Successfully Using Quality Improvement to Enhance APP Grant Performance

June 15, 2017
3:00-4:30 pm ET

U.S. Department of Health and Human Services
Administration on Children, Youth and Families
Family and Youth Services Bureau
Personal Responsibility Education Program (PREP)

Objectives

- By the end of this webinar, participants will be able to:
  - Describe Continuous Quality Improvement (CQI)
  - Discuss differences between Quality Assurance vs. CQI
  - Describe the Model for Improvement Framework
  - Identify CQI Tools
    - Flow charts, cause-and-effect diagrams, histograms, Pareto charts, run charts, control charts, scatter diagrams
  - Learn how grantees are conducting CQI with their programs

Presenters

Jill McArdle, RN, MSPH, Research Public Health Analyst, RTI International

Robert Nobles, Dr.PH, MPH, CIP, Associate Vice Chancellor for Research, University of Tennessee – Knoxville, SRAE and C-PREP

Sarah Leff, MPH, Program Manager, and Mara Decker, Dr.PH, Project Director, California State PREP

Continuous Quality Improvement

Jill McArdle, RN, MSPH
RTI International

U.S. Department of Health and Human Services
Administration for Children, Youth and Families
Family and Youth Services Bureau
Personal Responsibility Education Program (PREP)

Quality Assurance vs. Continuous Quality Improvement

- Continuous Quality Improvement (CQI) evolved from Total Quality Management (TQM) used in industry post WW II.
- Quality Assurance (QA) measures compliance against certain necessary standards. Done through inspection, and audit.
- Quality Improvement (QI) is a continuous improvement process.
- QA is required and normally focuses on individuals, while QI is a proactive approach to improve processes and systems. Standards and measures developed for quality assurance, however, can inform the quality improvement process.

TQM → Quality Improvement/Quality Management – Improvement → Continuous Quality Improvement

- Continuous quality improvement is a process of identifying, describing, and analyzing strengths and problems and then testing, implementing, learning from, and revising solutions. - *Childwelfare.gov*

- "*[In healthcare]* CQI is defined as a structured organizational process for involving personnel in planning and executing a continuous flow of improvements to provide quality health care that meets or exceeds expectations.

  - *Sollecito WA, Johnson JK*

QA vs. CQI

	Quality Assurance	Continuous Quality Improvement
Motivation	Measuring compliance with standards	Continuously improving processes to meet standards
Means	Inspection	Prevention
Attitude	Required, defensive	Proactive
Focus	Outliers: "bad apples“ Individuals	Processes Systems
Responsibility	Few	All

FYSB Family & Youth Services Bureau

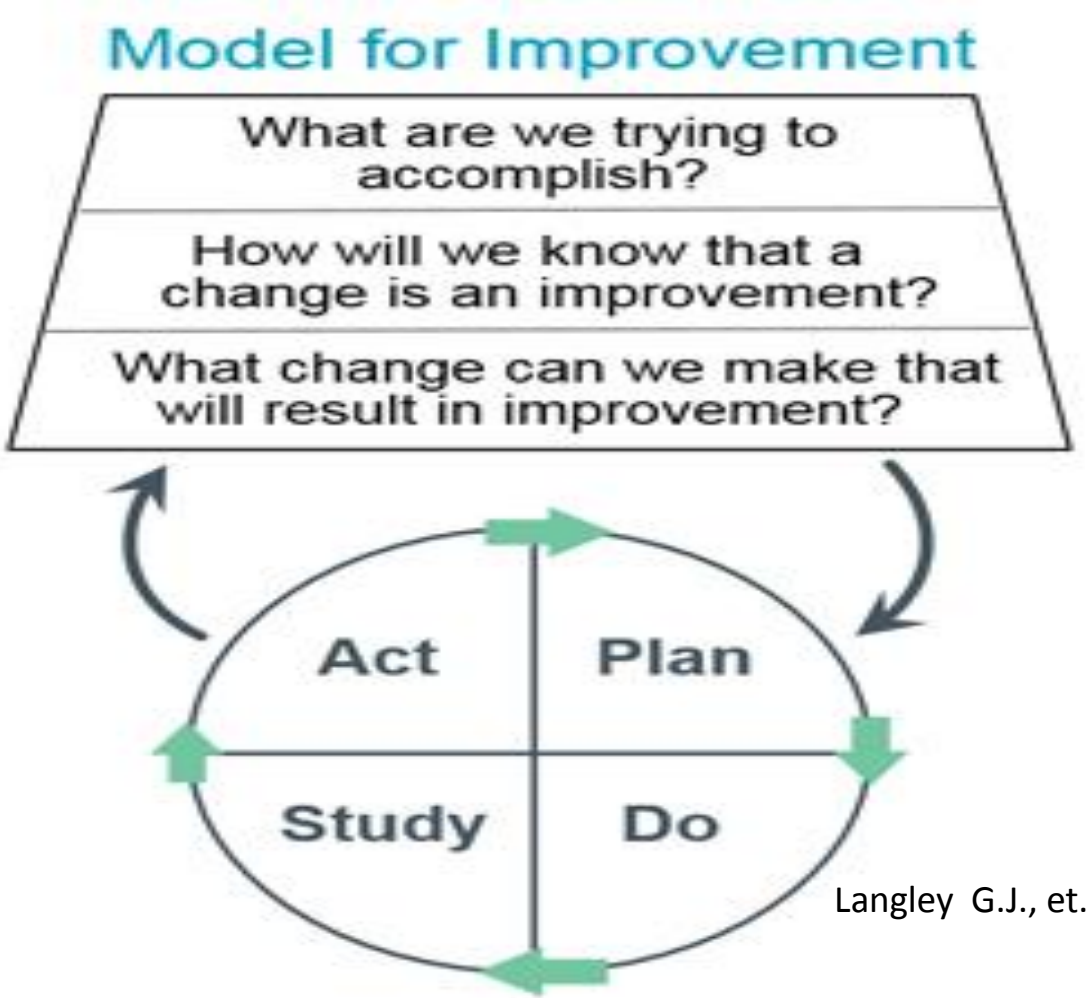
Poll: Are you doing more QA or CQI in your organization?

- More Quality Assurance (QA)
- More Continuous Quality Improvement (CQI)
- Neither

CQI Structural Elements

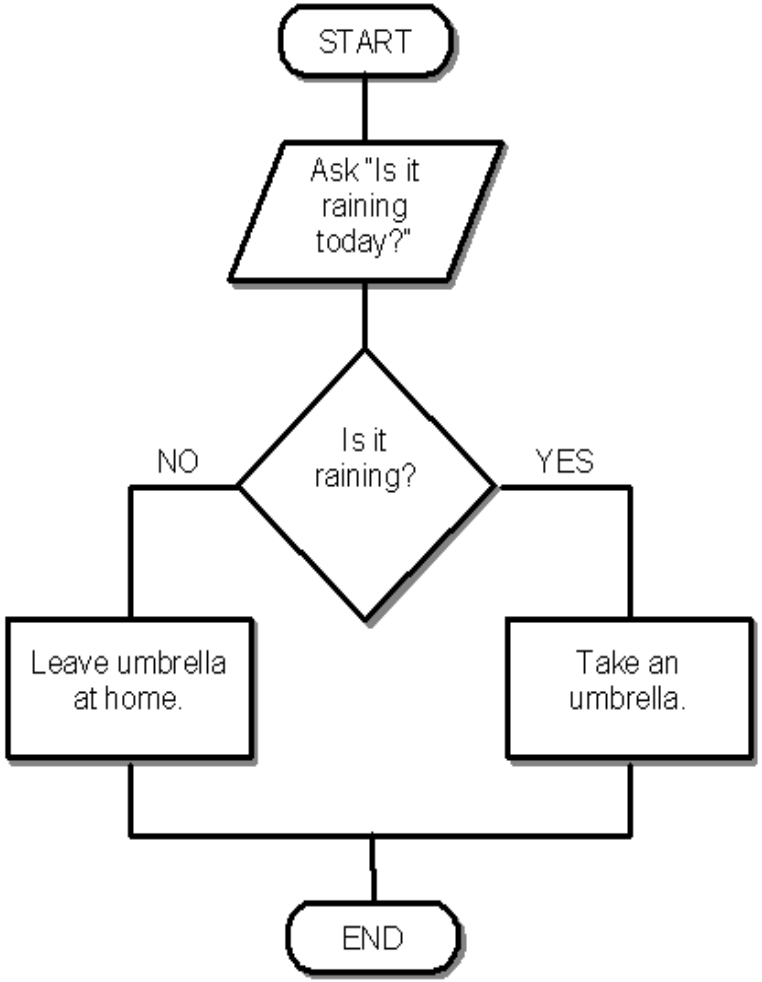
1. Process Improvement teams
2. Use of one or more of seven CQI tools:
   - Flow charts, cause and effect diagram, scatter diagram, histogram, pareto chart, run chart, control charts
3. Quality Council: set priorities, implement, monitor
4. Organizational leadership
5. Statistical analysis- focus to reduce variation in processes
6. Customer satisfaction measures
7. Benchmarking
8. Redesign of processes

The Model for Improvement



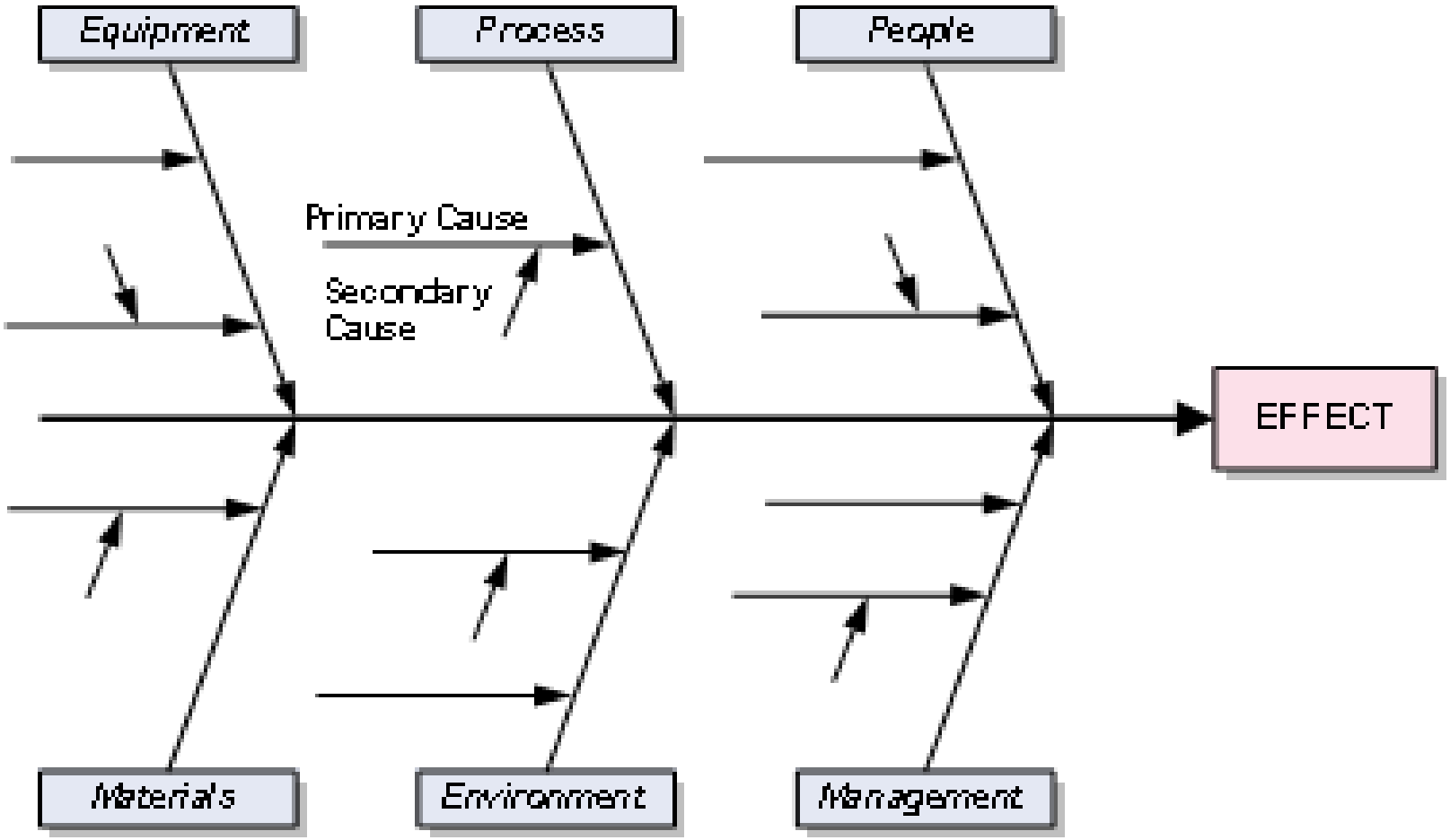
Langley G.J., et.

Simple Flow Chart



Symbol	Name	Function
	Start/end	An oval represents a start or end point
	Arrows	A line is a connector that shows relationships between the representative shapes
	Input/Output	A parallelogram represents input or output
	Process	A rectangle represents a process
	Decision	A diamond indicates a decision

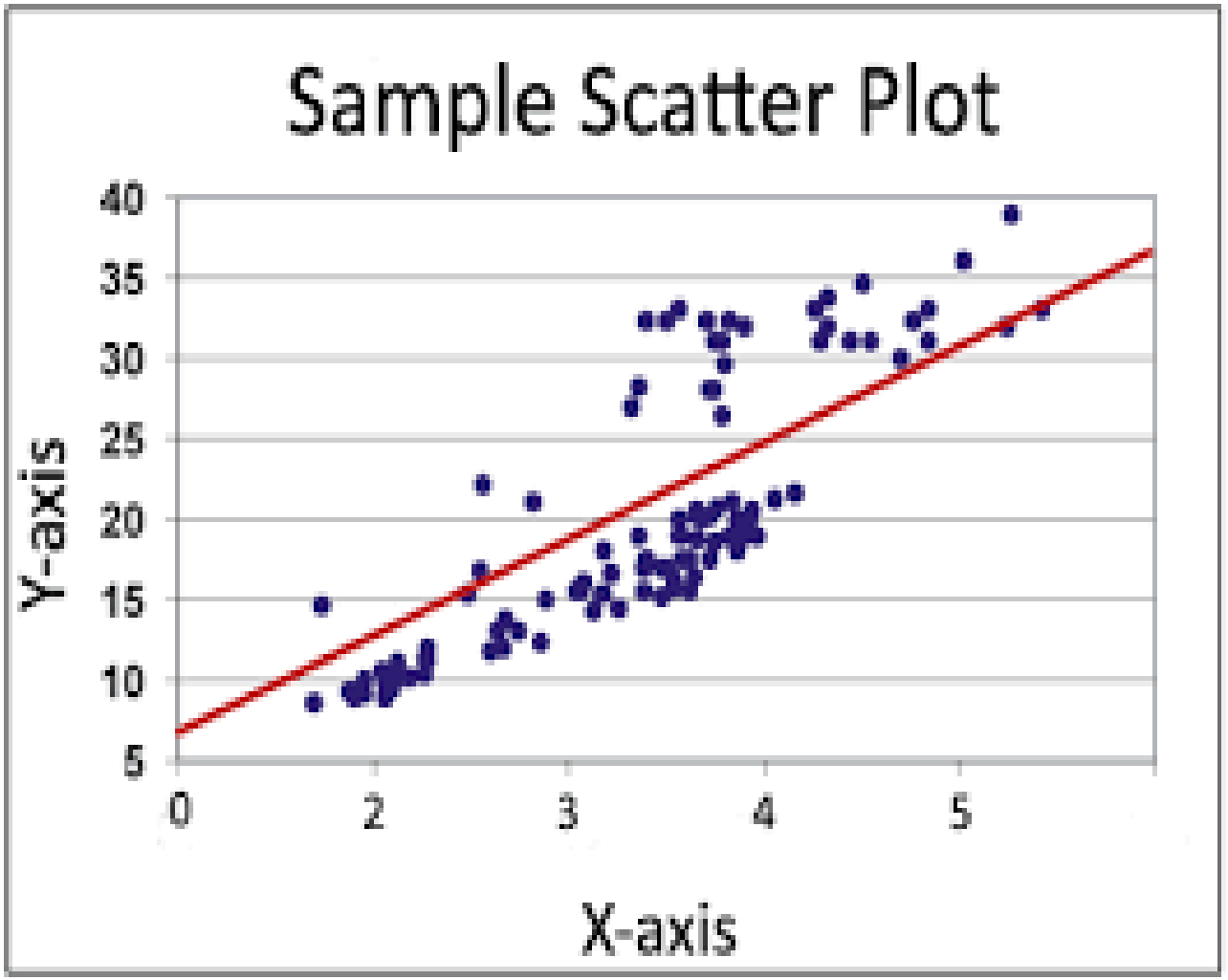
Fishbone Diagram -- Cause and Effect -- Ishikawa



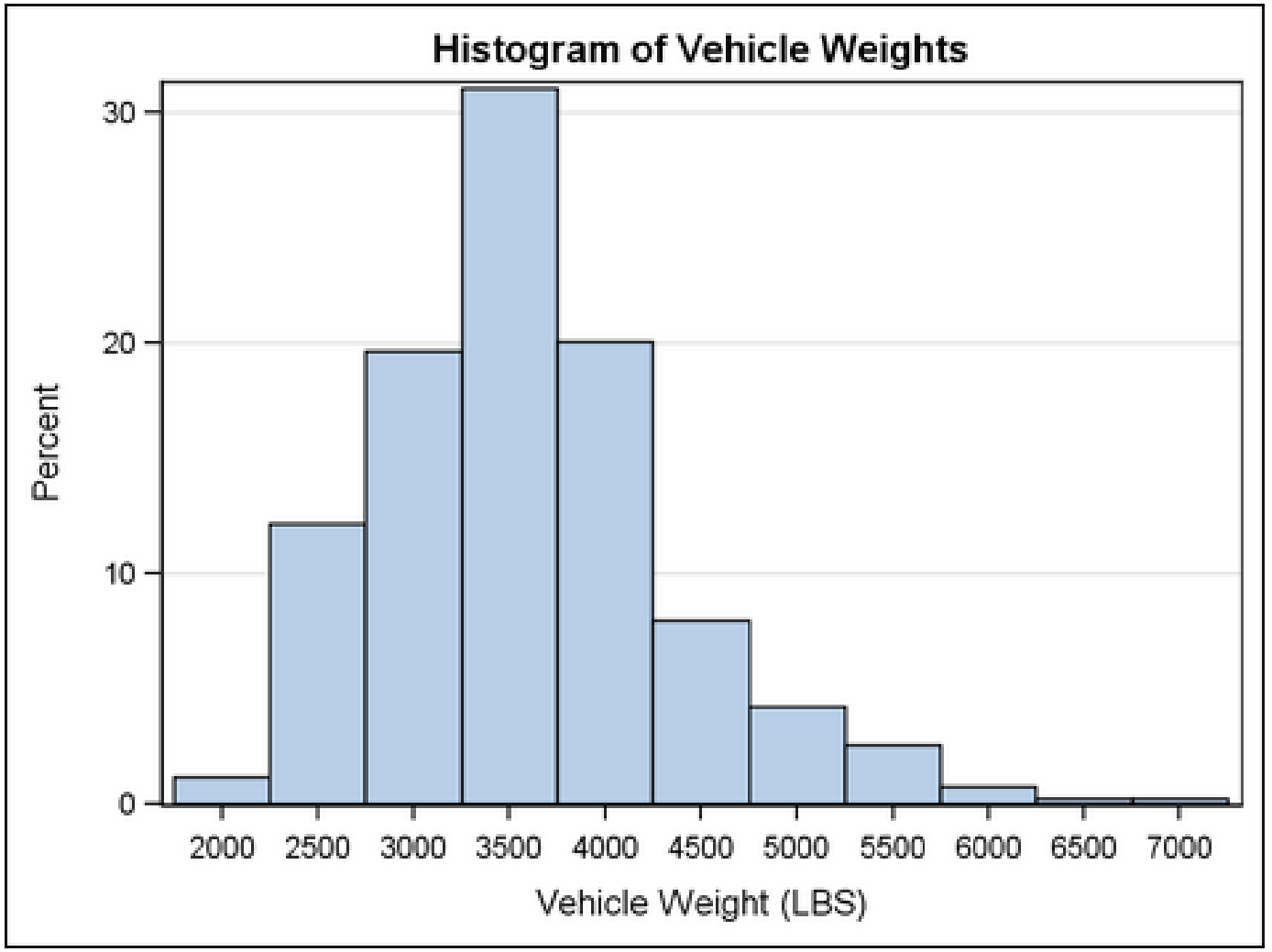
Data Table – Simple Tally Sheet

Class (Marks)	Frequency
11-15	2
16-20	3
21-25	3
26-30	5
31-35	6
36-40	6
41-45	3
46-50	2
Total	**30**

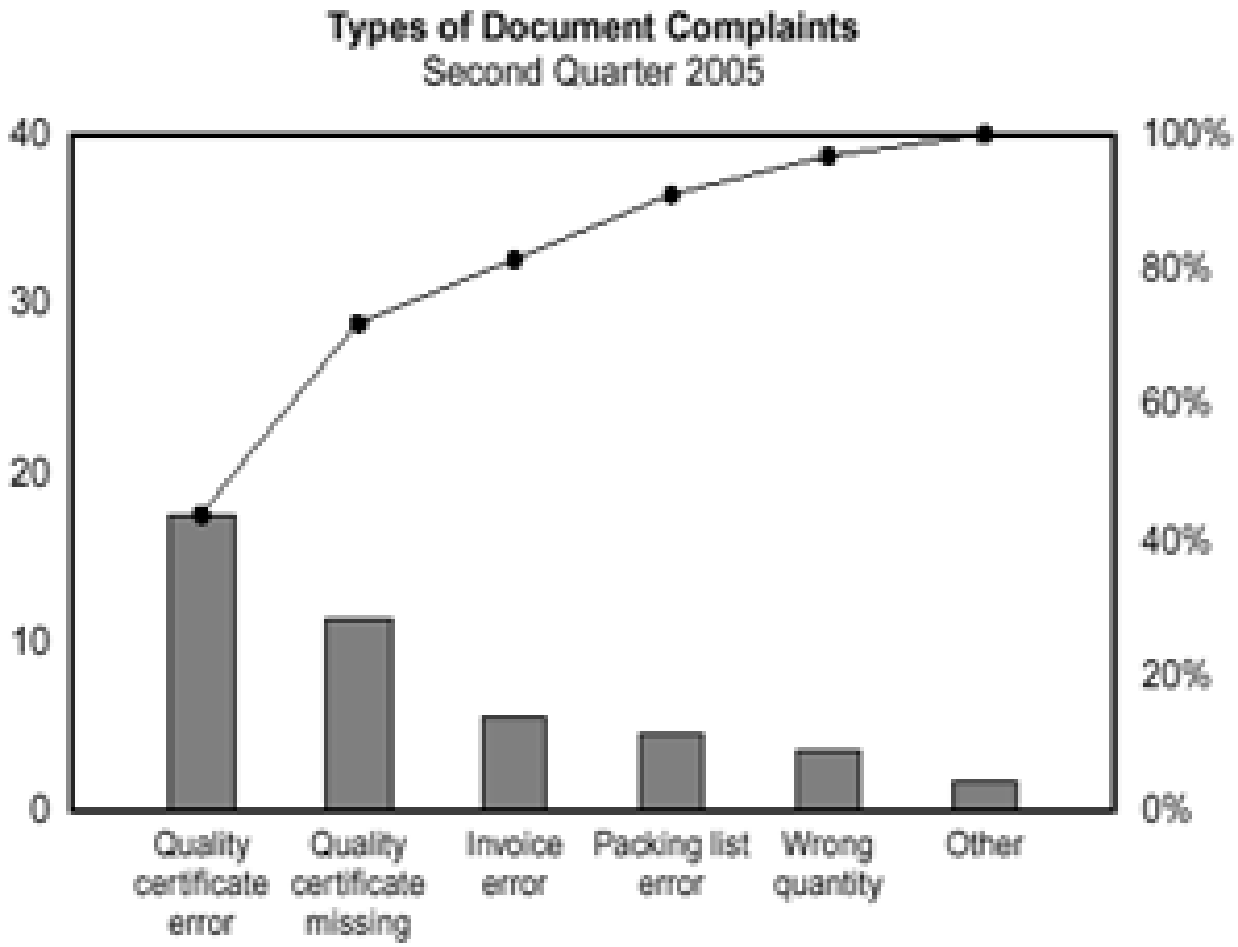
Scatter Diagram



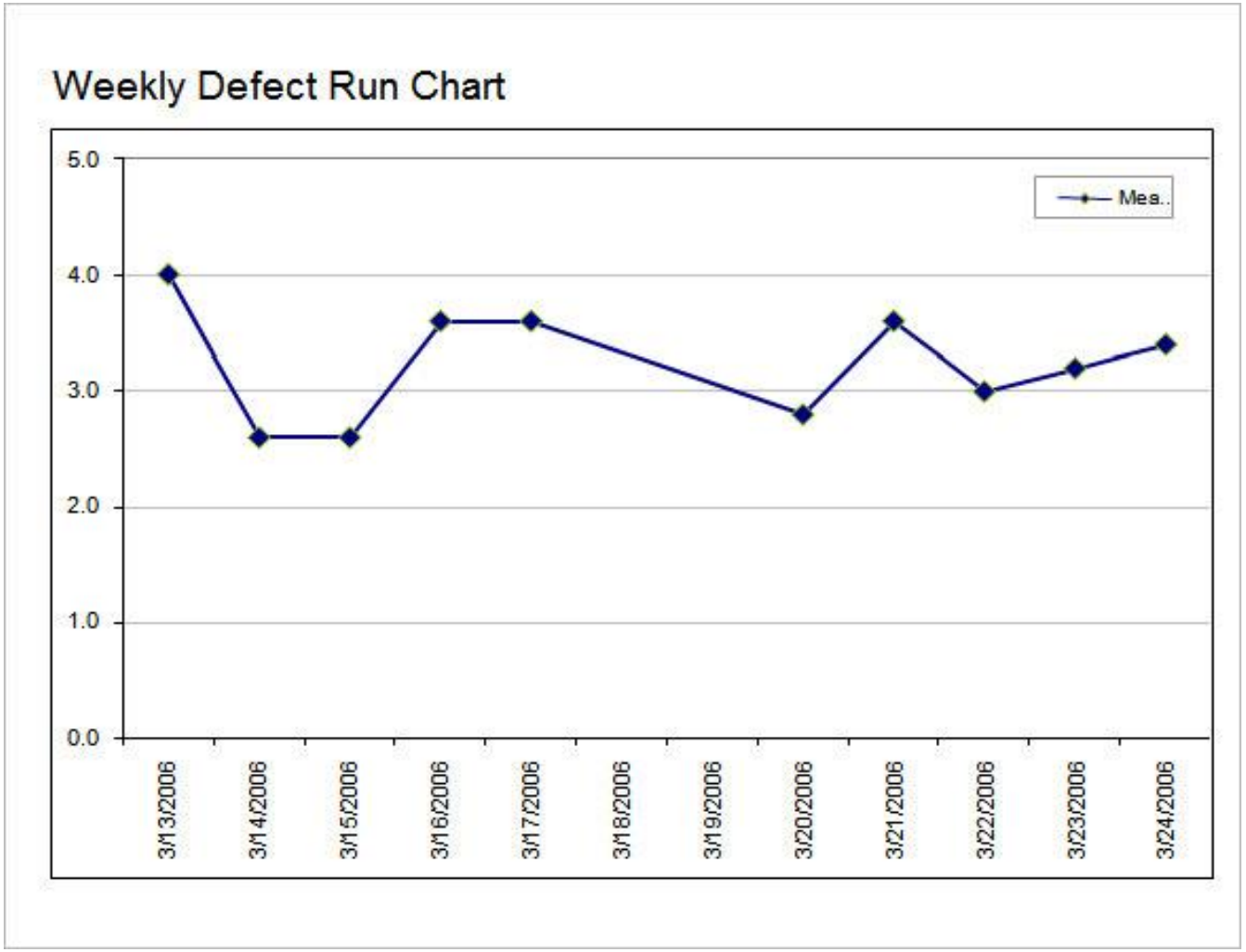
Histogram


Histogram of Vehicle Weights
Percent
30
20
10
0
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
7000
Vehicle Weight (LBS)

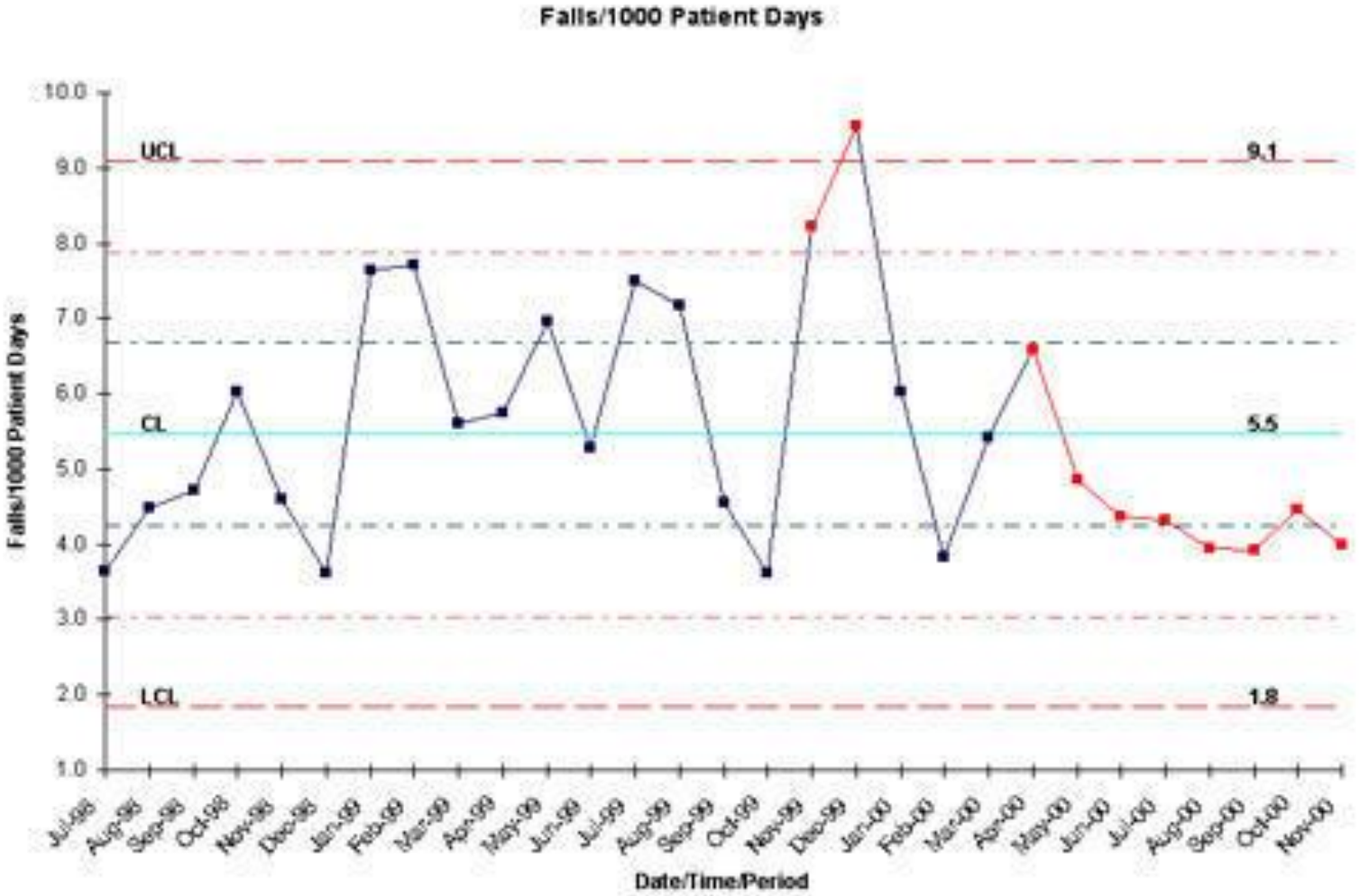
Pareto – Type of Histogram
Law of Vital Few -- 80-20 Rule



Run Chart


Weekly Defect Run Chart
5.0
4.0
3.0
2.0
1.0
0.0
Mea..
3/13/2006
3/14/2006
3/15/2006
3/16/2006
3/17/2006
3/18/2006
3/19/2006
3/20/2006
3/21/2006
3/22/2006
3/23/2006
3/24/2006

Statistical Control Chart



Types of Measures For Monitoring a Program

- **Implementation -** Are you implementing the program as you planned?
  - Are you providing materials, trainings, etc.?
- **Effectiveness -** Are your implementation activities achieving what you had hoped?
  - Are clients using your materials, attending you trainings, etc.?
- **Evaluation -** Are you achieving desired outcomes?
  - Teen pregnancy reductions, knowledge of risks improvement.

References

- Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (2nd edition). San Francisco: Jossey-Bass Publishers; 2009.

- Sollecito WA, Johnson JK. McLaughlin and Kaluzny's Continuous Quality Improvement in Health Care (Fourth Edition). Burlington: Jones & Bartlett Learning; 2013.

- Institute for Healthcare Improvement

  http://www.ihi.org

Contact Information

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CQI as a Mechanism for Program Excellence

Presented by: Dr. Robert Nobles
Associate Vice Chancellor for Research/
External Evaluator for AFC

THE UNIVERSITY OF
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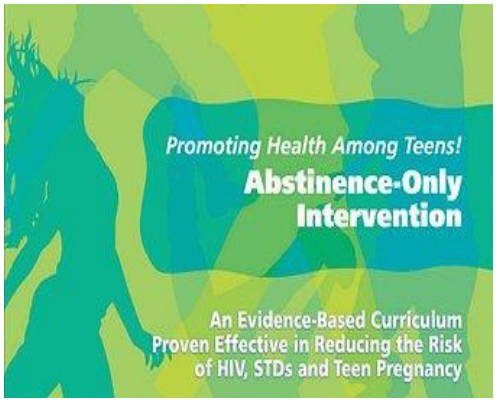
About the Agency

- Ambassador's for Christ Youth Ministries (AFC)
- Faith-based non-profit organization established in 2002
- Services Houston/Harris County through partnerships
- 1st multi-year, multi-million dollar Teen Pregnancy Prevention award in 2012 for ~ $3M (DHHS, Family and Youth Services Bureau/FYSB)
- Currently facilitates 8 awards focusing on youth from FYSB (5) [includes SRAE and PREP], Texas HHSC, OJJDP, & Aetna Foundation

About the Problem

- Texas ranked 2nd highest in teen births in 2014 (~400K)
- Houston/Harris Country accounts for 16% (~64K) of the Texas total
- Black and Hispanic youth account for 90%
- **Complicating Factors**: geographic distribution; homeless/runaway youth; high sexual activity; low SES; low self efficacy

About SRAE



- Sexual Risk Avoidance Education (SRAE)
- Project initiated October 2016
- Targets 550 African-American and Hispanic youth (150 Year 1, 200 Years 2-3) in middle and high school
- Promoting Health Among Teens-Abstinence Only (PHAT-AO) (8 hours) & Positive Youth Development (4 hours)

AMBASSADORS FOR CHRIST
YOUTH MINISTRIES

About SRAE (continued)

Program Outcome Goals

1) Increase number of youth who refrain from or discontinue sexual activity;

2) Reduce rates of teen births among youth residing in targeted communities;

3) Reduce rates of sexually transmitted diseases/infections (STDs/STIs) among adolescents;

4) Reduce incidence of substance use and sexual risk behaviors;

5) Increase knowledge of the benefits associated with self-regulation, success sequencing for poverty prevention, healthy relationships, and goal setting, resisting sexual coercion and dating violence, and preventing youth risk behaviors such as underage drinking or illicit drug use without normalizing teen sexual activity;

6) Increase number of parents and significant adults participating in risk avoidance education; and

7) Increase community commitment and support for sexual risk avoidance and non-marital sexual activity

Audience Poll #1

- Which of the choices best represent your program infrastructure as it relates to evaluation services:
  - Use of an External Evaluator (outside of your organization)
  - Use of an Internal Evaluator (dedicated to evaluation)
  - Use of internal program staff (not dedicated to evaluation)
  - Another form of evaluation not identified above.

About the CQI Process

- External Evaluation
  - Integrated in the planning process
  - Reviews grants prior to submission
  - Develops process measurement guidelines
  - Provides program implementation training to program staff

About the CQI Process

- External Evaluation
  - Creates all data gathering documents and protocols
    - Pre-test, Post-test, 3 & 6 month follow-up
  - Facilitates quality assurance
    - Fidelity assessments
    - Documentation and record review
  - Monitors program achievements
    - Outcome measures
    - Impact measures

About the CQI Process

- **Oversight Committee** (asks…)

  1) Is the project being implemented with fidelity to the approved design, including adherence to proposed outcomes, timelines and budget?

  2) What changes have been made in response to ongoing evaluations?

  3) How successful does the project appear to be in terms of youth outcomes?

  4) What successes and unforeseen positive outcomes can be celebrated and communicated/disseminated/replicated?

  5) What barriers to implementation have arisen?

  6) What strategies can be used to overcome these barriers?

  7) What unforeseen costs have been incurred?

  8) What actions will be implemented immediately to improve the program?

CQI Successes Observed Through PREP

PREP

Personal Responsibility Education Program

Audience Poll #2

- Which of the choices best represent your program experience related to the Personal Responsibility Education Program (RPEP):
  - Your program currently implements PREP.
  - Your program has implemented PREP in the past.
  - Both A & B
  - Neither A & B
  - Your response is not represented in the choices above.

About the Personal Responsibility Education Program (PREP)

Intended population (Youth)

- African-American and Hispanic; 15-19 years old; High-risk for pregnancy/STDs (e.g. pregnant/parenting, homeless, in foster care)

Program Focus

- Increase self image and skill sets; Reduce teen pregnancy rates, STD rates, and associated risk behaviors

Curriculum	Hours	Intended Pop	Implementation Site
PHAT	12	African American & Hispanic Youth	Schools
Be Proud! Be Responsible!	5	African American & Hispanic Youth	Community Settings
Be Proud! Be Responsible! Be Protective!	8	African American & Hispanic Pregnant or Parenting Youth	Community Settings
Cuidate!	5	Hispanic Youth	Community Settings
** Positive Youth Development	4	At Risk Youth	School/Community

PREP continued

Time Period	Latino	African A	Other	Total Pop
First Grant (10/2012 – 9/2015)				
Yr 1 Annual	82	88	10	187
Yr 2 Semi Annual	125	108	13	267
Yr 2 Annual	273	358	82	733 (all to date)
Yr 3 Semi Annual	507	419	133	1091 (all to date)
Yr 1, 2 & 3	563	469	130	1212
Second Grant (10/2015 – present)				
Yr 1 Semi Annual	275	62	17	354
Yr 1 Annual	342	86	29	457
Yr 2 Semi Annual	851	292	43	1186 (all to date)

Participant Demographics (from 2/17)

Measure	Intended Pop	Numbers	Total
Gender	Male Female	446 516	972
Race/Ethnicity	African American Hispanic Other	239 687 46	
Sexual Orientation	Straight Gay/Lesbian Bisexual Transgender Questioning	866 11 49 1 31	
High Risk	Pregnant/Parenting Foster Care Juvenile D Center Runaway Homeless	35 3 6 3 2	

REFLECTIVE ASSESSMENT – SWOT ANALYSIS

STRENGTHS

- Quality of AFC's relationships with school and community:
  - Encourages other schools & organizations to get involved in the project
  - Provides relevant and accurate info to youth and parents
  - Allows AFC to continuously surpass outreach targets: Yr2 goal: 350 and Yr2Qr1 outreach: 515
- Passion and commitment of AFC's team
  - Shared desire to achieve AFC's mission: reducing pregnancy & STD rates among high-risk teens
  - Students' positive testimonies, students' desire to re-enroll in program, mentorship requests/opportunities

REFLECTIVE ASSESSMENT – SWOT ANALYSIS

WEAKNESSES/THREATS

- Training/module completion in allotted time
- Previously - School scheduling, participant attrition, completion of follow-up surveys

OPPORTUNITIES

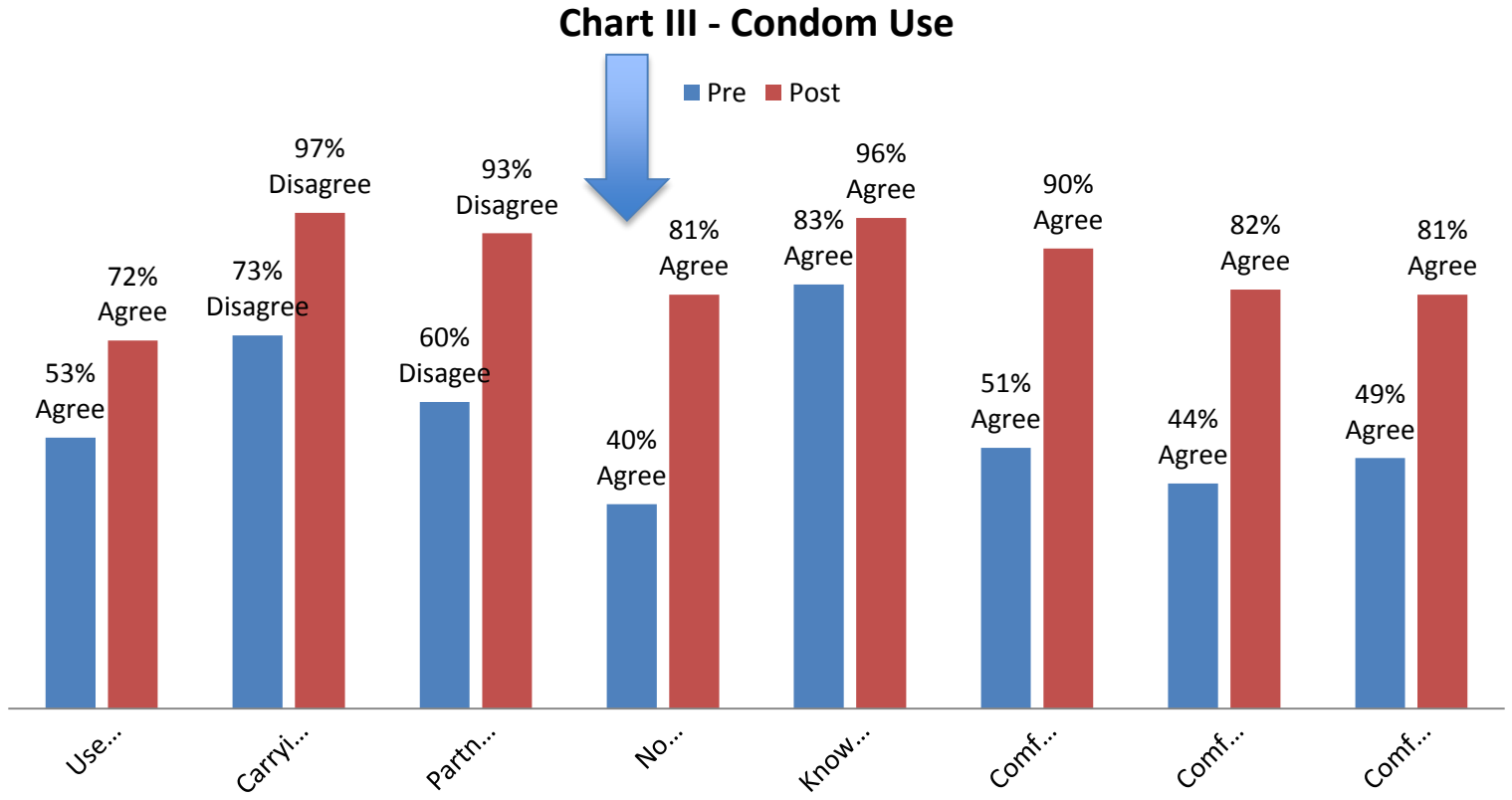
- Hiring additional program facilitators

Audience Poll #3

- Does your program have the infrastructure to receive real time or near real time feedback on program processes, outcomes, and impacts?
  - Yes
  - No
  - I don’t know

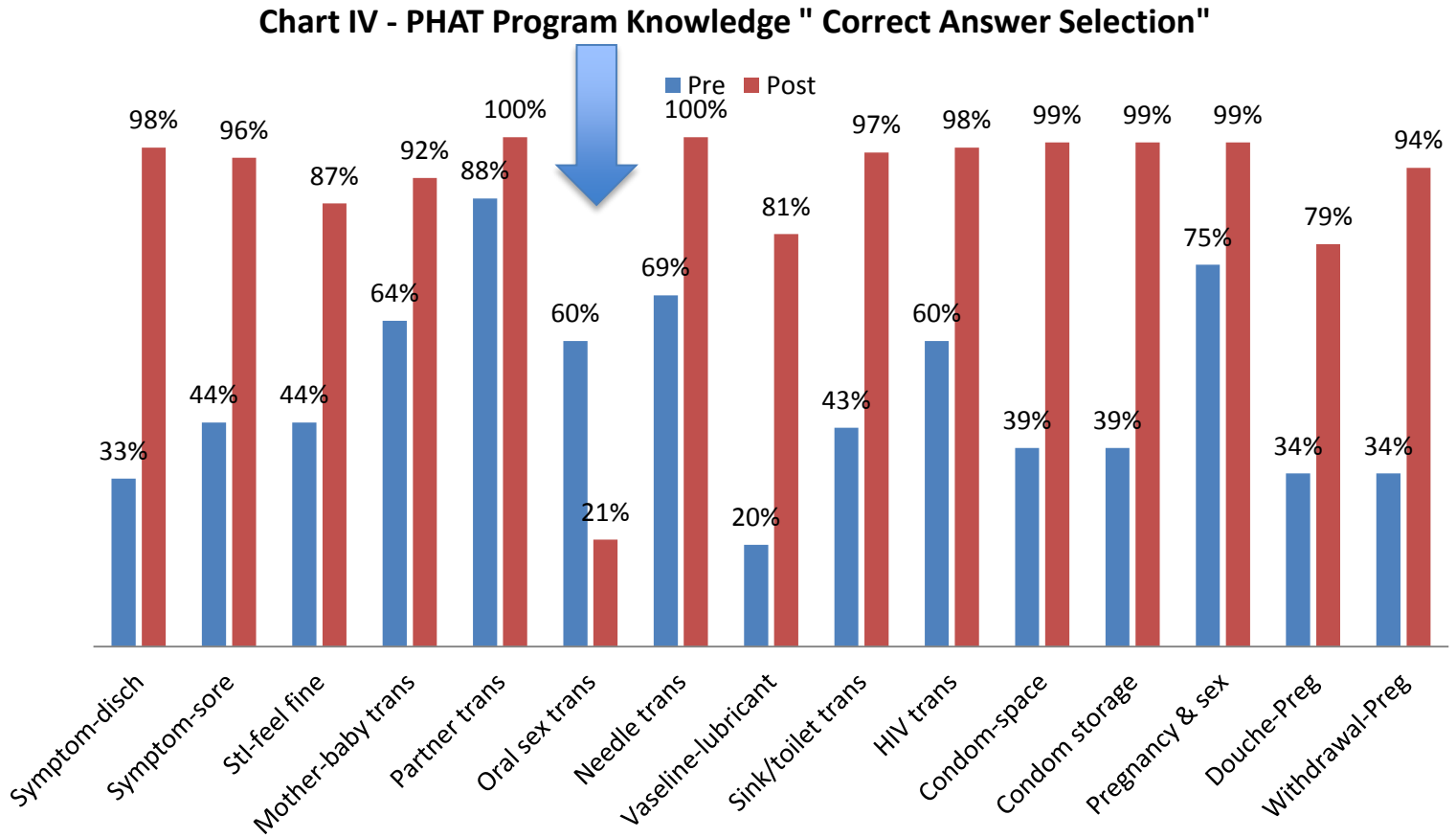
PREP OUTCOMES

Example: No condom – No sex



PREP OUTCOMES

Example: Oral Sex Transmission



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PREP IMPACT

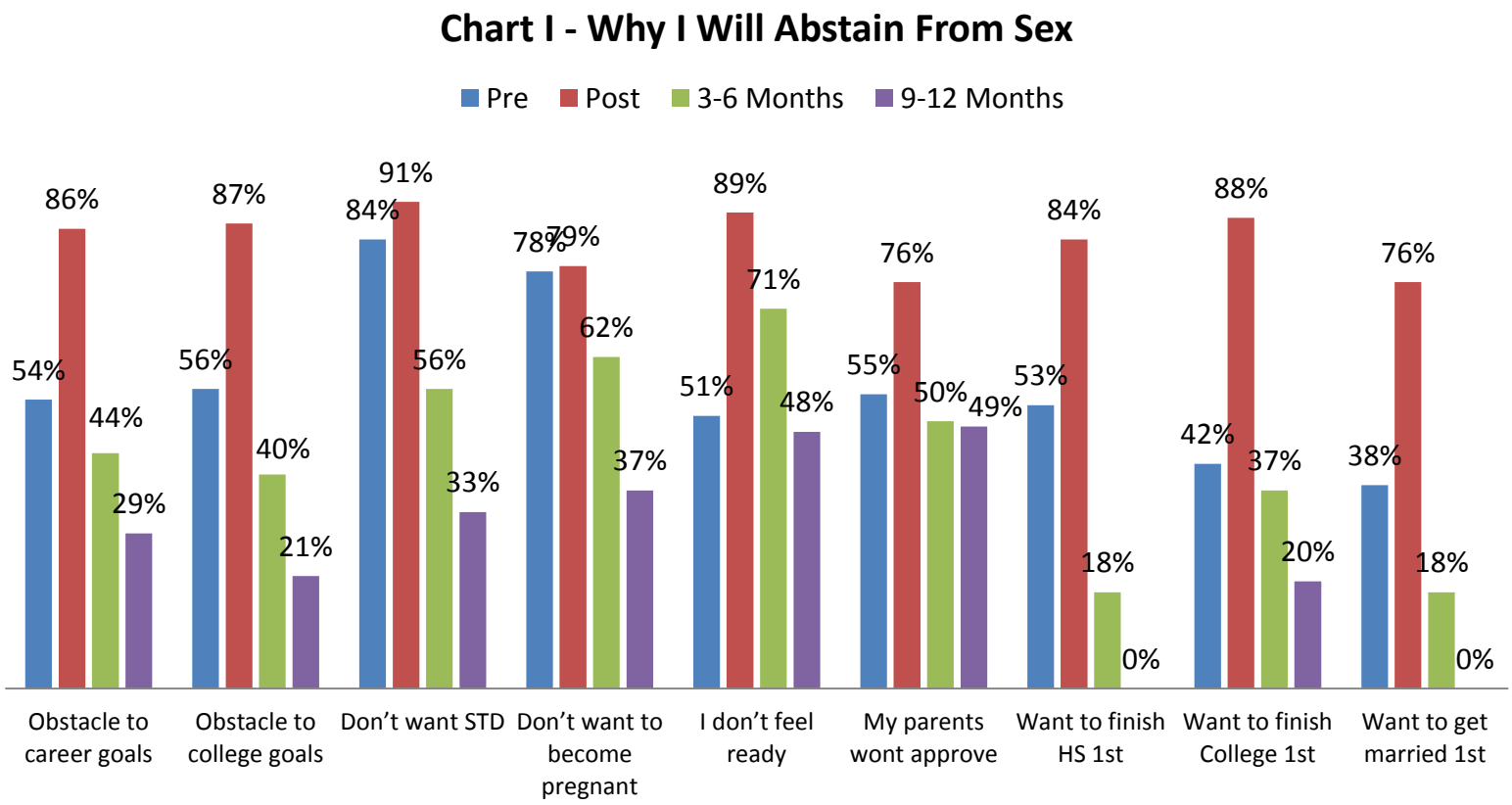
Chart I - Why I Will Abstain From Sex
Pre
Post
3-6 Months
9-12 Months
54%
86%
44%
29%
56%
87%
40%
21%
84%
91%
56%
33%
78%
79%
62%
37%
51%
89%
71%
48%
55%
76%
50%
49%
53%
84%
18%
0%
42%
88%
37%
20%
38%
76%
18%
0%
Obstacle to career goals
Obstacle to college goals
Don't want STD
Don't want to become pregnant
I don't feel ready
My parents wont approve
Want to finish HS 1st
Want to finish College 1st
Want to get married 1st

PREP IMPACT

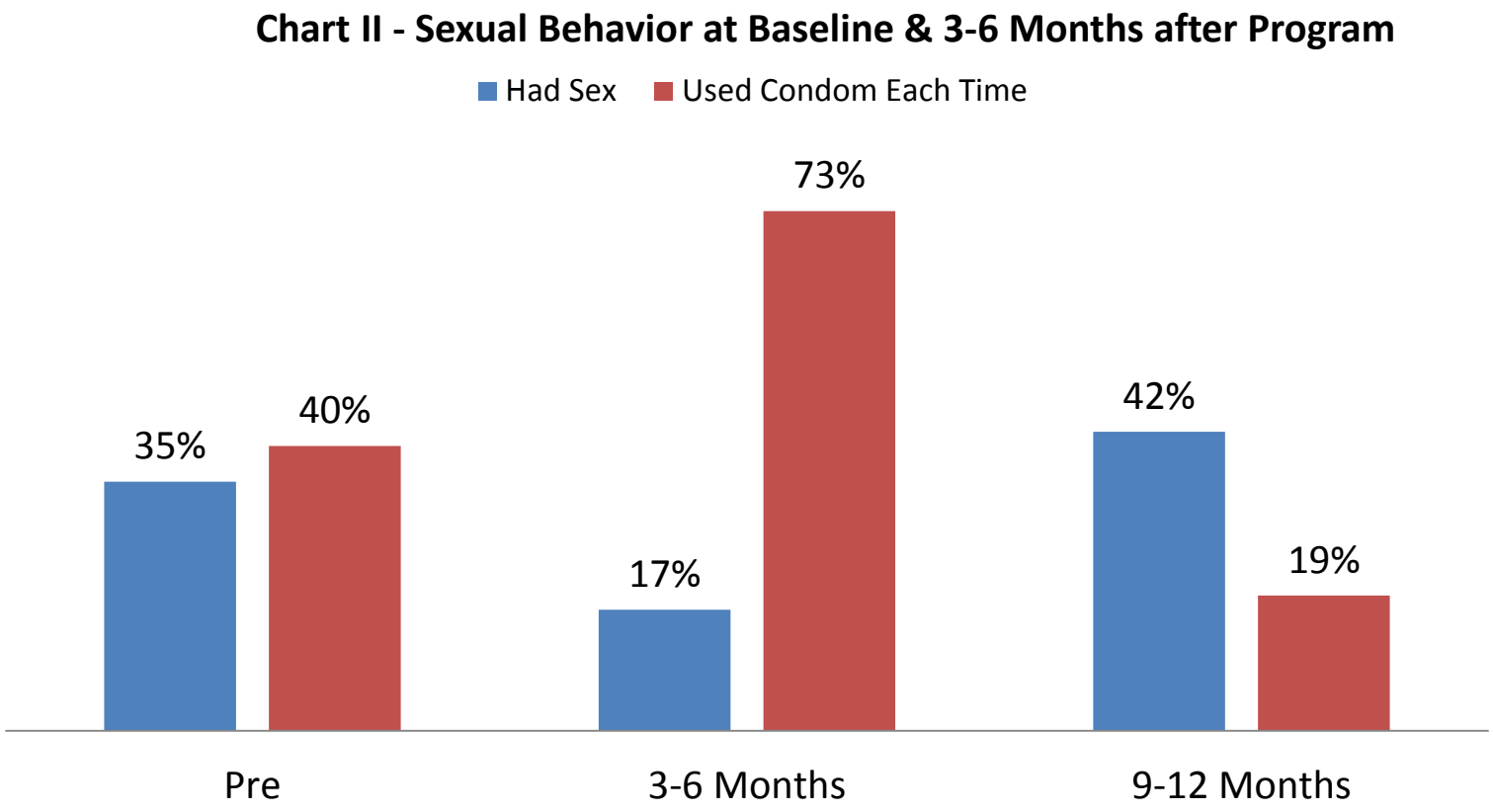
Chart II - Sexual Behavior at Baseline & 3-6 Months after Program
Had Sex
Used Condom Each Time
35%
40%
17%
73%
42%
19%
Pre
3-6 Months
9-12 Months

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Continuous Quality Improvement: Experiences from California PREP

Sarah Leff, MPH and Mara Decker, DrPH

U.S. Department of Health and Human Services
Administration for Children, Youth and Families
Family and Youth Services Bureau
Personal Responsibility Education Program (PREP)

Acknowledgements

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- The CA PREP team at the Maternal, Child and Adolescent Health Division of the California Department of Public Health
- Our partners at the University of California, San Francisco, and ETR Associates
- CA PREP sub-awardees for their dedication and commitment to serving youth in communities across our state

California PREP is made possible by grant number 1701CA PREP from the Family & Youth Services Bureau.

Overview of CA PREP presentation

- Background on CA PREP grant structure and programming
- CA PREP by the numbers
- CA PREP's CQI approach
  - Overview of process (Continuous Program Improvement Road Map)
  - Measures and tools
  - Using the results
  - Findings
  - Lessons learned

CA PREP grant structure

State PREP grantee

California Department of Public Health/Maternal, Child and Adolescent Health Division

Evaluation and technical assistance support

University of California, San Francisco

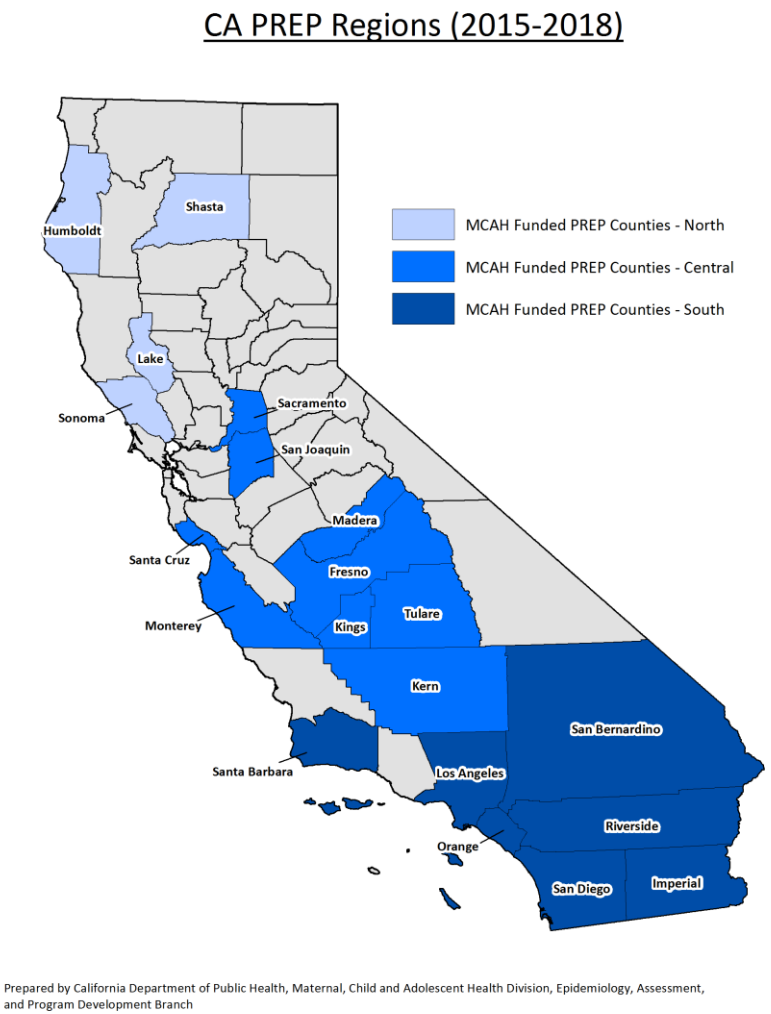
Training, implementation, and data collection support

ETR Associates

Implementation with youth

CA PREP Sub-awardees

CA PREP programming



Current program cycle (2015-2018)

- 22 sub-awardees in 20 counties
- Eligibility based on the California Adolescent Sexual Health Needs Index

Target populations:

- Youth in high-need geographic areas
- Homeless/runaway youth
- Youth in alternative/continuation schools
- Youth in foster care or juvenile justice
- LGBTQ youth
- Youth in a mental health or substance use treatment program
- Youth with special needs
- Migrant farmworker youth
- Expectant and parenting female youth

CA PREP programming

- Five program models to meet the needs of diverse settings and populations:
  - Be Proud! Be Responsible!
  - Sexual Health and Adolescent Risk Prevention (SHARP)
  - ¡Cuídate!
  - Power Through Choices
  - Making Proud Choices
- Settings include schools, community-based organizations, juvenile justice facilities, foster care, shelters, and others

CA PREP by the numbers

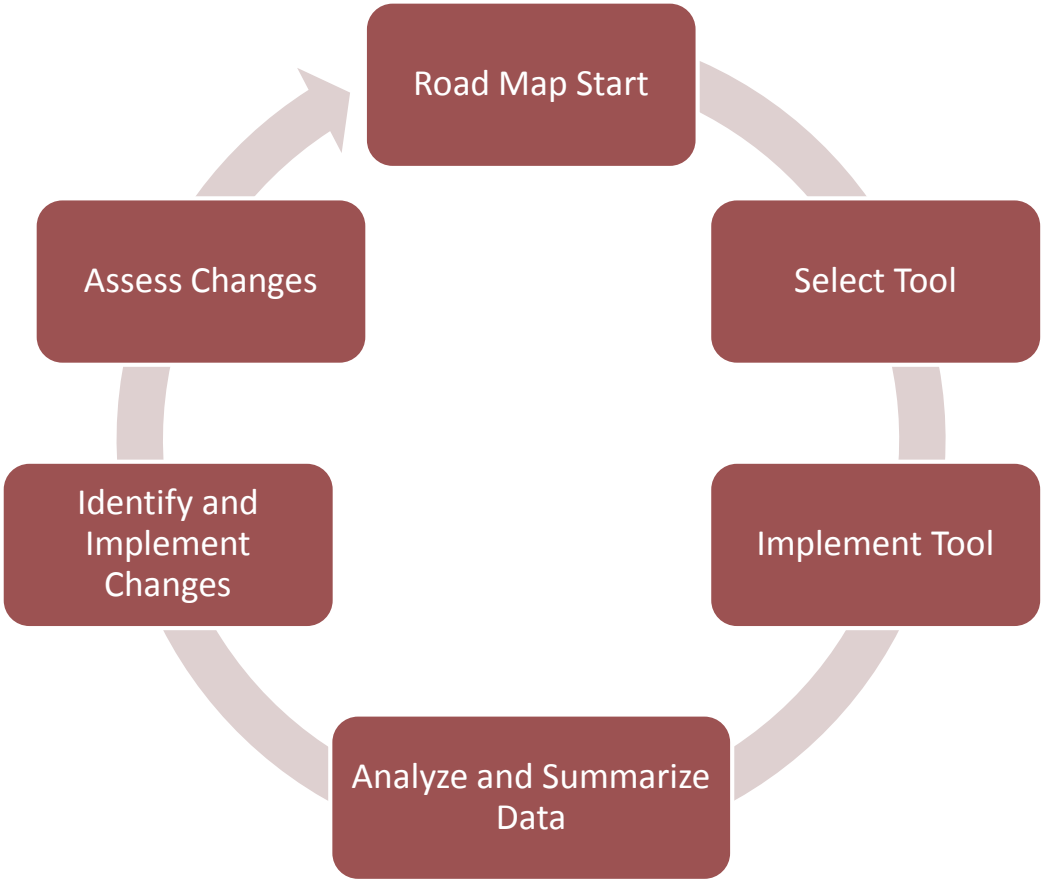
- Since the start of the 2015-2018 program cycle:
  - 17,856 youth attended at least one program session
  - 88.8% (15,861 youth) completed the program
  - 1,412 cohorts were implemented across 254 unique sites
- CA PREP youth snapshot:*
  - The average age of CA PREP participants is 15 years old
  - 54% male and 44% female
  - The majority of youth served self-identify as Hispanic (71%)

**Data are from CA PREP program cycle 2, year 1 (covers data collection from October 1st, 2015-June 30th, 2016). Due to missing data, numbers may not total to 100%.*

CQI approach

- High-quality data collection
- Meaningful sharing of results with sub-awardees and partners
- Partnered approach to program monitoring and implementation
- Use of data to improve statewide and local efforts:
  - Identify areas for training and support
  - Identify best practices and areas for improvement
- Dissemination of data that can be shared with communities

Continuous Program Improvement Road Map



Source: CPI Tool Kit *ETR Associates, 2011. Supported with funds from CA Dept. of Public Health, Office of Family Planning, contract # 10-95452*

Measures and tools

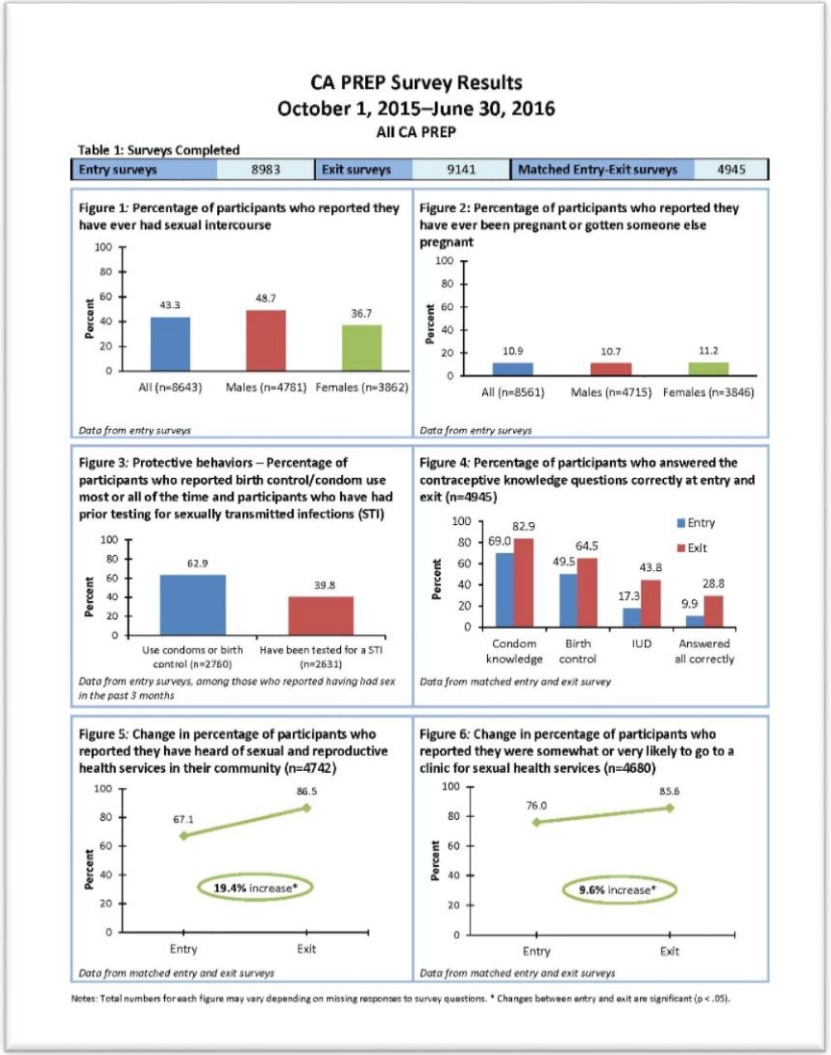
- Attendance logs
- Fidelity checklists
- Entry and exit surveys
- Supervisor observations
- Facilitator self-assessments
- Semi-annual implementation reporting
- *Ad hoc* activities

Using the results

- Data dashboards
  - Survey results
  - Attendance and fidelity
- Implementation check in calls
- PREP Connect calls

Informs future:

- Trainings
- Technical assistance
- Site visits



CA PREP Survey Results
October 1, 2015–June 30, 2016
All CA PREP

Table 1: Surveys Completed

Entry surveys	8983	Exit surveys	9141	Matched Entry-Exit surveys	4945

Figure 1: Percentage of participants who reported they have ever had sexual intercourse

Data from entry surveys

Figure 2: Percentage of participants who reported they have ever been pregnant or gotten someone else pregnant

Data from entry surveys

Figure 3: Protective behaviors – Percentage of participants who reported birth control/condom use most or all of the time and participants who have had prior testing for sexually transmitted infections (STI)

Data from entry surveys, among those who reported having had sex in the past 3 months

Figure 4: Percentage of participants who answered the contraceptive knowledge questions correctly at entry and exit (n=4945)

Data from matched entry and exit survey

Figure 5: Change in percentage of participants who reported they have heard of sexual and reproductive health services in their community (n=4742)

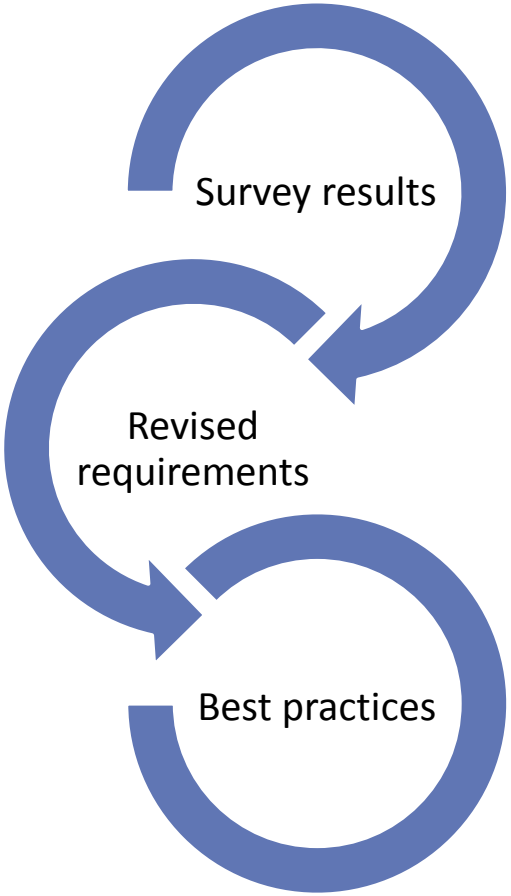
Data from matched entry and exit surveys

Figure 6: Change in percentage of participants who reported they were somewhat or very likely to go to a clinic for sexual health services (n=4680)

Data from matched entry and exit surveys

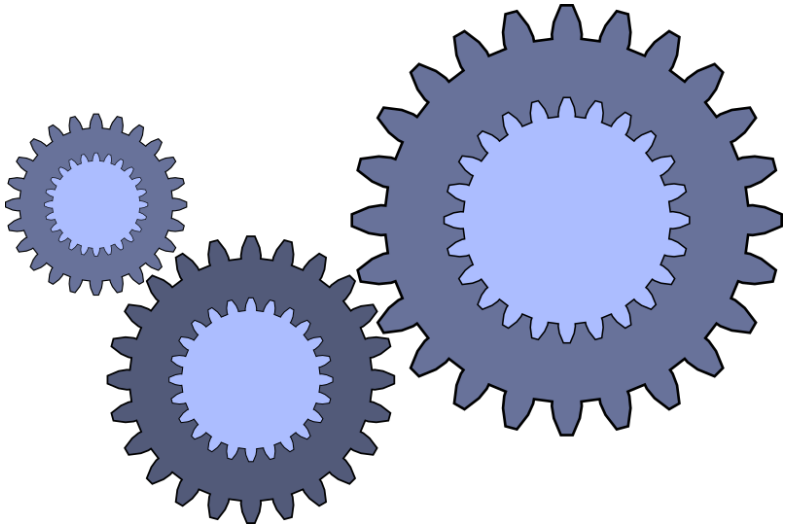
Notes: Total numbers for each figure may vary depending on missing responses to survey questions. * Changes between entry and exit are significant ($p < .05$).

Findings: Clinical linkages



Lessons learned

- Ensure results get shared and used
  - Consider data utility and burden
- Stress results are for improvement efforts, not punitive
- Dynamic and iterative process



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Questions and Answers

Webinar Evaluation

- Please complete the following evaluation related to your experience with today's Webinar.

http://www.surveygizmo.com/s3/3626286/Evaluation-and-CQI-Webinar

- If you attended the Webinar with other team members, please share the link and complete the evaluation separately.