
		R			Review



# Process

- Utilize the State Health Office OSTDS Program Evaluation and Quality Improvement tool to evaluate 7 new permit applications, 7 repair permit applications ~ baseline
- Identify the 3 most common errors ~ OSTDS permitting process
  - Application - Not indicating water supply/sewer availability
  - Site Evaluation – Loading rate, excavation, drain field configuration
  - Site Evaluation - Available unobstructed area / ESHWT indicators and observed water

# Process

- Improved quality by creating/implementing quality assurance tools
- Permitting Worksheets
- Peer/Supervisory Review
- Standardization
- Staff training and development
- Equipment Inventory
- Customer Satisfaction Survey
- Consistent Staff and Contractor Meetings
- Staffing

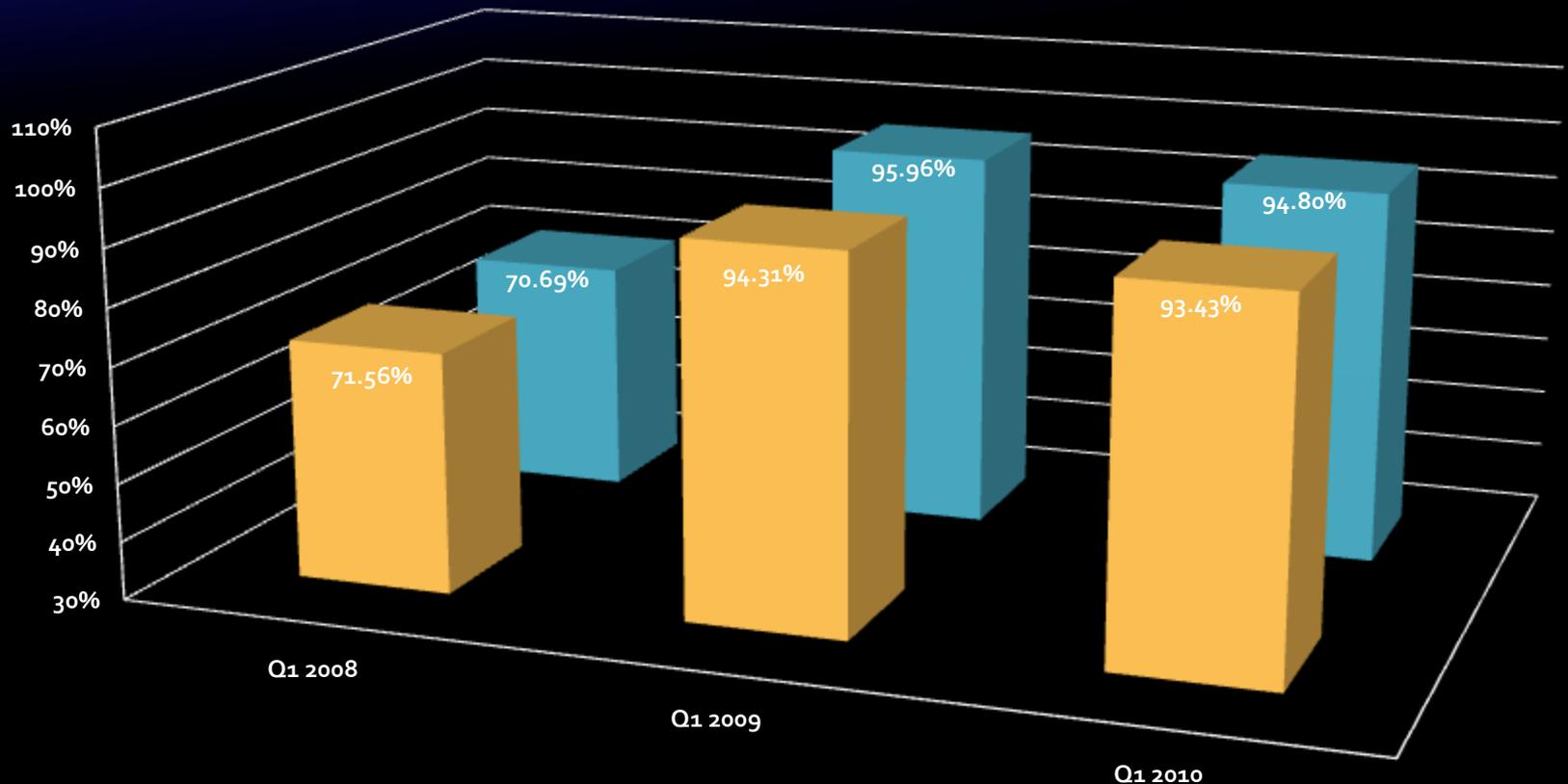
# Results

- Measure performance:
  - Conduct a review of 7 New and 7 Repair permit applications after implementing tools ~ measure progress
  - Conduct baseline customer satisfaction survey ~ septic tank contractors
- A 24% reduction of the most common errors found for new permits.
- A 18% reduction of the most common errors found for repair permits.

# Customer Satisfaction Results

## OCHD Customer Feedback for Environmental Health Program First Quarter Comparison - 2008, 2009 and 2010

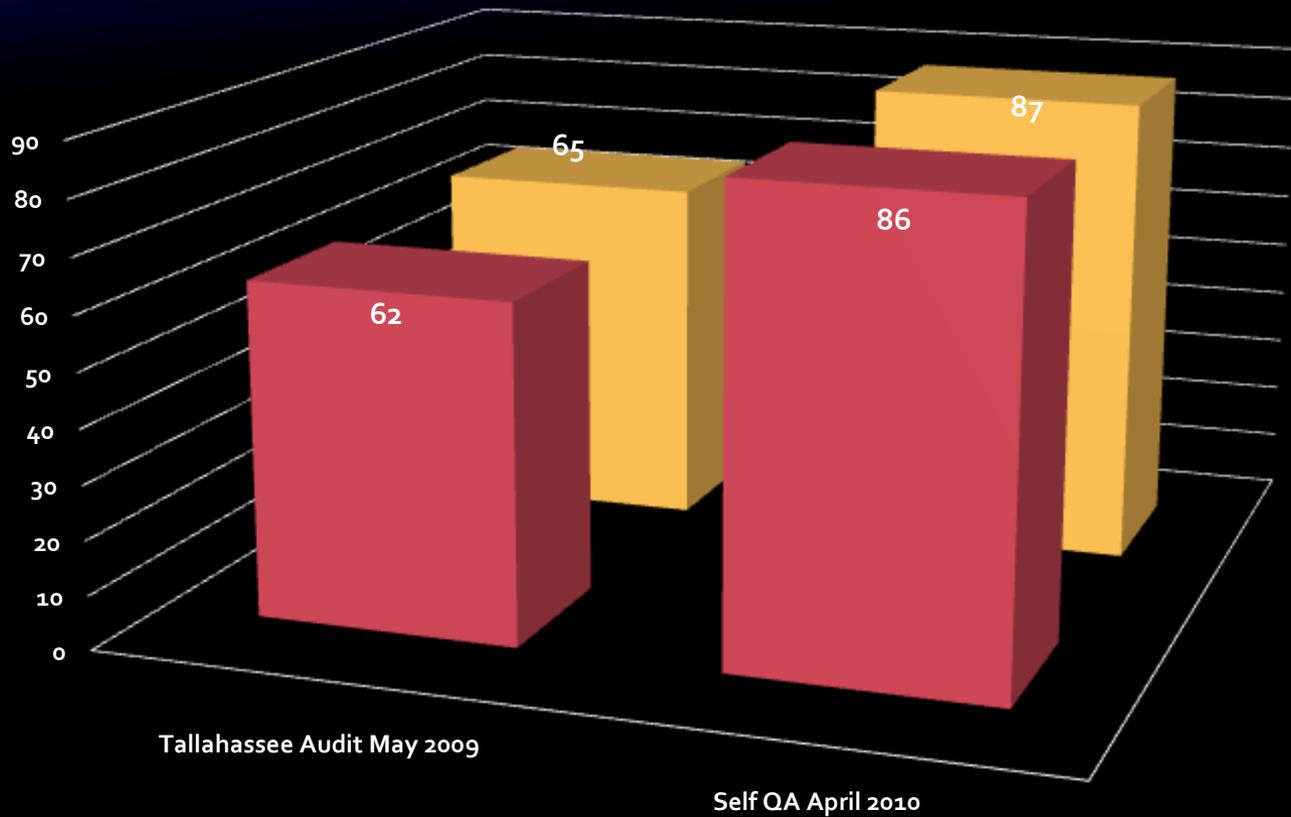
■ Experience was Excellent or Very Good    ■ Wait Time was None or Not Long



# QA Audit Chart

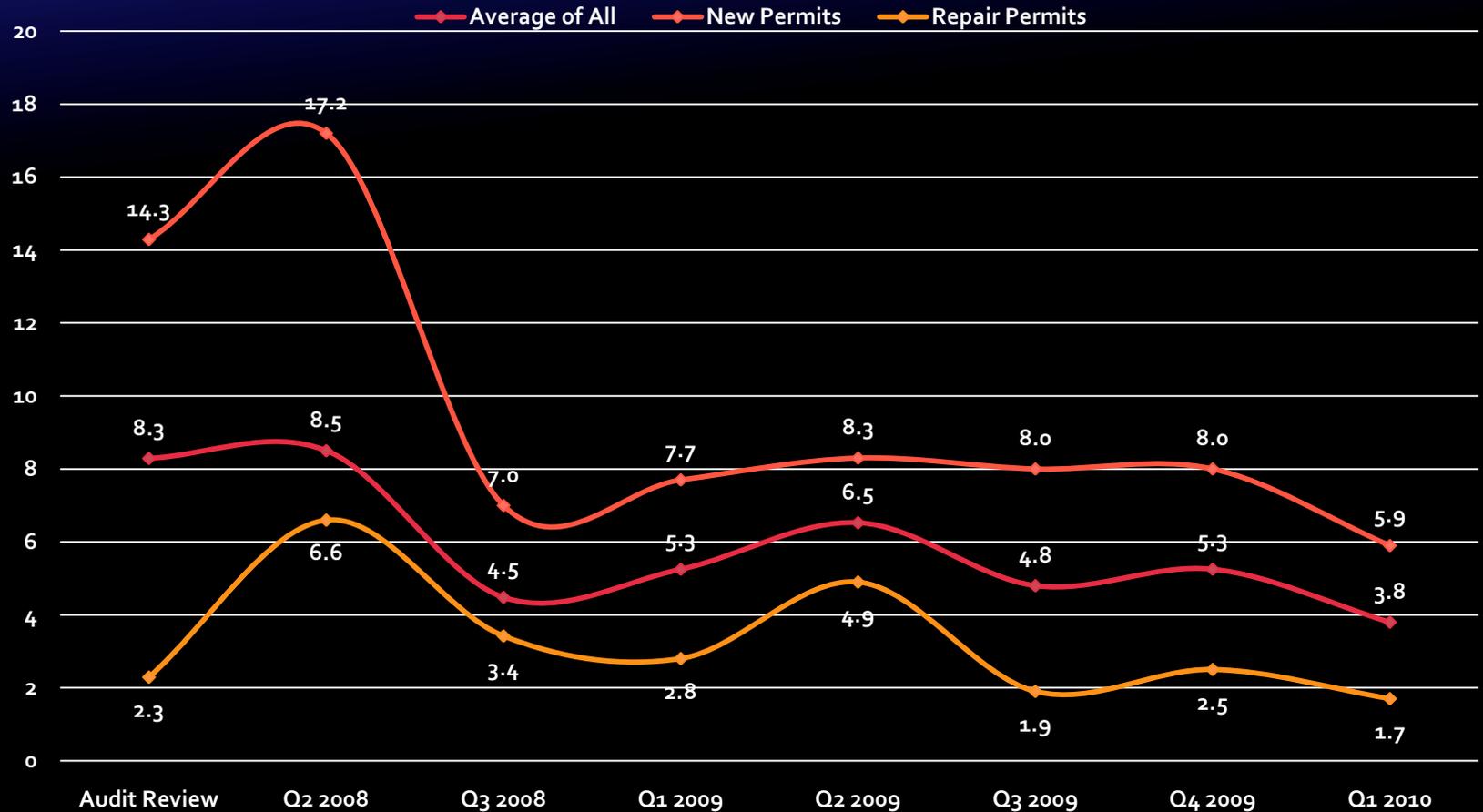
## Environmental Health Septic Program Audit Scores

■ Score for New Systems   ■ Score for Repair Systems



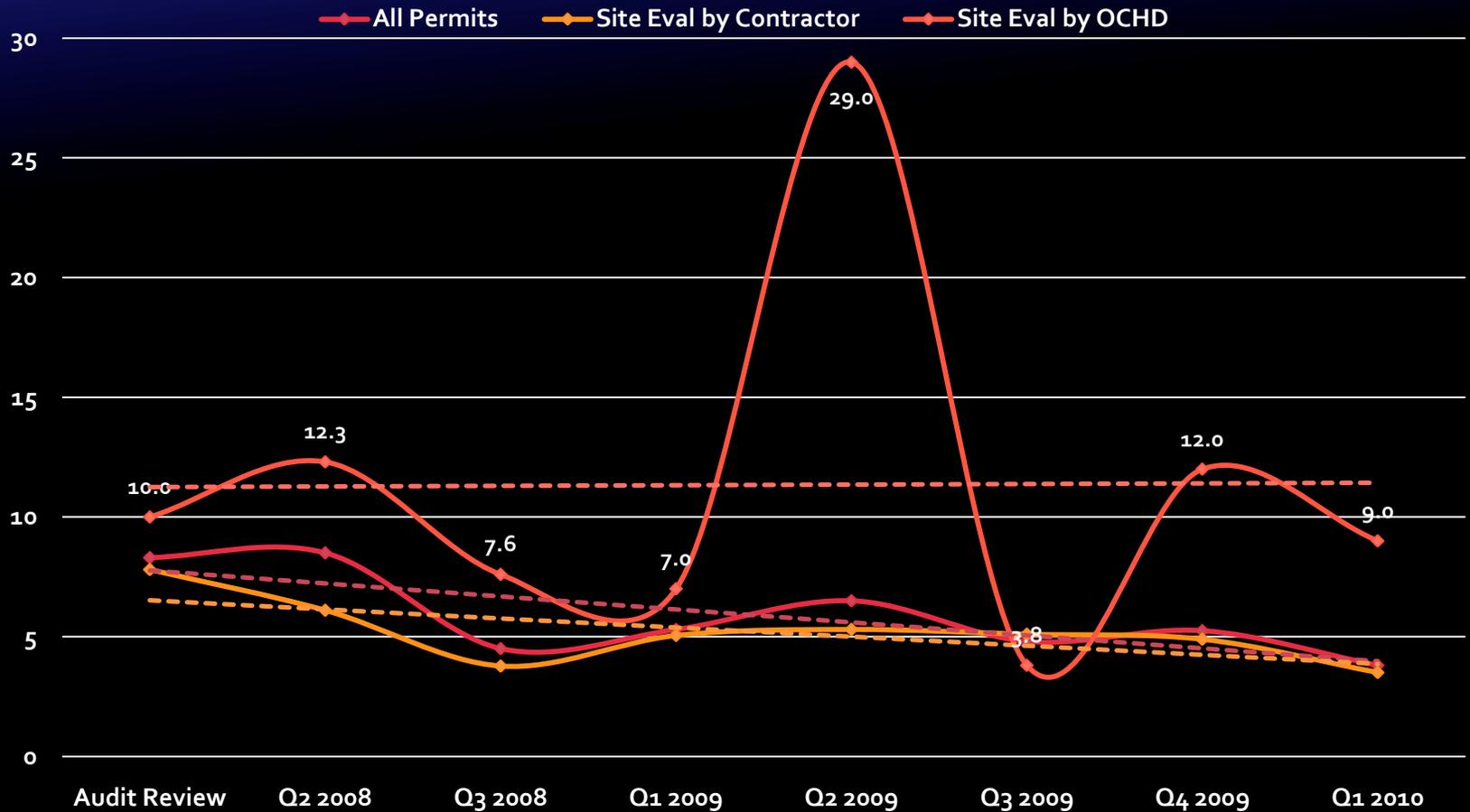
# Quarterly Review

## Septic Permitting - Actual Number of Days from Permit Payment to Permit Issuance\*



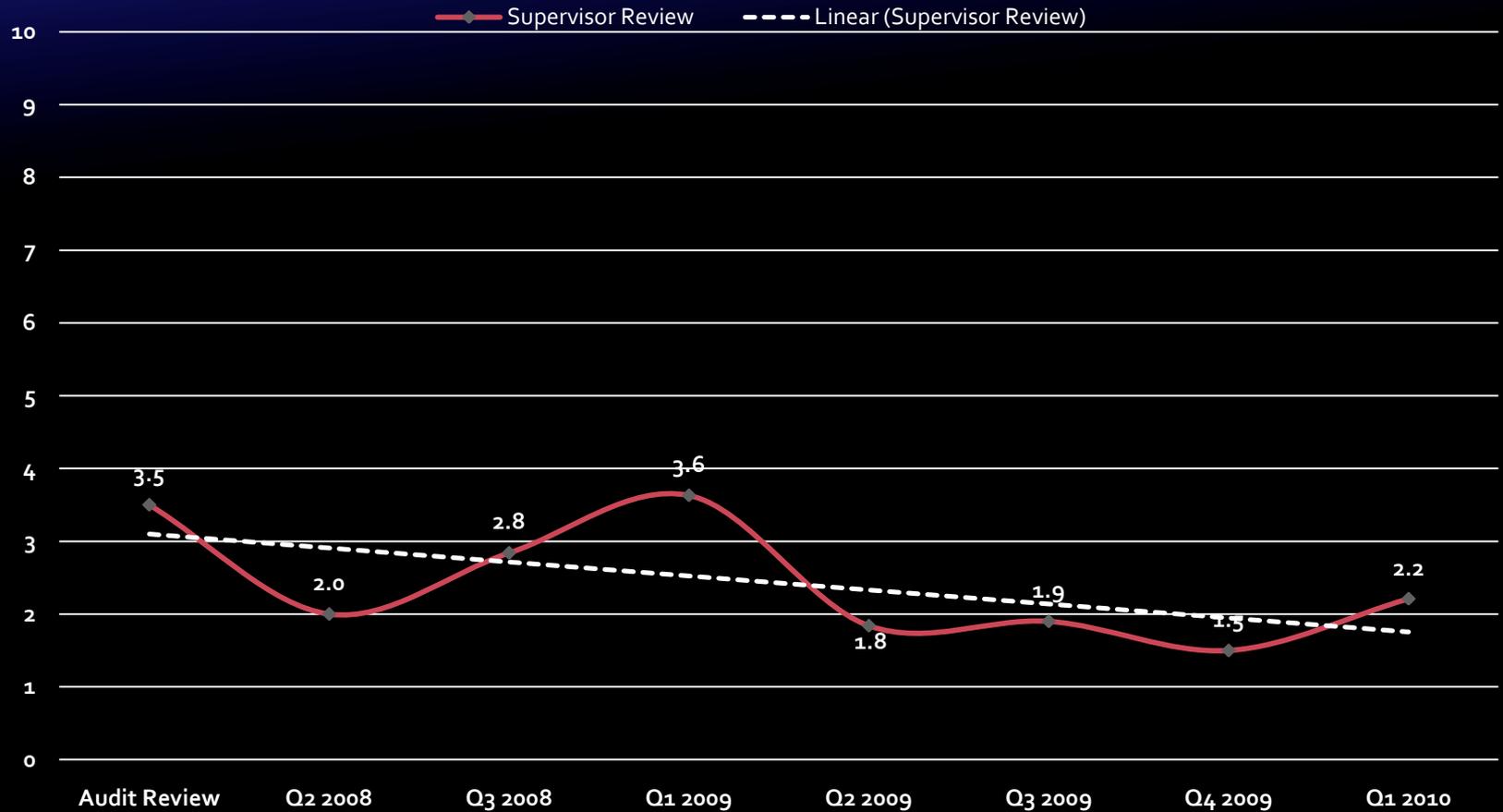
# Quarterly Review

## Septic Permitting - Actual Numbers of Days for Permit Issuance by Site Evaluation Type



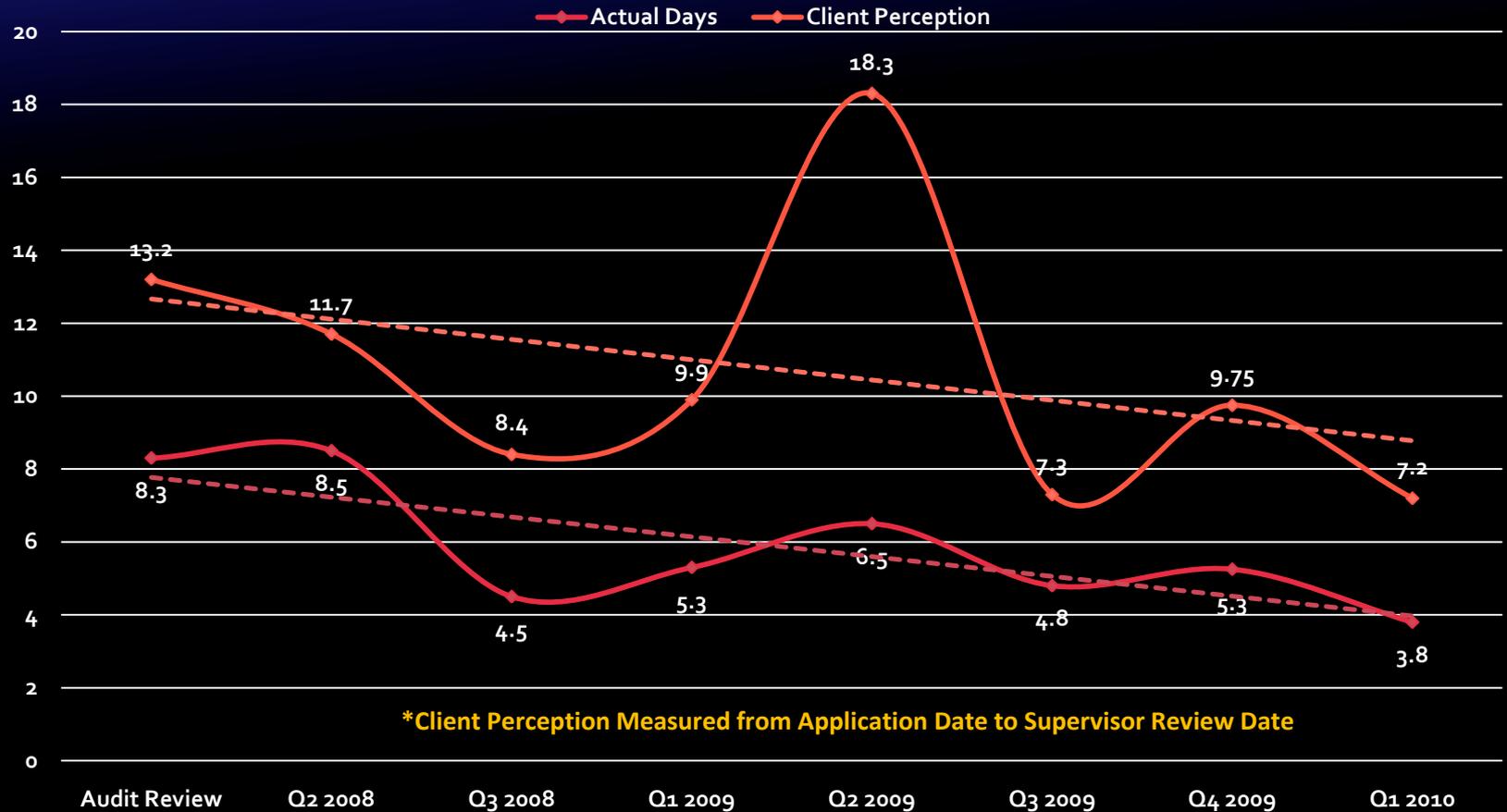
# Quarterly Review

## Septic Permitting Number of Days for Supervisor Review



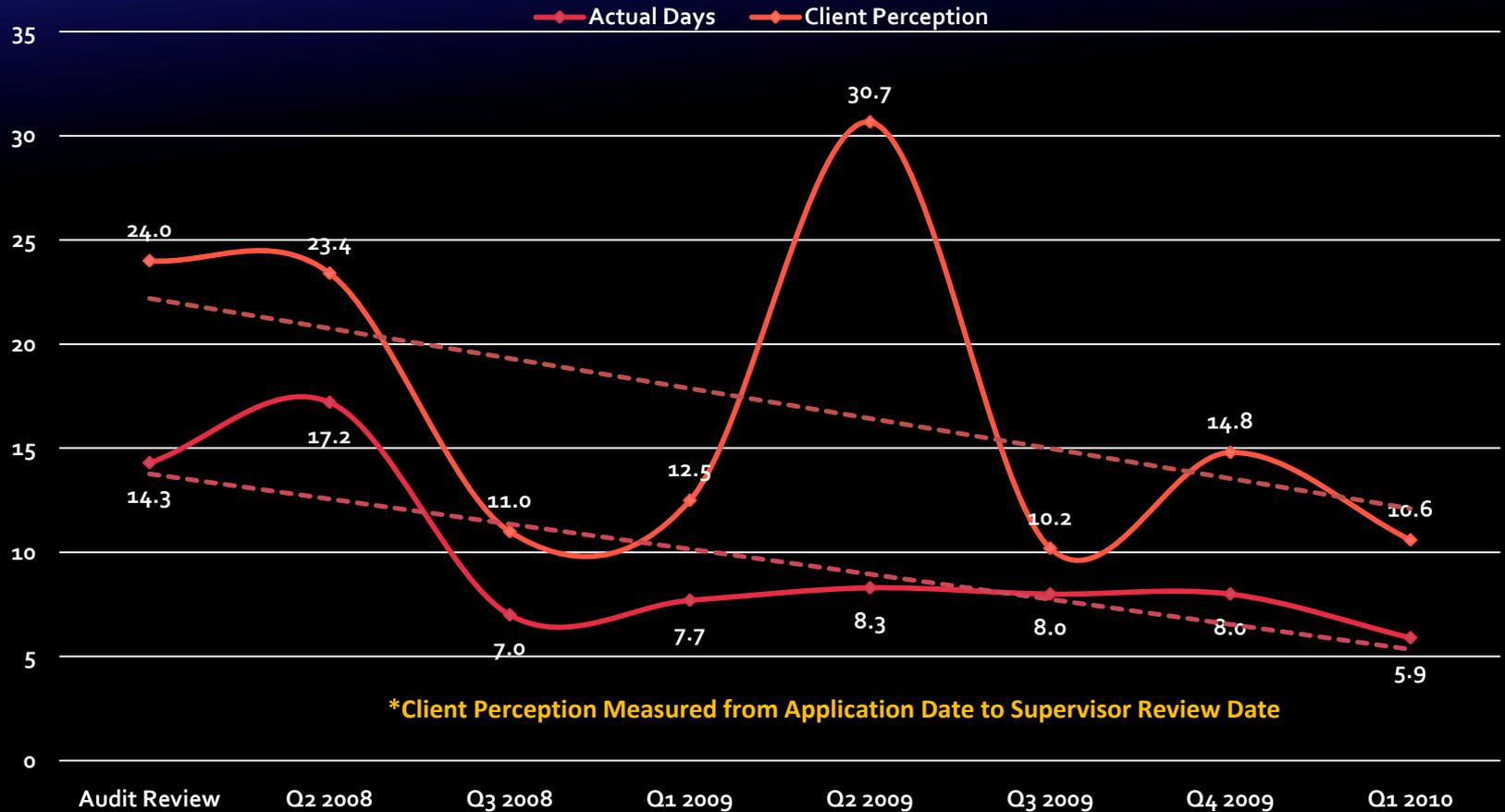
# Quarterly Review

## Septic Permitting - Permit Issuance (All Types) Actual Days versus Client Perception



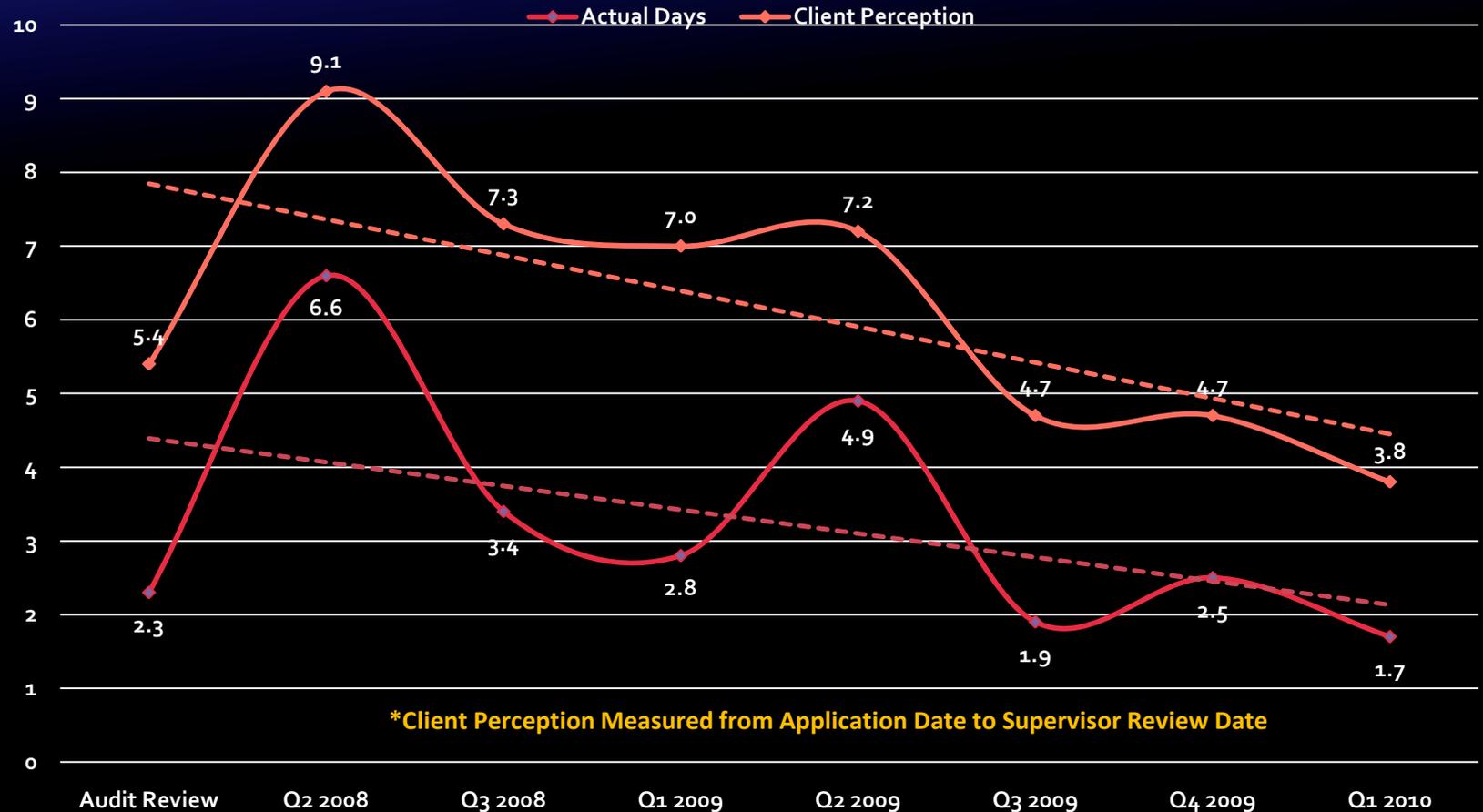
# Quarterly Review

## Septic Permitting - New Permit Issuance Actual Days versus Client Perception



# Quarterly Review

## Septic Permitting - Repair Permit Issuance Actual Days versus Client Perception



\*Client Perception Measured from Application Date to Supervisor Review Date

# Future Goals

- Identify 3 new most common errors
- Continue regular QA/Audit/CAP
- Continue to identify training needs
- Continue 5S's
- Policy

# HUG Me Transition Project

Project Manager: Susannah Mena

Champion: Dr. Steven Hale

Orange County Health Department  
Office of Strategic Planning

# Project Approach

- MS Project was used as the tool for tracking tasks, time and resources.
- MS SharePoint was used for collaboration.
- Different Six Sigma tools were used to find out problems and their root causes.
  - Cost Benefit Analysis
  - Risk Analysis
  - Financial Analysis
  - Heavily oriented toward Project Management
- Types of Office Waste
  - Not applicable

# Project Schedule

ID	Task Name	Duration	Start	Finish	November	December	January	February
1	<b>HUG-Me Transition</b>	<b>162 days?</b>	<b>Mon 11/10/08</b>	<b>Tue 6/30/09</b>	[Gantt bar spanning from Nov 10 to Jun 30]			
2	<b>Planning Phase</b>	<b>45 days?</b>	<b>Mon 11/10/08</b>	<b>Thu 1/15/09</b>	[Gantt bar spanning from Nov 10 to Jan 15]			
3	Data review	19 days?	Mon 11/10/08	Mon 12/8/08	[Gantt bar from Nov 10 to Dec 8]			
4	Review of Charter- Sponsor	10 days?	Thu 11/20/08	Fri 12/5/08	[Gantt bar from Nov 20 to Dec 5]			
5	Review of Charter- Management	10 days?	Thu 11/20/08	Fri 12/5/08	[Gantt bar from Nov 20 to Dec 5]			
6	ORH pre-kick off mtg	0 days	Wed 12/3/08	Wed 12/3/08	[Milestone diamond on Dec 3]			
7	Charter sign-off	0 days	Mon 12/8/08	Mon 12/8/08	[Milestone diamond on Dec 8]			
8	CounterPart matching	0 days	Mon 12/8/08	Mon 12/8/08	[Milestone diamond on Dec 8]			
9	Kickoff Meeting	0 days	Tue 12/9/08	Tue 12/9/08	[Milestone diamond on Dec 9]			
10	Tasks & Schedule Completed	0 days	Mon 12/22/08	Mon 12/22/08	[Milestone diamond on Dec 22]			
11	Team Meeting	1 day?	Thu 1/15/09	Thu 1/15/09	[Milestone diamond on Jan 15]			
12	<b>HR</b>	<b>1 day?</b>	<b>Fri 11/21/08</b>	<b>Fri 11/21/08</b>	[Gantt bar for HR tasks from Nov 21 to Nov 21]			
13	Job descriptions	1 day?	Fri 11/21/08	Fri 11/21/08	[Gantt bar from Nov 21 to Nov 21]			
14	Job Titles	1 day?	Fri 11/21/08	Fri 11/21/08	[Gantt bar from Nov 21 to Nov 21]			
15	Salaries	1 day?	Fri 11/21/08	Fri 11/21/08	[Gantt bar from Nov 21 to Nov 21]			
16	Employee Legacy Issues	1 day?	Fri 11/21/08	Fri 11/21/08	[Gantt bar from Nov 21 to Nov 21]			
17	HR Communications Matrix	1 day?	Fri 11/21/08	Fri 11/21/08	[Gantt bar from Nov 21 to Nov 21]			
18	<b>IT</b>	<b>17 days?</b>	<b>Fri 11/21/08</b>	<b>Wed 12/17/08</b>	[Gantt bar for IT tasks from Nov 21 to Dec 17]			
19	Review of Equipment	0 days	Wed 12/3/08	Wed 12/3/08	[Milestone diamond on Dec 3]			
20	Review of data connection	0 days	Wed 12/3/08	Wed 12/3/08	[Milestone diamond on Dec 3]			
21	Review of facilities	0 days	Wed 12/3/08	Wed 12/3/08	[Milestone diamond on Dec 3]			
22	Review of Software	1 day?	Fri 11/21/08	Fri 11/21/08	[Gantt bar from Nov 21 to Nov 21]			
23	Review of security	1 day?	Fri 11/21/08	Fri 11/21/08	[Gantt bar from Nov 21 to Nov 21]			
24	Review of ORH policies & procedures	1 day?	Fri 11/21/08	Fri 11/21/08	[Gantt bar from Nov 21 to Nov 21]			
25	Equipment Inventory	11 days?	Wed 12/3/08	Wed 12/17/08	[Gantt bar from Dec 3 to Dec 17]			
26	New Equipment Costs	3 days?	Wed 12/3/08	Fri 12/5/08	[Gantt bar from Dec 3 to Dec 5]			
27	ORH phone system	4 days?	Wed 12/3/08	Mon 12/8/08	[Gantt bar from Dec 3 to Dec 8]			
28	Data conversation	1 day?	Fri 11/21/08	Fri 11/21/08	[Gantt bar from Nov 21 to Nov 21]			
29	<b>Contracts</b>	<b>12 days?</b>	<b>Fri 11/21/08</b>	<b>Wed 12/10/08</b>	[Gantt bar for contract tasks from Nov 21 to Dec 10]			
30	MOA Execution	1 day?	Fri 11/21/08	Fri 11/21/08	[Gantt bar from Nov 21 to Nov 21]			
31	Receive Copies of Contracts, Leases, etc	5 days	Wed 12/3/08	Tue 12/9/08	[Gantt bar from Dec 3 to Dec 9]			
32	<b>Review of all existing contracts</b>	<b>1 day?</b>	<b>Wed 12/10/08</b>	<b>Wed 12/10/08</b>	[Milestone diamond on Dec 10]			
33	Facilities	1 day?	Wed 12/10/08	Wed 12/10/08	[Gantt bar from Dec 10 to Dec 10]			
34	Services	1 day?	Wed 12/10/08	Wed 12/10/08	[Gantt bar from Dec 10 to Dec 10]			
35	Staffing	1 day?	Wed 12/10/08	Wed 12/10/08	[Gantt bar from Dec 10 to Dec 10]			
36	Miscellaneous	1 day?	Wed 12/10/08	Wed 12/10/08	[Gantt bar from Dec 10 to Dec 10]			
37	Review of policies & procedures	1 day?	Fri 11/21/08	Fri 11/21/08	[Gantt bar from Nov 21 to Nov 21]			
38	Review of any outstanding legal issues	1 day?	Fri 11/21/08	Fri 11/21/08	[Gantt bar from Nov 21 to Nov 21]			

# Target Board

## HUG-Me Program Transition

### Opportunity Statement

Transition of the Orlando Regional Health's HUG-Me program due to a change in ORH's financial commitment.

### Goal/Objective

Create a "new" HUG-Me program within OCHD transitioning all clients, and their families. The high level of health care that has made HUG-Me a nationally recognized program will be maintained.

### Scope

Creation of a "new" HUG-Me program within OCHD that closely mirrors the ORH HUG-Me program. Minimal client service disruption – transparent. Maintaining the proper staff to accommodate the unique program and clients' specialized needs.

### Team

**Project Sponsor:** Deanna AmRhein

**Project Management Lead:** Jim Pate

**Project Manager:** Susannah Mena

**Subject Matter Experts:** Michael Dey & Debbie Tucci

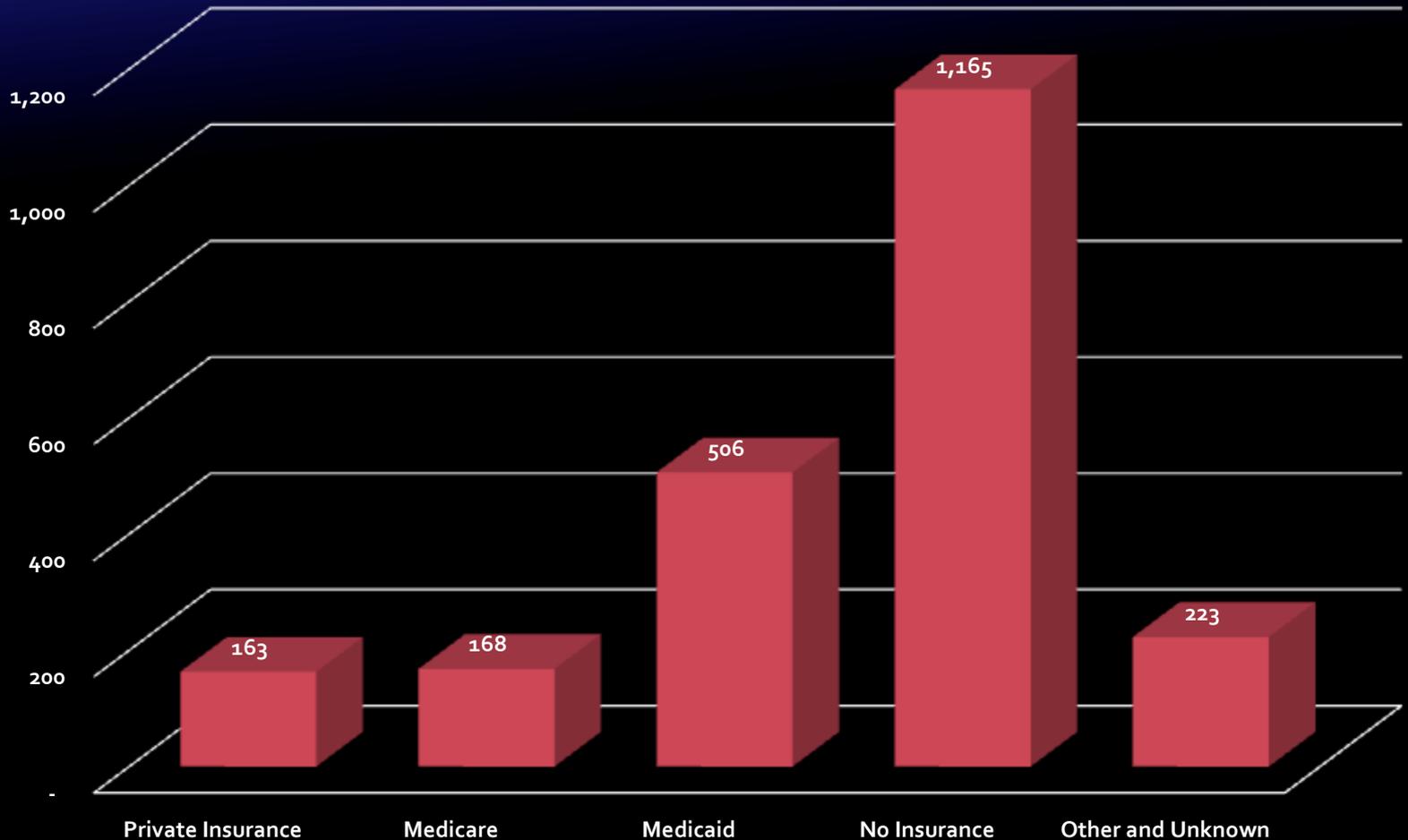
**Team Members:** Melissa Hulse; Alma Vargas; Sandy Frazier; Chris Collinge; Milly Caraballo; Robin Muhammad; Tammy Nicholas; Carlos Marin-Rosa; Patrick Westerfield; Alelia Munroe

### Deliverables

- 1) Transition of all clients & their families
- 2) Donation of all HUG-Me related assets
- 3) Hire staff to meet clients' needs
- 4) Transfer of all grants – federal, state & local

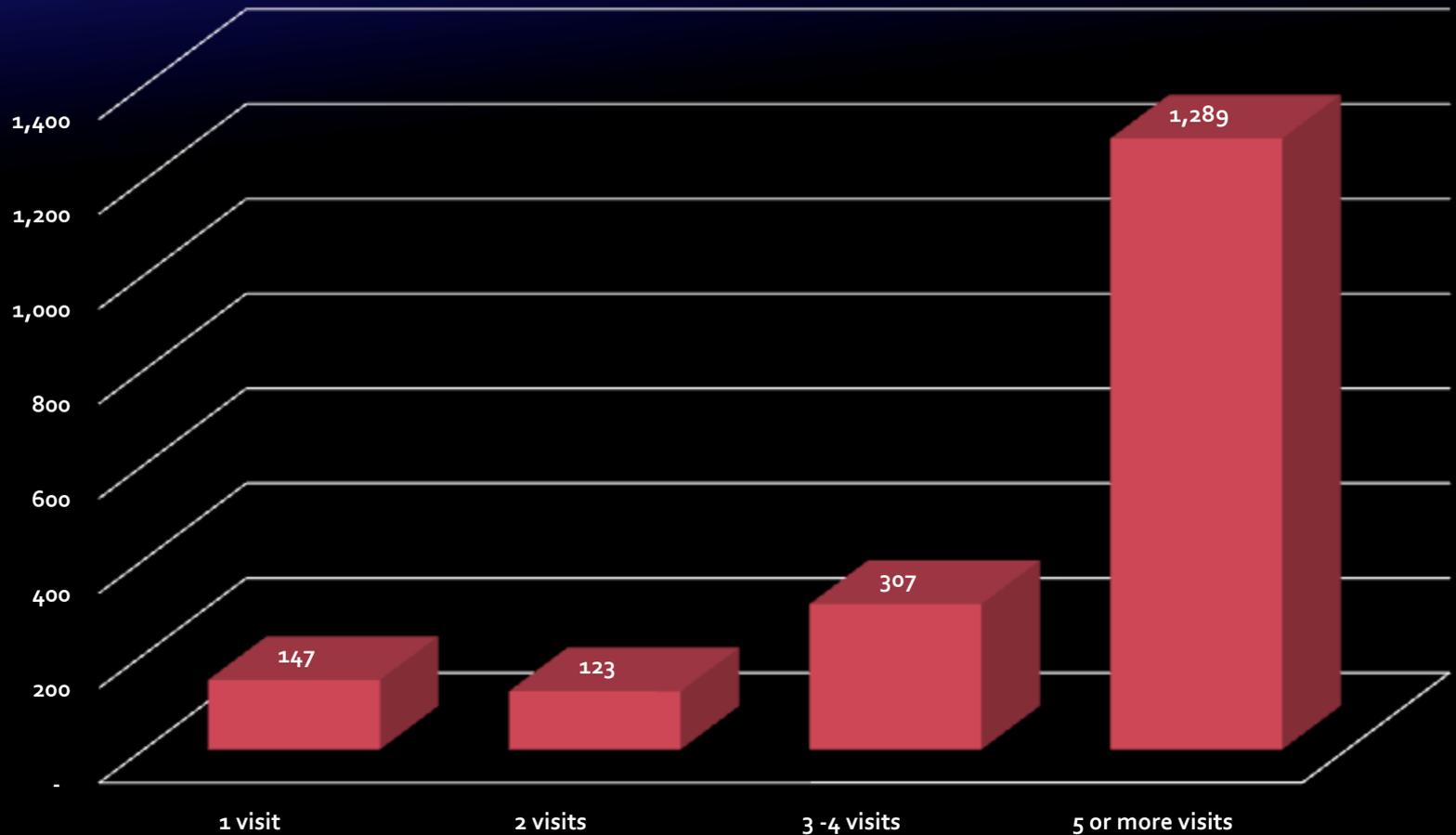
# Cost Benefit Analysis

HUG Me Client Distribution by Insurance Type  
2,225 Clients Total



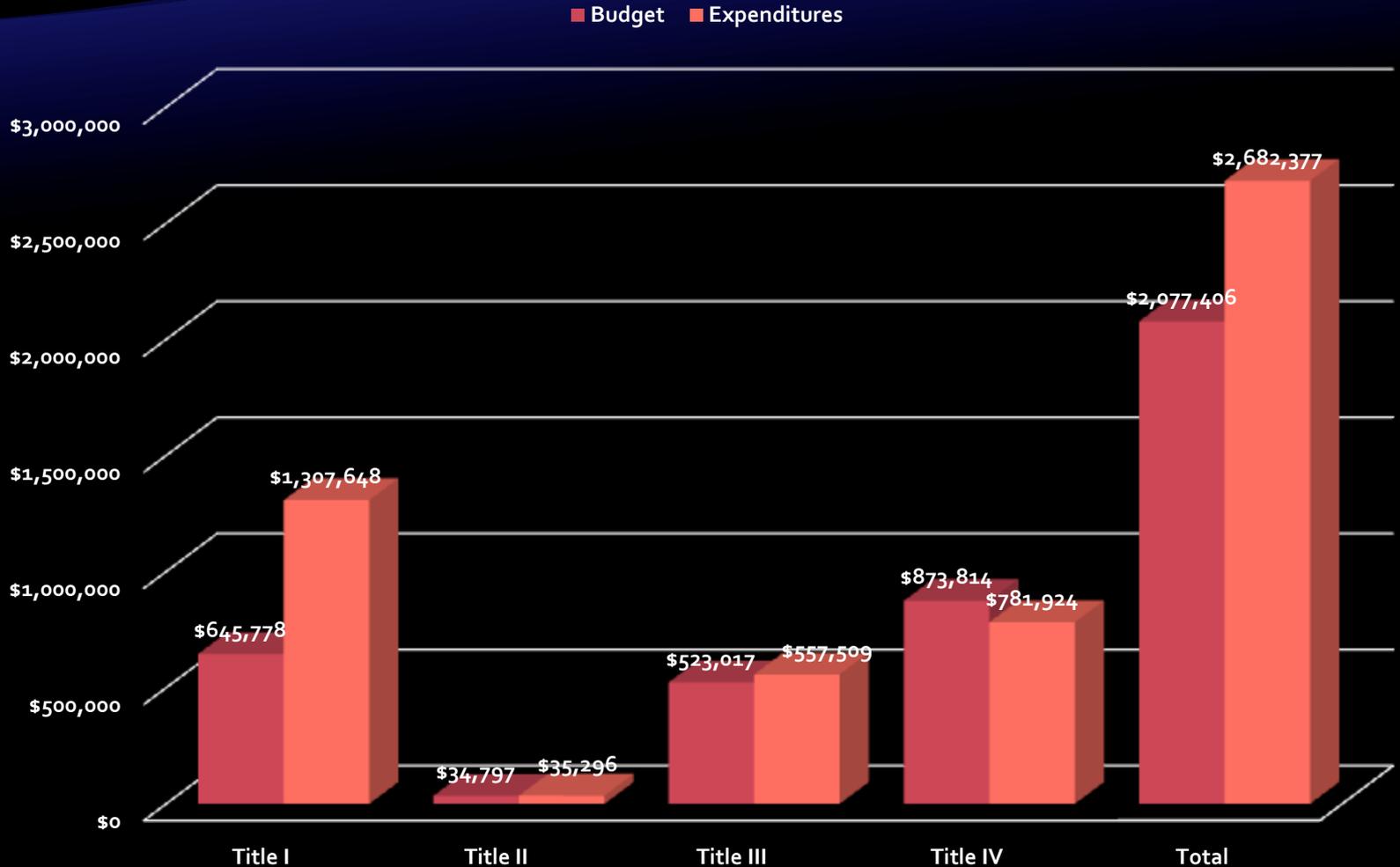
# Cost Benefit Analysis

HUG Me Clients by Number of Visits  
1,866 Visits Total



# Cost Benefit Analysis

## HUG Me Ryan White Grant Budget and Expenditures



# Revenue Opportunities

215 clients - 5 or more visits	\$455,000.00
Using \$260 Cost Based Reimbursement Rate	\$73,710.00
46 clients - 1 or 2 visits	\$29,250.00
Potential Medicaid Reimbursement	\$557,960.00

# Total Anticipated Revenue

<b>Anticipated Grant Revenue</b>	<b>\$2,077,406</b>
<b>Anticipated Medicaid Revenue</b>	<b>\$557,960</b>
<b>Total Anticipated Revenue</b>	<b>\$2,635,366</b>
<b>Projected Expenditures</b>	<b>\$2,141,950</b>
<b>Difference</b>	<b>\$493,416</b>

# Space Utilization

**HUG Me Staff Only \$12,125 Per Employee Per Year**

**24 HUG Me Employees  
324 Square Feet Per Employee**

**HUG Me, WIC & Immunology  
\$5,402 Per Employee Per Year**

**8 WIC Employees  
111 SF/Employee**

**38 Immunology  
Employees  
111 Square Feet  
Per Employee**

**24 HUG Me Employees  
111 Square Feet Per Employee**

# Target Board

# HUG-Me Program Transition

## Project Charter

Deliverables:

- Employee transfers/or new hires for vacant positions
- Seamless services provided to all clients through the transfer process
- Due diligence and take over of all feasible contracts for services, facilities, etc.
- Security of data through IT and legal avenues
- Billing/funding issues, compliance & requirements

## Conclusion

The HUG-Me program was started at OCHD on 1 October 2009. Most of the key elements were successfully transitioned. There are some outstanding issues that will impact OCHD and the HUG-Me program.

## Issues

- Pediatric clients are being removed from the HUG-Me program and will receive services from CMS
- CMS funding for the pediatric clients and the required Infectious Disease Specialist have been withdrawn from the HUG-Me program – these withdrawn funds also impact staff funding
- Sub-Lease between ORH and OCHD has not been completed.
- Lease between Orange County and the landlord is ready to be presented to the County Commissioners for approval – Jan/Feb 2010
- Orange County lease will expire in 2011 – at which point the program will most likely relocate to a more economically viable space
- Sub-Lease between Orange County & OCHD has been reviewed – revisions and comments have been submitted to Orange County
- Two state grants – SNS and TOPWA will expire in 2011 and most likely will not be renewed thereby impacting staff funding ultimately staff may need to be released

# Immunization Data Project

Project Manager: Shelly Persaud

Champion: Dr. Steven Hale

Orange County Health Department  
Office of Strategic Planning

# Purpose and Scope

**Purpose:** Develop a process to ensure all state-provided vaccines are captured accurately in HMS and FLSHOTS, resulting in increased revenue and decreased error rate.

## Scope:

- Correct discrepancies between HMS/FLSHOTS for services provided between 10/1/08 and 12/31/08. (2/27/09)
- Develop Pareto chart for discrepancies in HMS/FLSHOTS.
- Develop a process map for Immunization, School Health and Immunization Billing. (5/22/09)
- Analyze current process to determine root-causes of discrepancies in HMS/FLSHOTS and decreased revenue.
- Develop policy and procedure manual for the Immunization Program. (6/30/09)
- Train staff according to Standard Operating Procedures. (6/26/09)
- Research and bill all Immunization and School Health clients based on client's Medicaid eligibility in FMMIS. (4/10/09)
- Pass audit by FDOH Office of Immunizations (3/24/09)

# Project Approach

- MS Project was used as the tool for tracking tasks, time and resources.
- MS SharePoint was used for collaboration.
- Different Six Sigma tools were used to find out problems and their root causes.
  - Pareto Charts
  - Process Mapping
  - Root Cause Analysis
  - Brainstorming
- Types of Office Waste
  - HMS duplicate entries

# Corrective Action Plan

Action	Target Date	Status	Responsible
Designate and train an Immunization employee to perform billing for IAP only	3/1/2009	Completed	Tammy Gay
Develop Vaccine Accountability Nurse Contract for IAP and SH nurses	4/7/2009	Completed	Regina Hayward and Tammy Gay
Develop Policy and Procedure manual	5/31/2009	Draft Completed	Patricia Stuart and Tammy Gay
Hire and train an employee to maintain accurate vaccine inventory data base	6/12/2009	Completed	Terrolyn Huckaby
Provide FLSHOTS and HMS Training to all SH, IAP and NCF nurses and clerks	6/30/2009	Completed	Tammy Gay

# FLSHOTS/HMS Training Update

- There were 3 scheduled trainings for all School Health, Neighborhood Center for Families and Immunization Action Plan (IAP) nurses and clerks.
  - Training dates: June 12th, 19th and 24th.
- Competency Test
  - 25 IAP staff were tested on June 26th 2009 and employees that did not pass were retested on 07/01/09.
- Topics :
  - Client Registration in FLSHOTS and HMS.
  - Merging duplicates in FLSHOTS.
  - Importing vaccinations from FLSHOTS to HMS
  - Reconciliation process to ensure all vaccines are captured accurately in HMS and FLSHOTS

# Training Recommendations

Team recommendations for future training:

- Review test results and identify areas for improvement.
- Work with HR to develop an online test for the Immunization program.
- All staff should take computerized test and receive a certificate of completion every 6 months.
- Document in performance standards of each employee

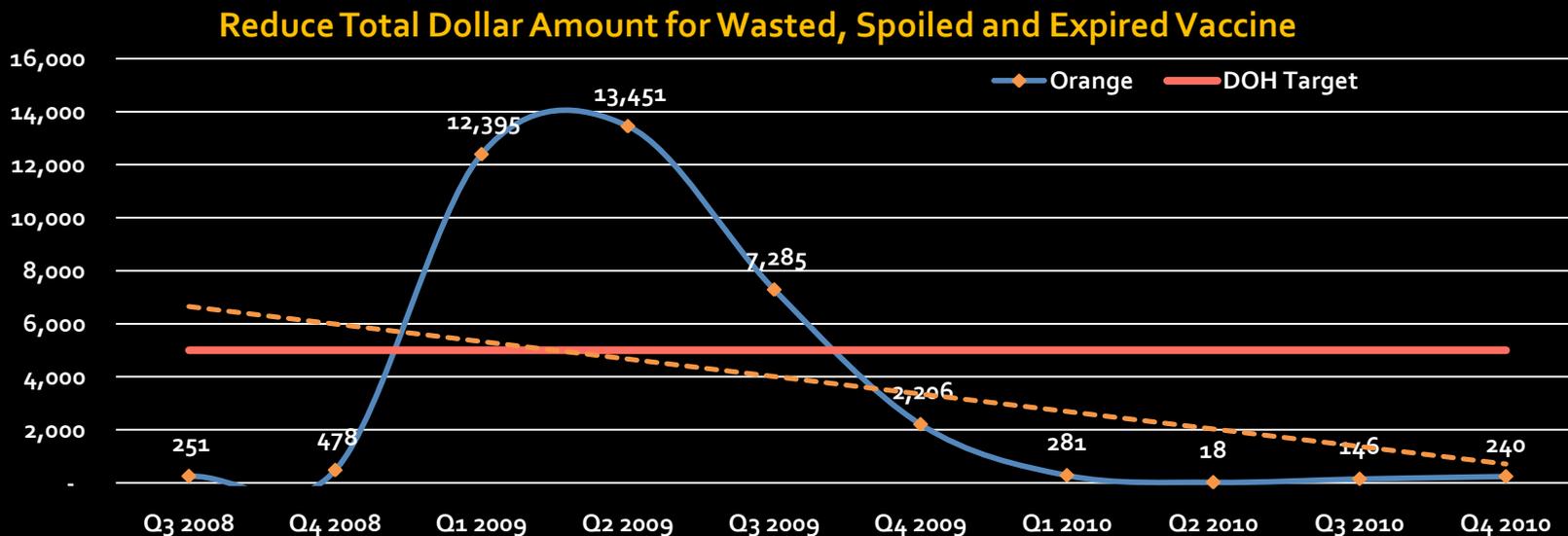
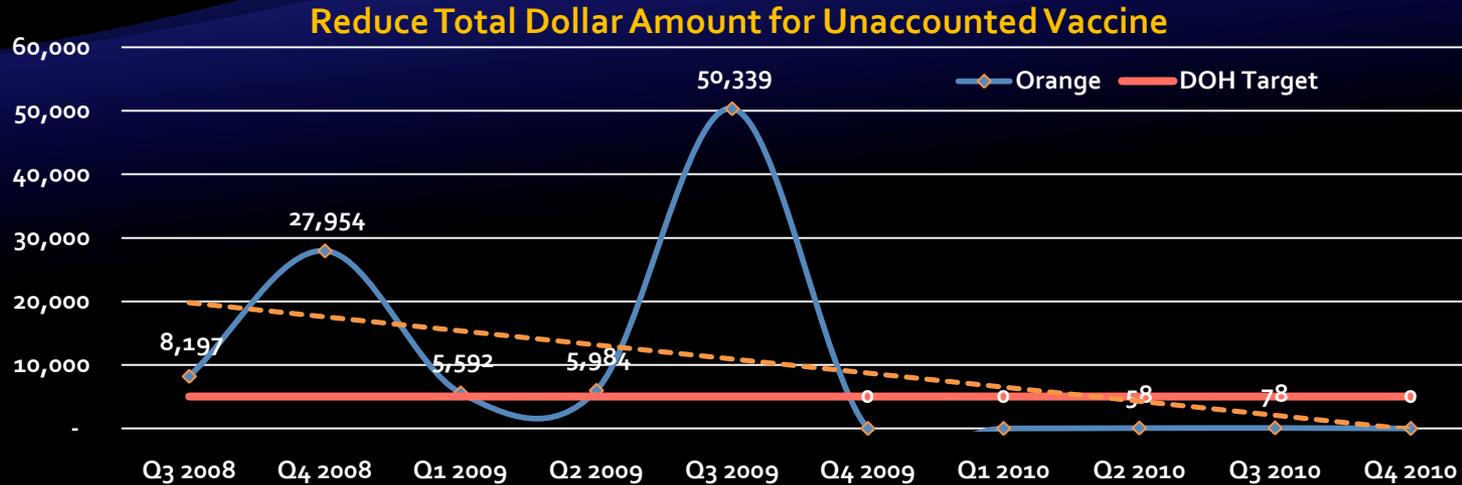
# Internal Review of State-Provided Vaccines 2009

Vaccines Not Imported for April 1, 2009 - June 30, 2009	Number Missed	CDC Cost	Total Vaccine Not Imported CDC Fee
DTAP	2	\$ 13.50	\$ 27.00
HEP A	2	\$ 12.88	\$ 25.76
HEP B	10	\$ 9.88	\$ 98.80
HIB PRPOMP	1	\$ 11.29	\$ 11.29
HPV	2	\$ 105.58	\$ 211.16
INFLUENZA	1	\$ 9.97	\$ 9.97
IPV	2	\$ 11.51	\$ 23.02
MENACTRA	6	\$ 80.13	\$ 480.78
MMR	2	\$ 18.30	\$ 36.60
PENTACEL	1	\$ 51.49	\$ 51.49
PNUE-CONJU	2	\$ 71.04	\$ 142.08
ROTATEQ	1	\$ 57.20	\$ 57.20
TD DECAVAC	4	\$ 18.17	\$ 72.68
TDAP	6	\$ 30.75	\$ 184.50
VZV	4	\$ 64.53	\$ 258.12
<b>Total</b>	<b>46</b>		<b>\$ 1,690.45</b>

	Initial Review for State-Provided Vaccines	Final Review for State-Provided Vaccines
Service Date:	10/1/2008 - 12/31/2008	04/01/2009 - 06/30/2009
<b>Total Vaccines not Imported in HMS</b>	<b>102</b>	<b>46</b>

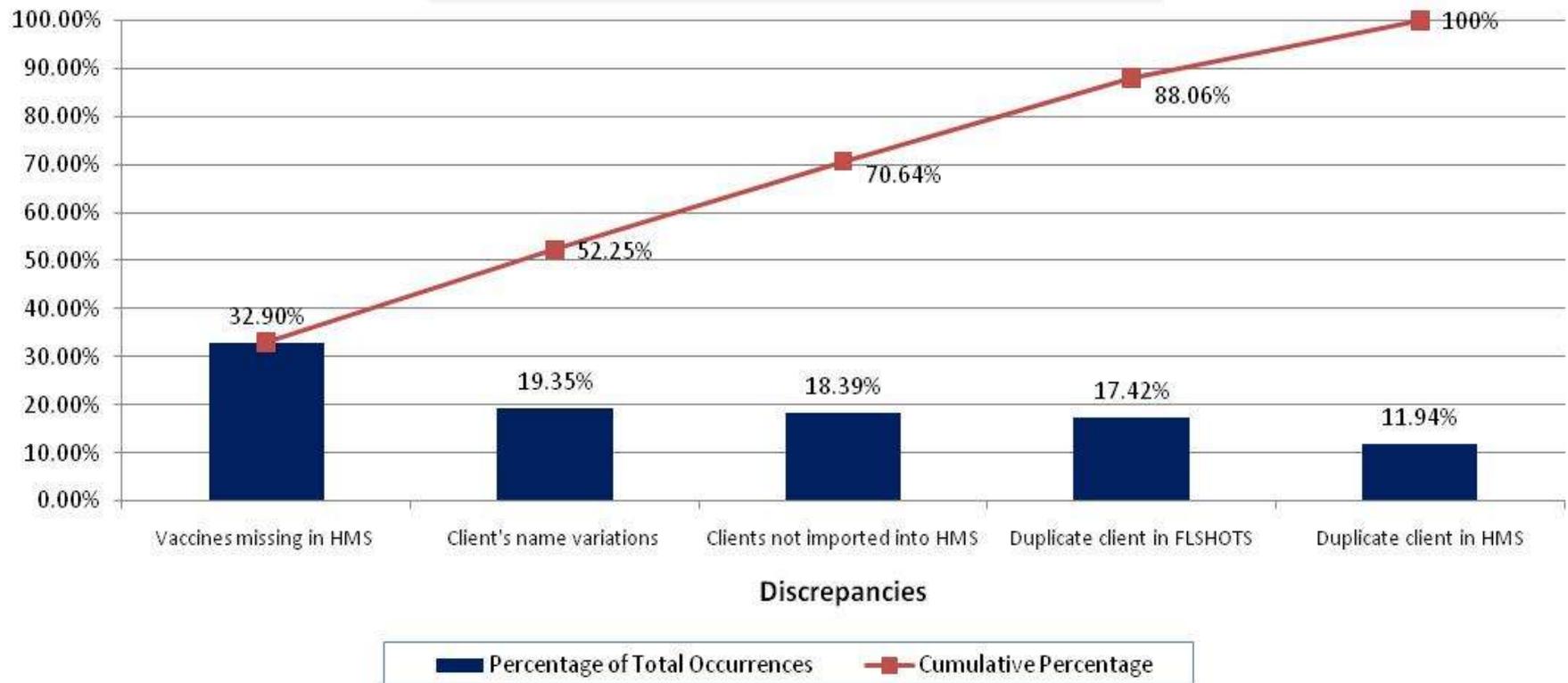
# External Review of State-Provided Vaccines 2010



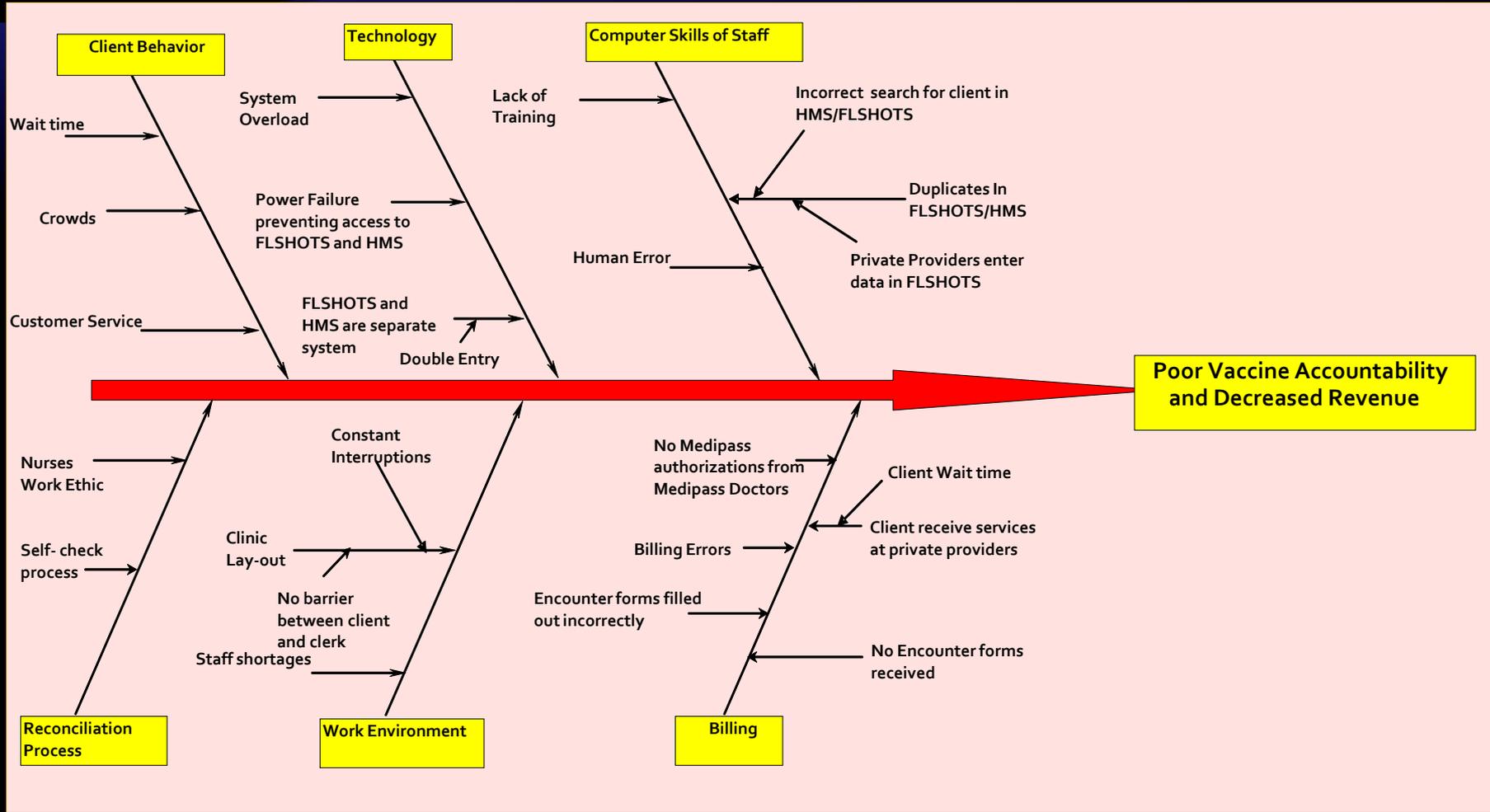
# Internal Review of State-Provided Vaccines

## Types of Discrepancies in FLSHOTS and HMS

Service Date: 10/1/08 - 12/31/08

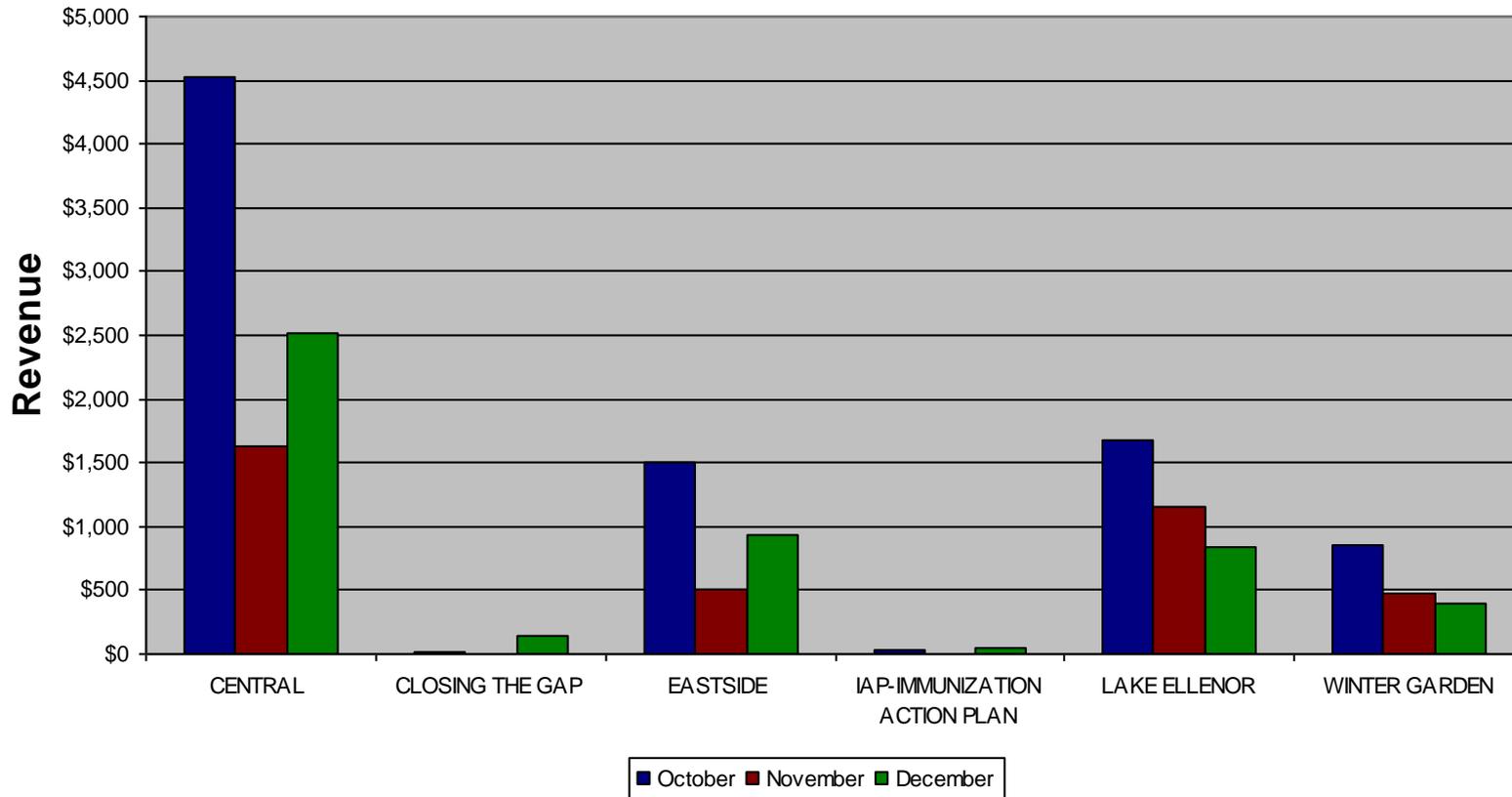


# Root - Cause Analysis



# Billing Update

Revenue for Immunizations-State Provided Vaccines  
Period 10/1/2008 - 12/31/2008



# Completed Tasks

ID	Task Name	Duration	Start	Finish	% Complete
1	Immunization Data Project	141 days	Tue 12/16/08	Tue 6/30/09	73%
2	Initial Team Leader Meeting	18 days	Tue 12/16/08	Thu 1/8/09	100%
3	Meet with Team Leader to select team members	1 day	Tue 12/16/08	Tue 12/16/08	100%
4	Prepare for Project Kick-off Meeting	16 days	Wed 12/17/08	Wed 1/7/09	100%
5	Project Kick-off Meeting	1 day	Thu 1/8/09	Thu 1/8/09	100%
6	Internal Review of data entry in OCHD clinical database	57 days	Wed 12/31/08	Thu 3/19/09	100%
7	HMS and FLSHOTS Reports Issued	1 day	Wed 12/31/08	Wed 12/31/08	100%
8	Review HMS Service history report	15 days	Thu 1/1/09	Wed 1/21/09	100%
9	Review vaccine utilization report in FLSHOTS	15 days	Wed 1/21/09	Tue 2/10/09	100%
10	Correct Discrepancies between HMS and FLSHOTS	13 days	Wed 2/11/09	Fri 2/27/09	100%
11	Correct discrepancies between HMS and FLSHOTS -Complete	0 days	Fri 2/27/09	Fri 2/27/09	100%
12	Develop spreadsheet with error rate of discrepancies and create pareto chart	14 days	Mon 3/2/09	Thu 3/19/09	100%
13	Billing	30 days	Mon 3/2/09	Fri 4/10/09	100%
14	Research and bill all SH and IAP clients based on client's Medicaid eligibility in FMMIS	30 days	Mon 3/2/09	Fri 4/10/09	100%
15	Bill all vaccines provided during 10/1/08 -12/31/08	30 days	Mon 3/2/09	Fri 4/10/09	100%
16	Bill all vaccines provided during 10/1/08 -12/31/08 Complete	0 days	Fri 4/10/09	Fri 4/10/09	100%
17	State Audit	0 days	Tue 3/24/09	Tue 3/24/09	100%
18	Pass audit by FDOH Bureau of Immunizations	0 days	Tue 3/24/09	Tue 3/24/09	100%
19	Quality Improvement	76 days	Tue 2/17/09	Tue 6/2/09	63%
20	Clinic walk-through	9 days	Tue 2/17/09	Fri 2/27/09	100%
21	IAP Clinic	1 day	Tue 2/17/09	Tue 2/17/09	100%
22	SH Msit	1 day	Fri 2/27/09	Fri 2/27/09	100%
23	Develop "As Is" Process Map	38 days	Fri 3/20/09	Tue 5/12/09	89%
24	IAP Program	18 days	Fri 3/20/09	Tue 4/14/09	100%
25	School Health Program	5 days	Wed 4/15/09	Tue 4/21/09	100%

# The Billing Project

Project Manager: Melissa Hulse

Champion: Deanna AmRhein

Orange County Health Department

Office of Strategic Planning

# Purpose and Scope

**Purpose:** Collect, interpret and present data necessary for SMT to make objective, informed decisions on the effectiveness of the Billing Process.

## **Scope:**

- Map the billing process
- Determine data needs and/or availability
- Develop methods to capture data
- Analyze data collected and identify most frequent issues/problems
- Develop recommendations for process improvement

# Project Approach

- MS Project was used as the tool for tracking tasks, time and resources.
- MS SharePoint was used for collaboration.
- Different Six Sigma tools were used to find out problems and their root causes.
  - Process Mapping
  - Gap Analysis
  - Pareto Charts on problem frequency
- Types of Office Waste
  - Not applicable

# Complications

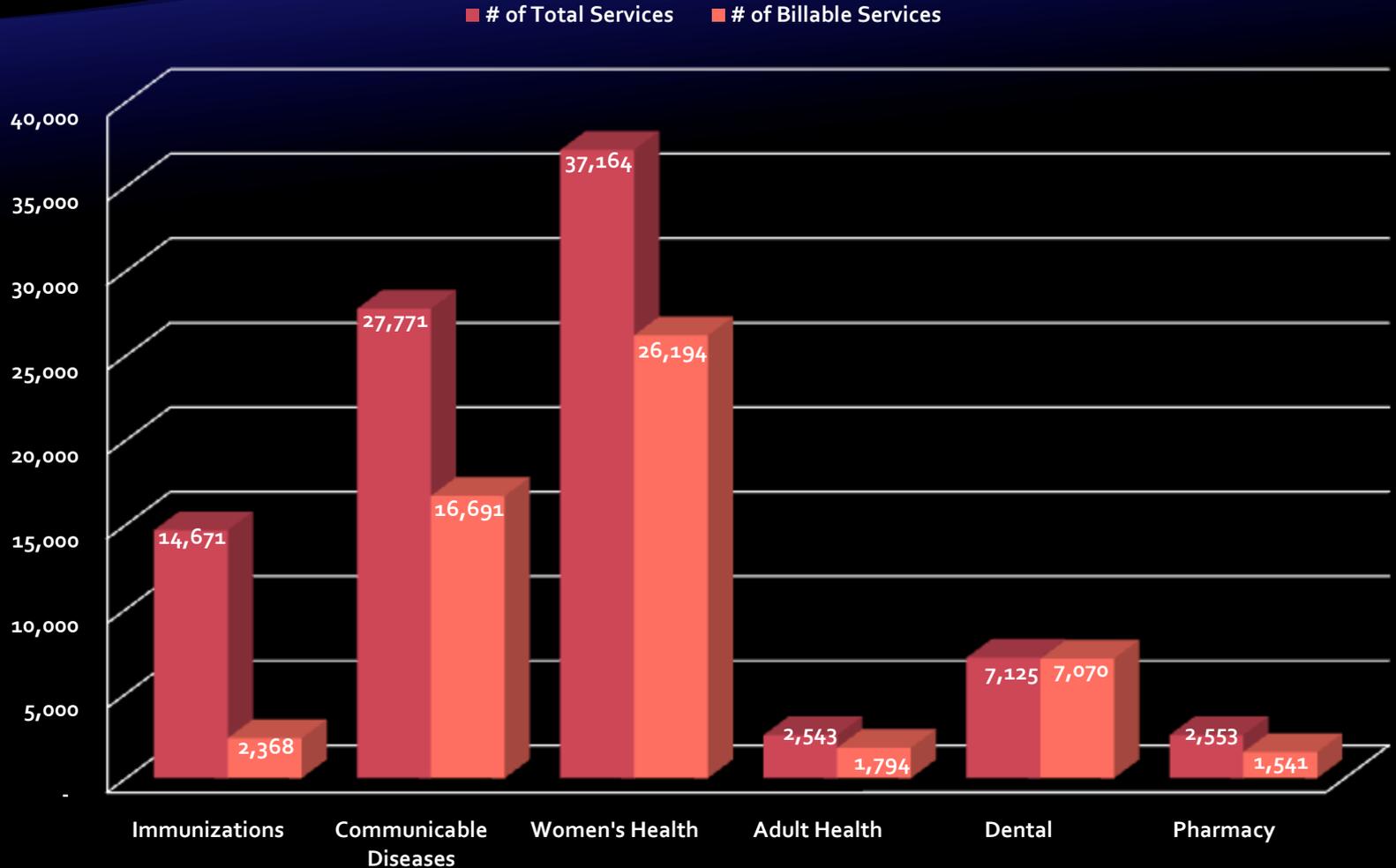
- Maternity Package implementation
- Medicaid Reimbursement Rates frequently changed
- Unreliable Billing and Service Reports from HMS
- H1N1 and HUG Me activities
- Programs resisted participation in process mapping

# Assumptions

- It is assumed that service coding, insurance and eligibility information in HMS is correct.
- 
- It is assumed that clients with no eligibility determination should pay 100%.
- In the first quarter of 2009, Orange County Health Department provided 91,287 total services and 55,658 billable services

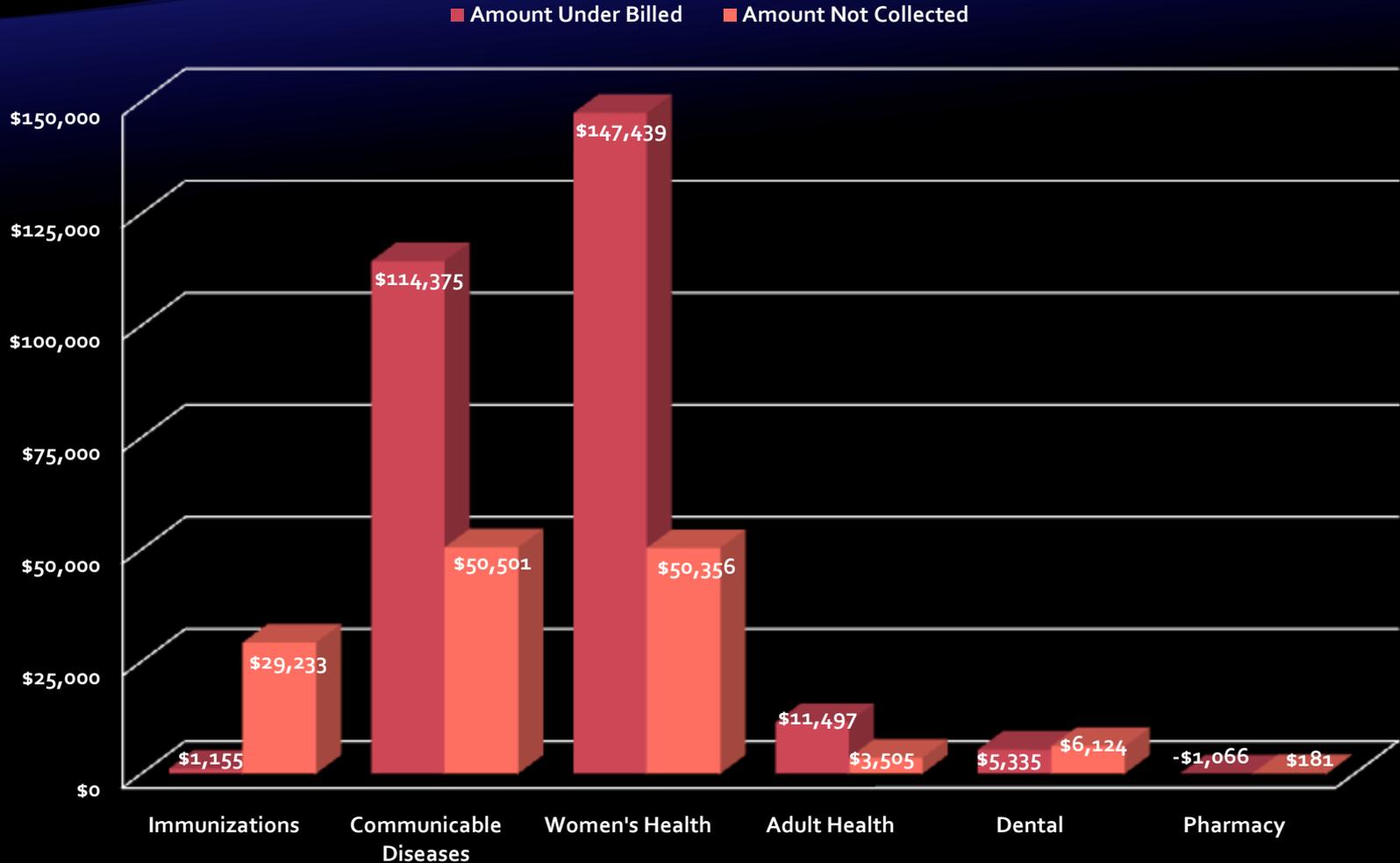
# Services by Program Area

## Billing Project- Services Breakdown by Program Area



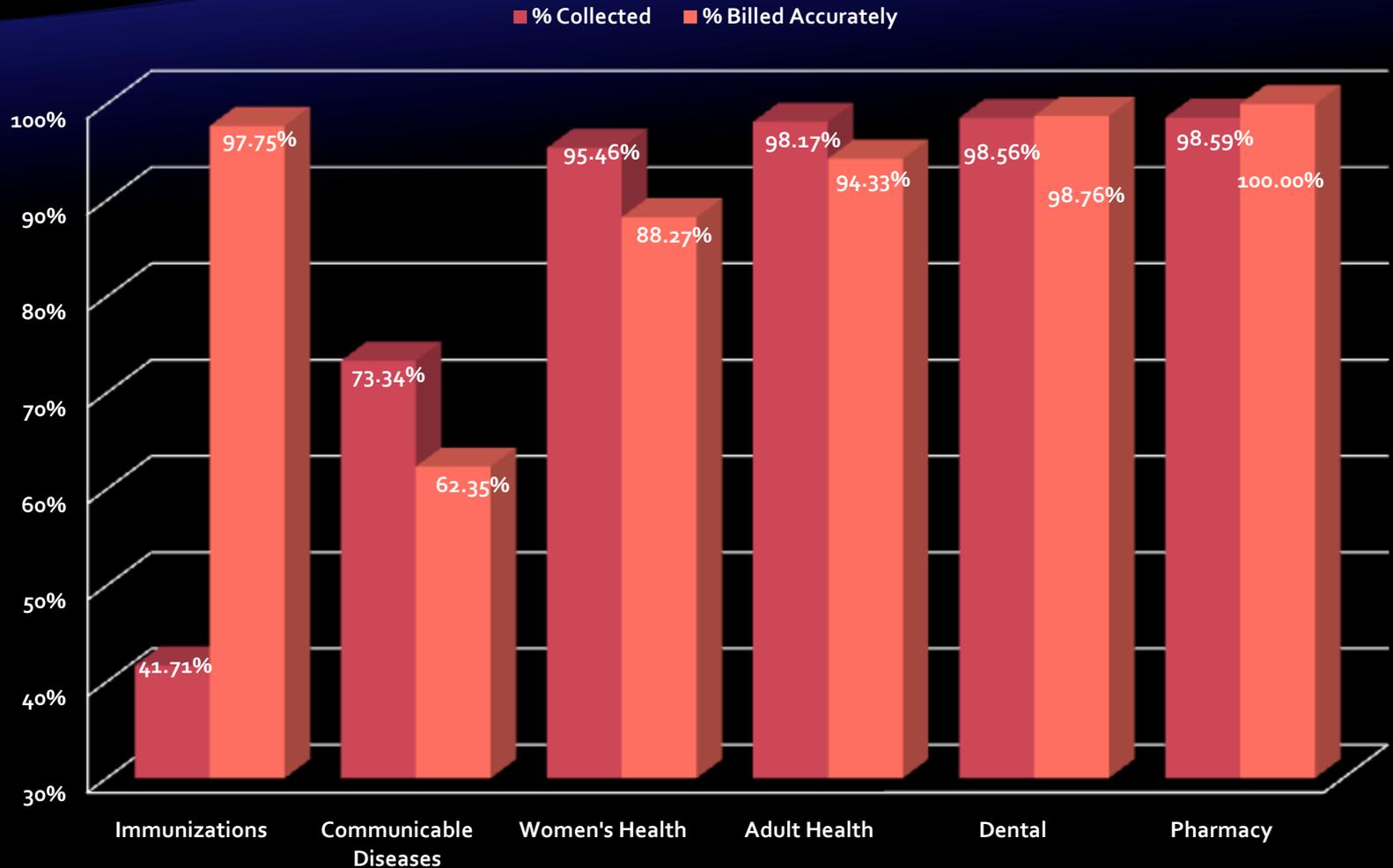
# Potential Loss by Program

## Billable Services - Potential Revenue Lost by Program Area



# Billing Analysis by Program

## Billing Project - Billable Services Analysis by Program Area



# Program Losses

- Immunizations
  - \$30,388 in potential revenue was lost the first quarter of 2009
  - \$1,155 in billings were not collected
  - \$29,233 was under billed
  - The most **potential** revenue lost in Immunizations was in Rabies vaccinations, accounting for \$24,566 of the \$30,388 total potential revenue.
- Communicable Disease
  - \$164,877 in potential revenue was lost the first quarter of 2009
  - \$50,501 in billings were not collected
  - \$114,375 was under billed
  - The most **potential** revenue lost in Communicable Diseases was in Office Visits, accounting for \$125,538 of the \$164,877 total potential revenue.

# Program Losses

- Women's Health
  - \$197,795 in potential revenue was lost in the first quarter of 2009
  - \$50,356 in billings were not collected
  - \$147,439 was under billed
  - The most **potential** revenue lost in Women's Health was in several areas: Return Visits, High Risk Visits, Family Planning Counseling and services performed by a single nurse, accounting for \$139,702 of the \$197,795 total potential revenue.

# Potential Not Realized

- The Billing Project Team calculated the *Potential Billing* - what the Amount Billed should have been, given a client's insurance coverage and Eligibility Determination.
- **\$418,636** in potential revenue was lost in the first quarter of 2009
- **\$139,901** in billings were not collected
- **\$278,736** was under billed

# The Training Project

Project Manager: Anne Strickland

Champion: Deanna AmRhein

Orange County Health Department

Office of Strategic Planning

# Purpose and Scope

**Purpose:** To determine mandatory and recommended training for all OCHD employees, to include discipline specific training.

## **Scope:**

- Determine mandatory training requirements
- Determine recommended training
- Determine time required and method of instruction.
- Develop easy to understand training matrix.
- Develop system to determine completion percentage

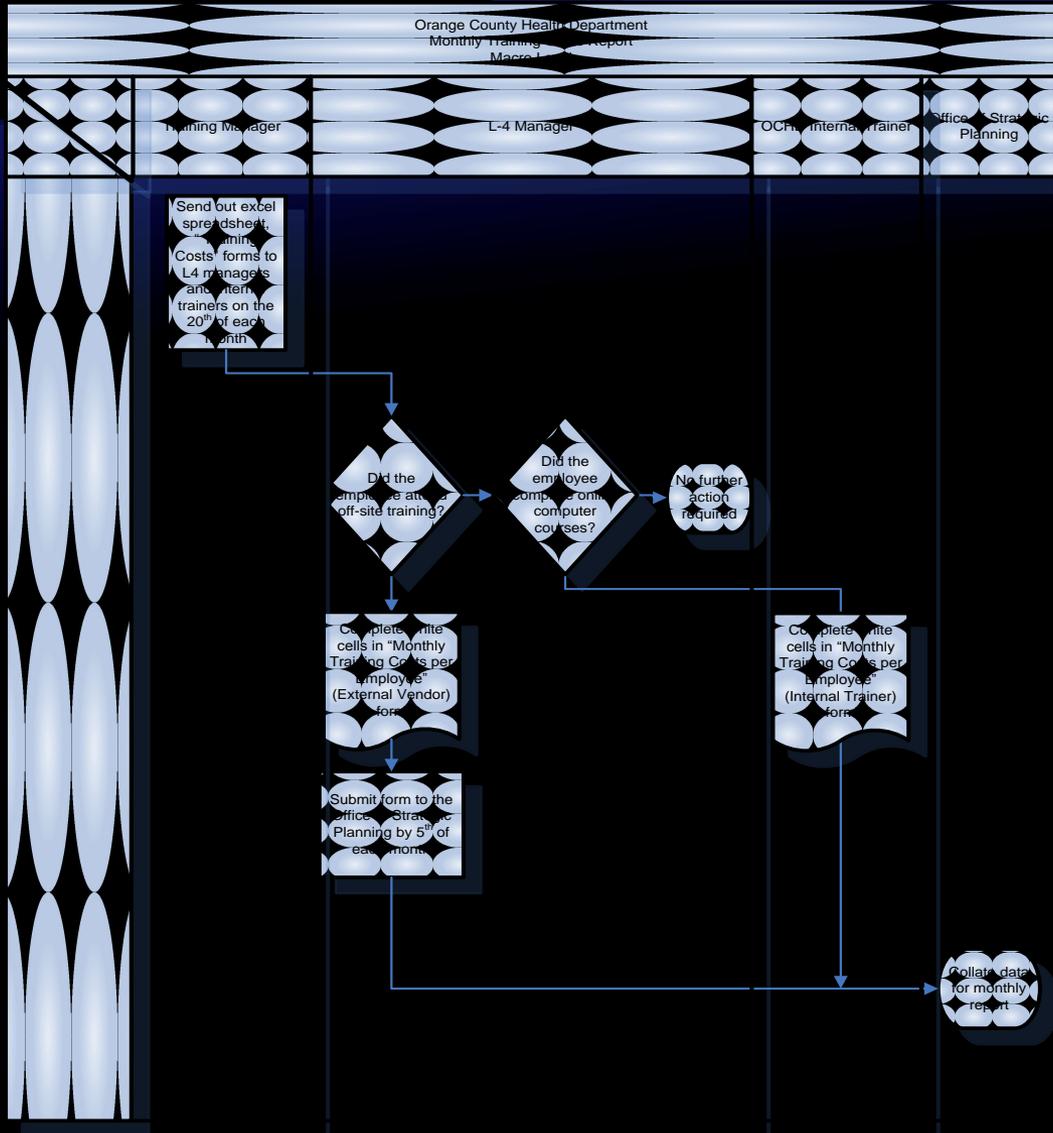
## **Deliverables:**

- Training matrix
- Reporting system

# Project Approach

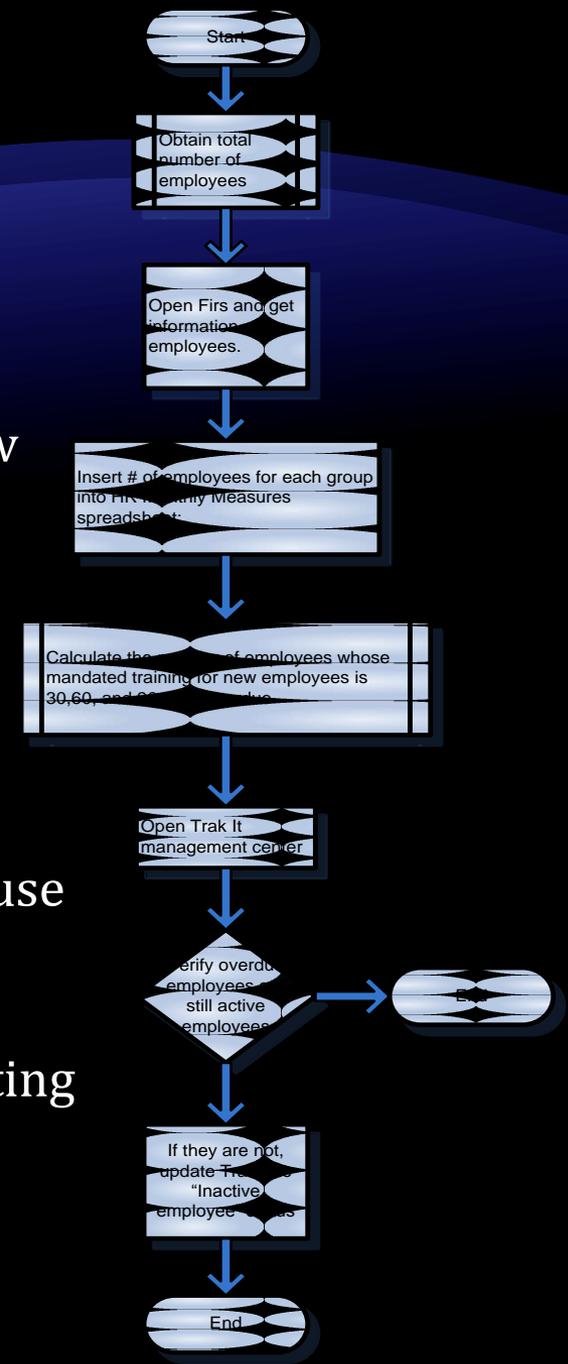
- MS Project was used as the tool for tracking tasks, time and resources.
- MS SharePoint was used for collaboration.
- Different Six Sigma tools were used to find out problems and their root causes.
  - Brainstorming
  - Process Mapping
  - Voice of the Customer
- Types of Office Waste
  - Double entry into duplicate systems
  - Time wasted due to inability to track course completion

# Process Flow Chart



# Process Flow Chart

- The training system has been in flux for the past few years
  - Started with locally developed system to register/track course completion
  - FDOH instituted Trak-It in 2005
  - Trak-It revised in 2008, not backward compatible
- FDOH reporting requirement difficult to meet because of constantly changing systems
- New process allows for an orderly migration to the revised Trak-It and subsequent tracking and reporting



# OUTCOMES

- Training Matrix developed for all areas of the health dept
  - Each area defined mandated and recommended training requirements
  - Matrix included: Licensure/Certification rqmts, Time frame for rqmts, Statutory References, Training Venue information
- Training Policy developed
  - Orange County Health Department training rqmts in addition to Department of Health Training rqmts
- Orange County Health Department Training Catalog
- Training Center site updated
- Trak-It Learning Management Center used for mandated training
- Three month pilot project to track monthly training and associated costs initiated

# How We Measure Success

- All of the major components defined in the charter were met.
- The training policy was approved and implemented.
- SharePoint site was developed by IT
- The training manager is responsible for measuring continued progress.
- The Office of Strategic Planning will collate the data for monthly training costs and percentage of training completed.

# Presentation Summary

- We had a go at some wildly divergent issues, with mixed results
- HUG-Me was an absolute nightmare but lessons learned have spawned new projects
- Use the proper tools depending on the objective and the process to be changed
- It helped to have Grace coach us through the rough spots
- Do not discount the power of change management principles, it would have saved us a lot of angst
  - Time taken to explain why, in terms they understand, is well worth the investment
- Keep plugging away and eventually the majority will join the effort

# Current/Projected Projects

- Human Resources process improvement in recruitment and termination activities
- Healthy Start work flow analysis and improvement
- Employee Satisfaction focus groups and improvement
- Health Management System standardization
- Electronic Health Record pilot project
- OCHD staffing matrix
- Cost analysis of all OCHD provided services

# Questions?

Jim Pate – Strategic Planning Manager

Alberto Araujo – Quality Manager

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