Performance Management and Quality Improvement 101
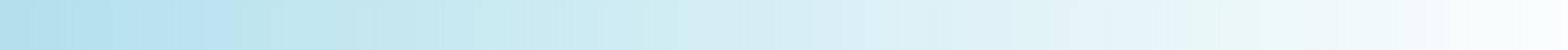
Jack Moran, PhD

Public Health Foundation

Introduction To Performance Management

"Performance management is the practice of actively using performance data to improve the public's health.

This practice involves the strategic use of performance measures and standards to establish performance targets and goals."

"Performance Management is what you do with the information you've developed from measuring performance."

Source: Guidebook for Performance Measurement

"Know where to find the information and how to use it - That's the secret of success" - Albert Einstein

What is Performance?

➢ Performance is the sum of behavior plus results:

Performance = Behavior + Results

➢If you only focus on behaviors, you won't notice if you did not get desired results

➢If you only focus on results, you won't notice if your employees don't behave correctly

Turning Point Performance Management Model

➢ Performance management is the strategic use of performance standards, measures, progress reports, and ongoing quality improvement efforts to ensure an agency achieves desired results.

➢ By improving performance and quality, public health systems can save lives, cut costs, and get better results (efficiency and effectiveness) by managing performance.

➢ In the case of public health, the ultimate purpose of these efforts is to improve the public's health.

Turning Point Performance Management Model
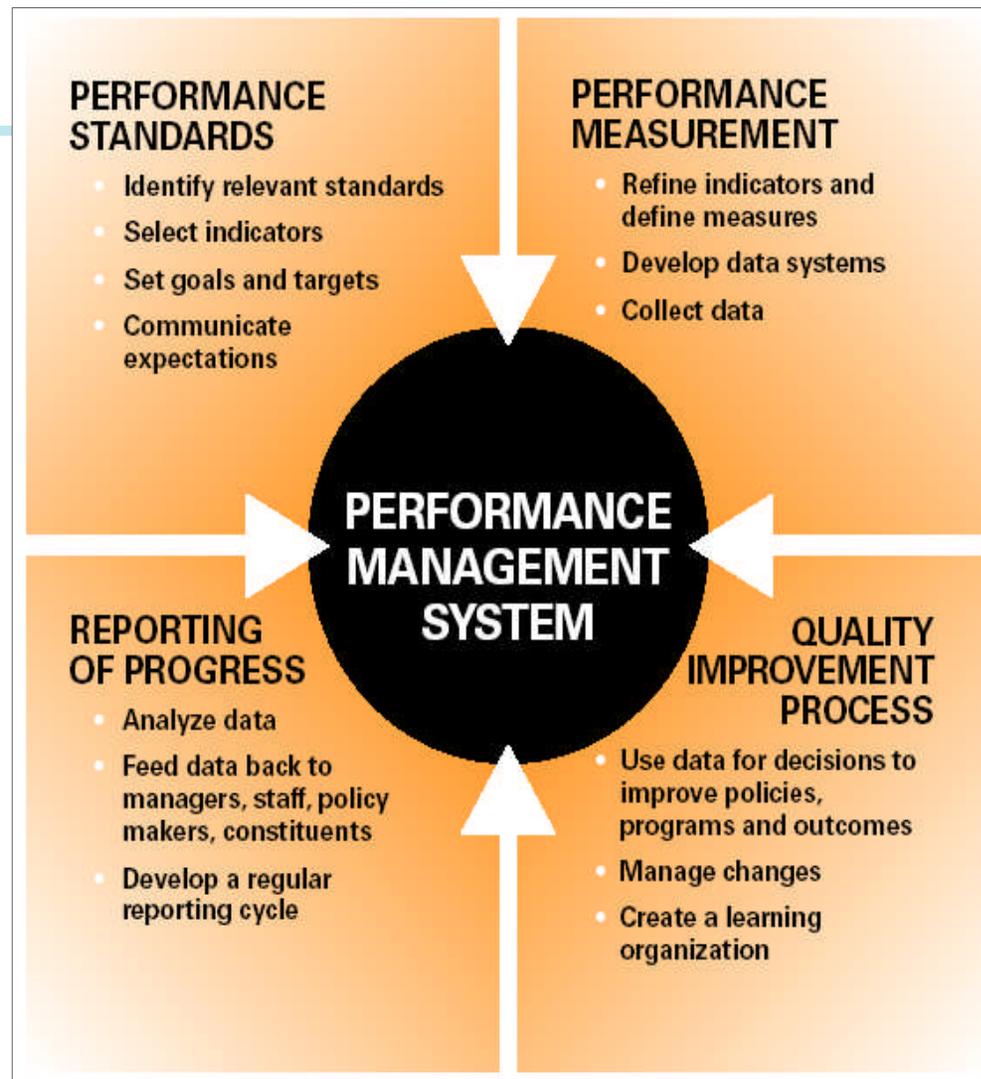
Definitions

➢ **Performance Standards** are the establishment of organizational or system performance standards, targets, and goals to improve public health practices.

➢ **Performance measures** are the development, application, and use of performance measures to assess achievement of such standards.

➢ **Reporting of Progress** is the documentation and reporting of progress in meeting standards and targets and sharing of such information through feedback.

➢ **Quality Improvement** is the establishment of a program or process to manage change and achieve quality improvement in public health policies, programs, or infrastructure based on performance standards, measures, and reports.

Data

> Public health departments usually have lots of data on health status and some of the limitations with these data are:
>> Aggregate level
>> Timeliness
>> Reliability and Validity

> What's missing:
>> Process data
>> Customer data

Manage and Improve Performance

Data $\longrightarrow$ **Information** $\longrightarrow$ **Knowledge**

Behavior $\longrightarrow$ **Attitudes** $\longrightarrow$ **Better Results**

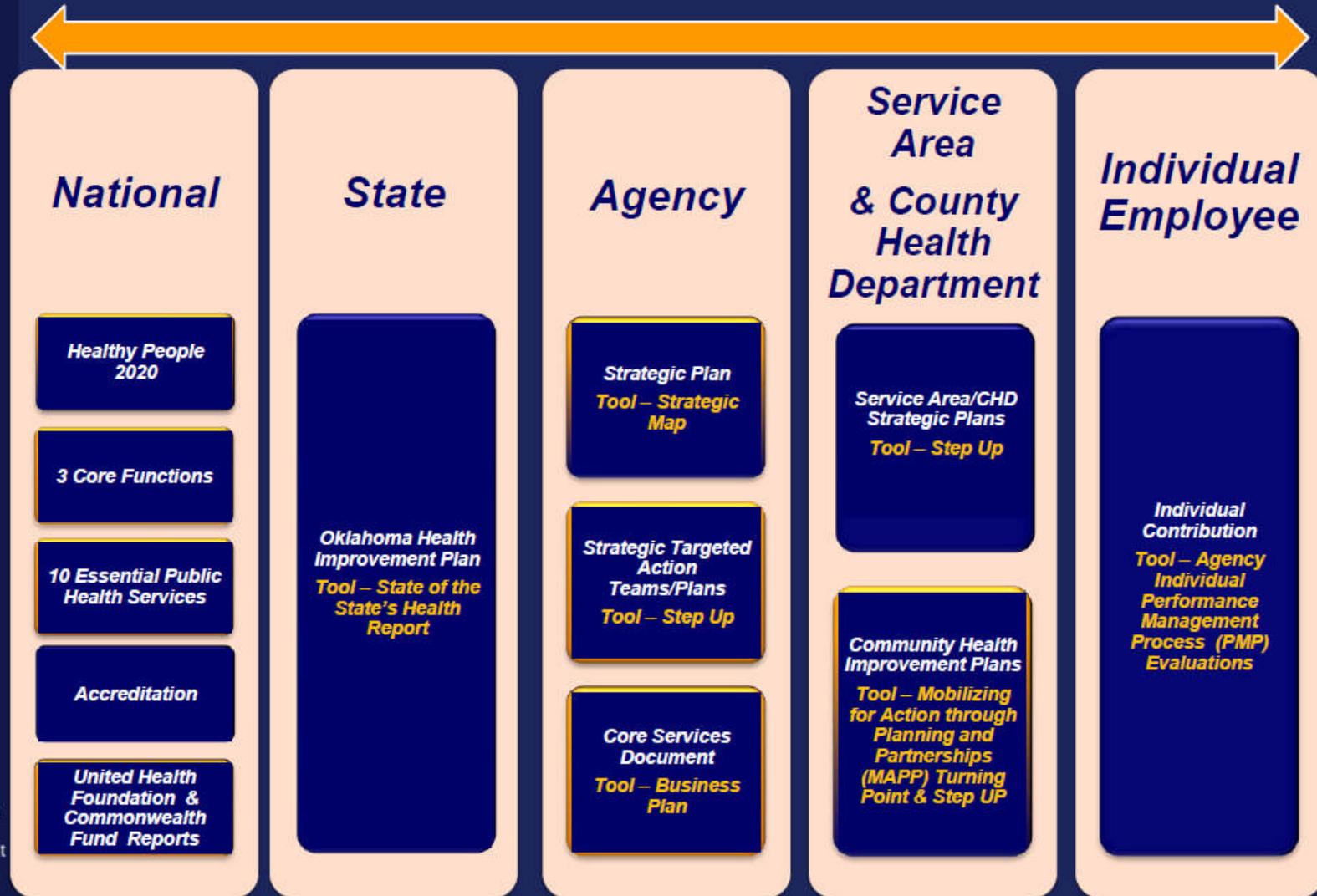"In order for these results to be achieved, performance management practices must be integrated or institutionalized into routine public health processes, and all players within an agency or program need to understand and be invested in his or her role within a larger system."

The Public Health Quality Improvement Handbook, R. Bialek, G. Duffy, and J. Moran, ASQ Quality Press, 2009, pp. 16

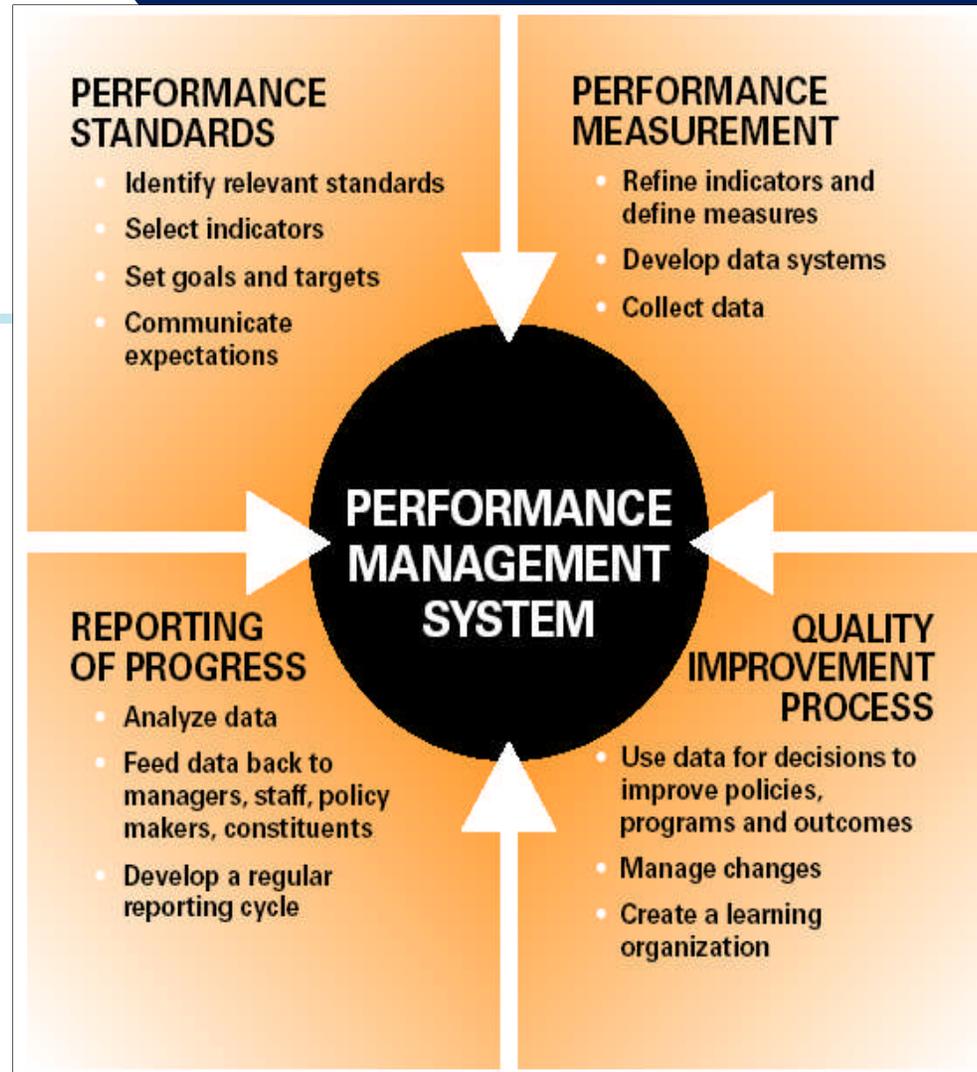# Tying It All Together
OSDH Performance Management Model

Oklahoma State Department of Health

National	State	Agency	Service Area & County Health Department	Individual Employee
Healthy People 2020		**Strategic Plan** *Tool – Strategic Map*	**Service Area/CHD Strategic Plans** *Tool – Step Up*	**Individual Contribution** *Tool – Agency Individual Performance Management Process (PMP) Evaluations*
3 Core Functions	**Oklahoma Health Improvement Plan** *Tool – State of the State's Health Report*	**Strategic Targeted Action Teams/Plans** *Tool – Step Up*		
10 Essential Public Health Services			**Community Health Improvement Plans** *Tool – Mobilizing for Action through Planning and Partnerships (MAPP) Turning Point & Step UP*	
Accreditation		**Core Services Document** *Tool – Business Plan*		
United Health Foundation & Commonwealth Fund Reports				

Elements for Success

➢ Commitment of senior management in setting and maintaining a culture of performance and quality is imperative to long term success.

➢ Involving the direct workforce in the identification and resolution of performances problems on a daily basis.

PERFORMANCE STANDARDS
- Identify relevant standards
- Select indicators
- Set goals and targets
- Communicate expectations

PERFORMANCE MEASUREMENT
- Refine indicators and define measures
- Develop data systems
- Collect data

PERFORMANCE MANAGEMENT SYSTEM

REPORTING OF PROGRESS
- Analyze data
- Feed data back to managers, staff, policy makers, constituents
- Develop a regular reporting cycle

QUALITY IMPROVEMENT PROCESS
- Use data for decisions to improve policies, programs and outcomes
- Manage changes
- Create a learning organization

1. What area are you doing the best?

2. What area needs the greatest improvement?

Assessing Your Performance Management System

1. **Do you set specific performance standards, targets, or goals for your organization?**

2. **Do you have a way to measure the capacity, process, or outcomes of established performance standards and targets?**

3. **Do you document or report your organization's progress?**

4. **Do you make information regularly available to managers, staff, and others?**

5. **Do you have a quality improvement process?**

6. **Do you have a process to manage changes in policies, programs, or infrastructure that are based on performance standards, measurements, and reports?**

Rating Scale

0 – nothing in place

1 – just getting started
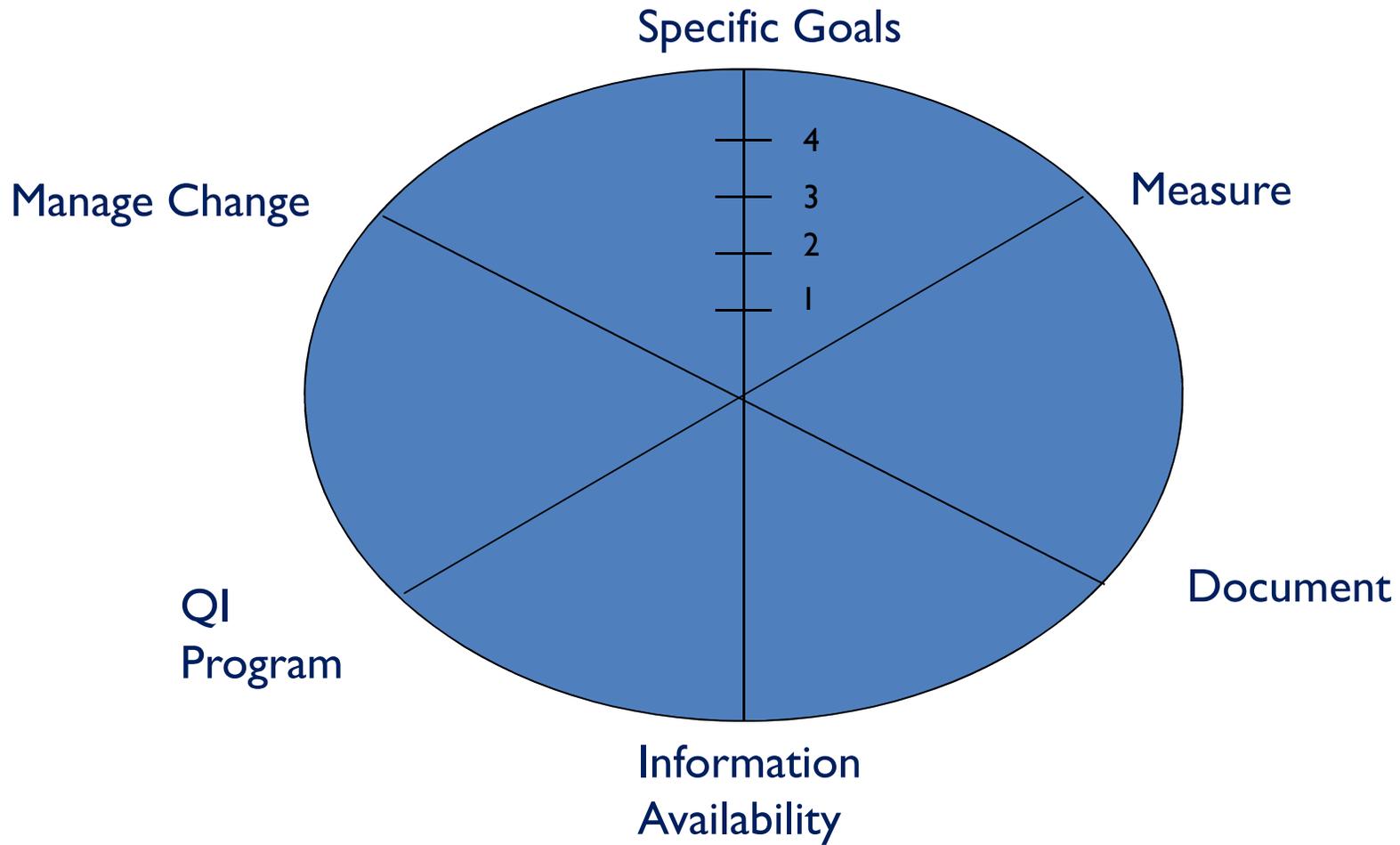
2 – moving in the right direction

3 – adequate – have made good progress over the last year

4 – very good performance and have plans in place to expand the PM program throughout the organization

5 – we have Institutionalized PM

Rating Your Current Performance Management Capability

Specific Goals

Measure

4

3

2

1

Manage Change

Document

QI
Program

Information
Availability

Some Other Models of Performance Management

Management Model

Priorities · People · Processes · Products · Progress · Performance

Performance Management

Planning Performance → Managing Performance → Reviewing Performance → Rewarding Performance → Planning Performance

Some Other Models of Performance Management

Performance Management Model

Some Other Models of Performance Management

Performance Management

- ➢ **Core performance management practices and processes generally include:**
    - ➢ goal setting
    - ➢ financial planning
    - ➢ operational planning
    - ➢ data collection
    - ➢ consolidation of data
    - ➢ data analysis
    - ➢ reporting of data
    - ➢ quality improvement
    - ➢ evaluation of results
    - ➢ monitoring of key performance indicators
    - ➢ others???

- ➢ The focus of these performance management activities is to ensure that goals are consistently met in an effective and efficient manner by an organization, a department, or an employee.
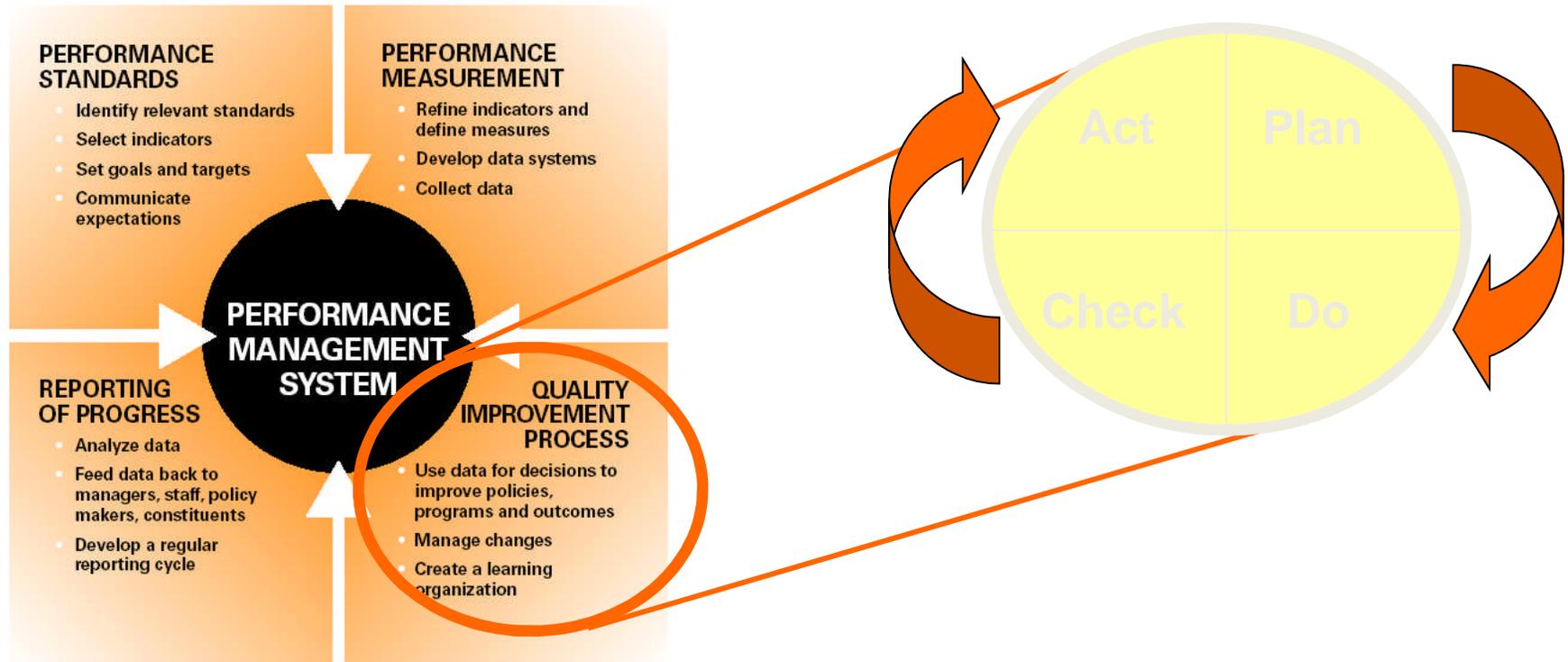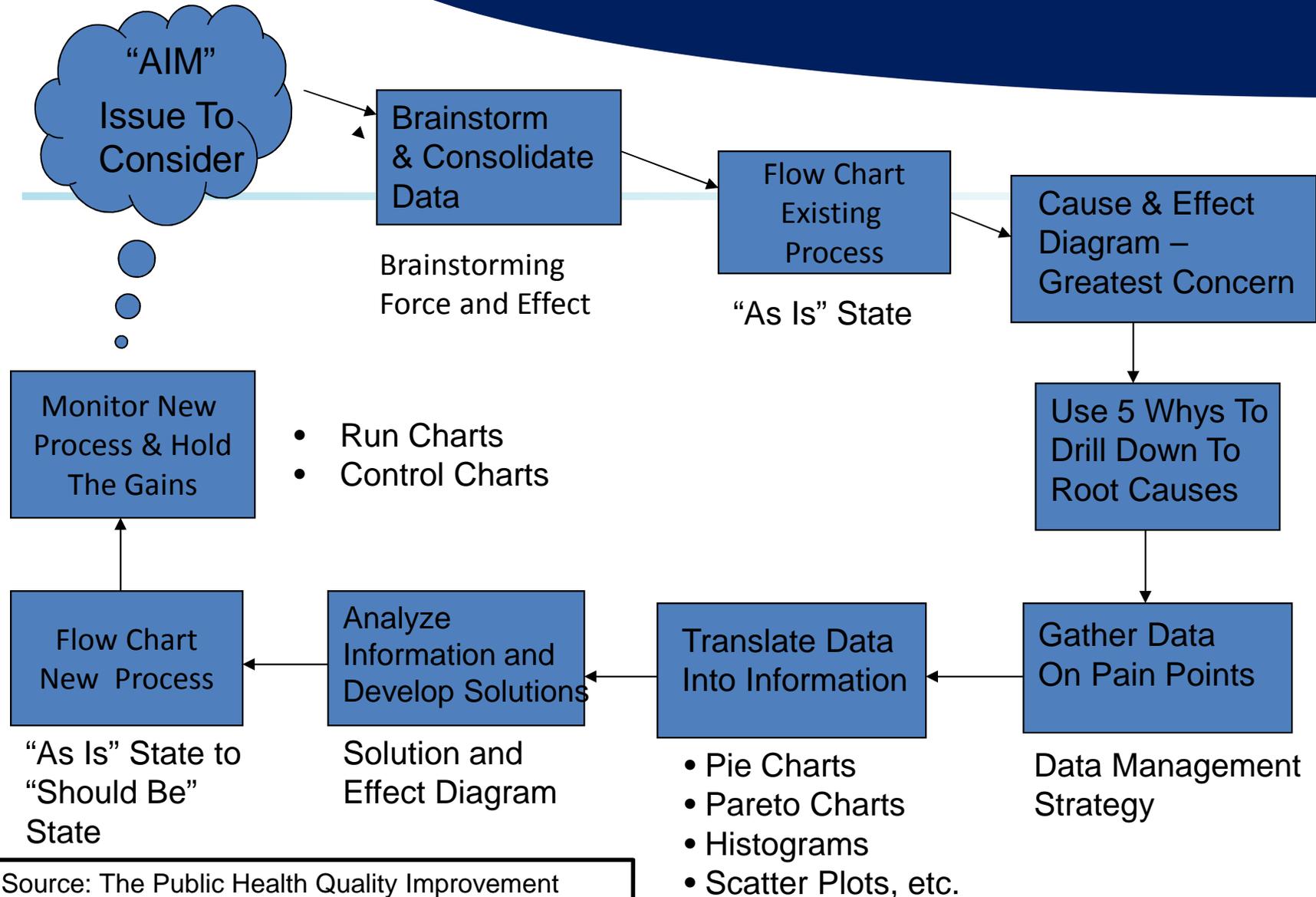
© Scott Adams, Inc./Dist. by UFS, Inc.
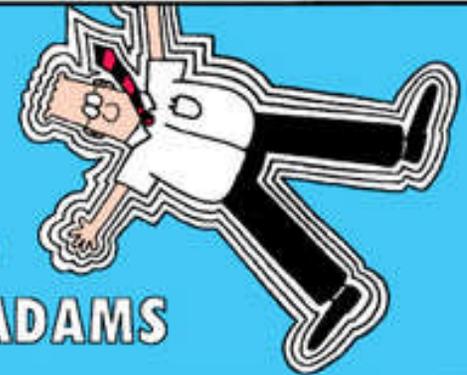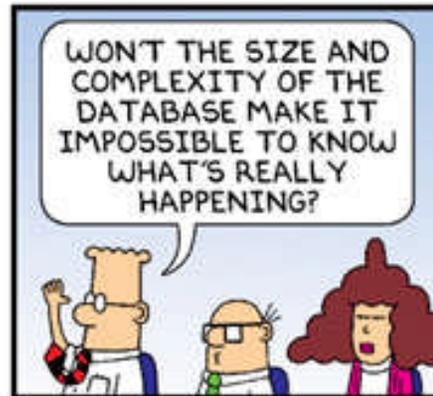
PDCA: A Quality Improvement Model

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Act

Plan

Check

Do

General Approach On How To Use The Basic Tools Of Quality Improvement

"AIM" Issue To Consider

Brainstorm & Consolidate Data

Brainstorming Force and Effect

Flow Chart Existing Process

"As Is" State

Cause & Effect Diagram – Greatest Concern

Use 5 Whys To Drill Down To Root Causes

Monitor New Process & Hold The Gains

- Run Charts
- Control Charts

Flow Chart New Process

Analyze Information and Develop Solutions

Translate Data Into Information

Gather Data On Pain Points

"As Is" State to "Should Be" State

Solution and Effect Diagram

- Pie Charts
- Pareto Charts
- Histograms
- Scatter Plots, etc.

Data Management Strategy

Source: The Public Health Quality Improvement Handbook, R. Bialek, G. Duffy, J. Moran, Editors, Quality Press, © 2009, p.160

What Is Quality?

➢ Today the most progressive view of quality is that it is defined entirely by the customer or end user and is based upon that person's evaluation of his or her entire customer experience.

➢ The customer experience is the aggregate of all the _Touch Points_ that customers have with the organization's product and services, and is by definition a combination of these.

➢ RFT

Deming Cycle of Continuous Improvement

Act → Plan

PDCA was made popular by Dr. Deming who is considered by many to be the father of modern quality control; however it was always referred to by him as the "Shewhart cycle."

The continuous improvement phase of a process is how you make a change in direction. The change usually is because the process output is deteriorating or customer needs have changed.

Check/Study

Do

Plan

1. Identify and Prioritize Opportunities

2. Develop AIM Statement

3. Describe the Current Process

4. Collect Data on Current Process

5. Identify All Possible Causes

6. Identify Potential Improvements

7. Develop Improvement Theory

8. Develop Action Plan

Do

1. Implement the Improvement

2. Collect and Document The data

3. Document Problems, Observations, and Lessons Learned

Check/ Study

1. Reflect on the Analysis

2. Document Problems, Observation, and Lessons learned

Act

Adopt → Standardize

Adapt → **Do**

Abandon → **Plan**

The Basic Tools of QI

➤ Flow Chart

➤ Cause and Effect Diagrams

➤ Pareto Chart

➤ Check Sheet

➤ Histogram

➤ Scatter Diagram

➤ Control Chart

People Centric

Data Centric

Learn to see your data.

VOP

Patient Flow

Enter Building

Greeter

Clerical

Screener

Okay to vaccinate? —— Possibly not —→ Triage

Okay to vaccinate? —— Yes —→ RN

Okay to vaccinate? —— Yes → RN

Need medical attention? —— No —→ Exit

Exit —→ Leave Building

Need medical attention? —— Yes —→ EMT

Okay to vaccinate? (Triage) —— No —→ Exit

EMT —→ Is patient able to leave on own? —— Yes —→ Exit

Is patient able to leave on own? —— No —→ EMT transports patient to medical facility —→ Leave Building

Swim Lanes

OSTDS Construction Permit: Site Evaluation Submitted subprocess

Spaghetti Diagram:
Health Department Administrative Office Flow

40 Feet

20 Feet

Prep printed documents for mailing	Generic Computer Work Station	Envelope Storage different types and sizes of envelopes	Inserts for Letters	Printers
1	2	3	4	5

Management

4 Supervisors

9

6	7	8
Stuff Envelopes With Pamphlets, etc	Retruned items from mail area – incorrect labeling	Type up form for Fed Ex Mailing

1st Floor

10 Feet

10	11	12
Labeling for Fed Ex	Mail Sort for location	Take Mail to Post Office Pick-up

Document Wasted Movement
Miles walked per day

40 Feet

Cause and Effect Diagram

Test Location

Client

Inconvenient

Don't see benefit

Don't Want Test

Too Public

Fearful

Poor
HIV Testing

Not Client
Centered

Not Respectful

Not Offered

Poor Experience

Counseling

Staff

Pareto Principle:
20% of sources cause 80% of any problem

Why do fewer clients in clinic B receive HIV tests?

Reasons	#
Too much time	3
Client does not want	5
Not offered	39
Unable to return	1
Language barriers	2
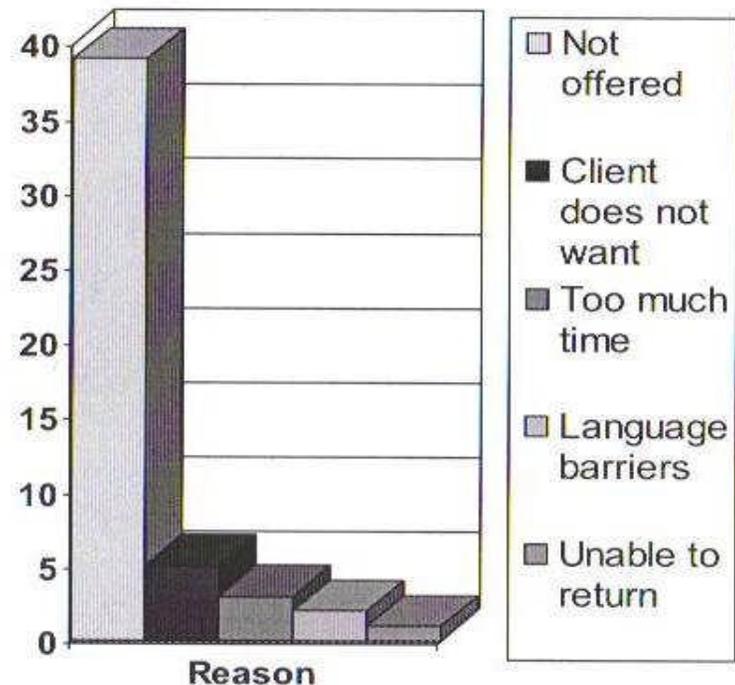
- **80% of process defects arise from 20% of the process issues.**

- **80% of delays in schedule arise from 20% of the possible causes of the delays.**

- **80% of client complaints arise from 20% of your services.**

DCHD
Immunization Checklist for the Clinics

√	**Front Desk**
	➢ Register patient in HMS ➢ Cross Check for duplicate patients
	➢ Access FL Shots for Patient Information "Search FL Shots"
	➢ Ask for address, phone number, and email address (change information if necessary)
	➢ Import updates to HMS
	➢ Make sure you have selected the proper Current Immunization Provider (CIP) status is correct in FL Shots
	➢ Print Immunization History from FL Shots attach to Superbill/Chart along with Insurance verification
	Staff Signature

√	**RN/LPN/MA/HST**
	➢ Greet patient
	➢ Assess for needed vaccines
	➢ Explain vaccines to be given today
	➢ Give VIS to patient/parent
	➢ Ask for any questions
	➢ Give Injections
	➢ Explain after care instructions, invite questions
	➢ Document immunization in Florida Shots
	➢ Give patient an updated record of shots w/new due date
	➢ Tell patient when to return for next vaccinations
	➢ Document in medical records
	Staff Signature

√	**Billing Clerk**
	➢ Process Superbill
	➢ Process any collections
	➢ Ask did you get your updated record of shots?
	➢ Release Client
	Staff Signature

Patient Label

Location Checklist

School Nurse Record of Treatment

Student Name_____ School_____ Date_____ Time____

Grade_____ or Age_____ Name of School Nurse_____

Reason(s) for Referral (mark all that apply)
____ Breathing Difficulty   ____ Congestion   ____ Cough   ____ Cramps
____ Abrasion   ____ Cut   ____ Tooth/Mouth Injury   ____ Ears
____ Eyes   ____ Fever   ____ Head Injury   ____ Insect Bite
____ Nosebleed   ____ Pain   ____ Rash   ____ Sore Throat
____ Stomach Ache   ____ Vomiting   ____ Other_____

Location of Injury/Problem (indicate on Diagram)
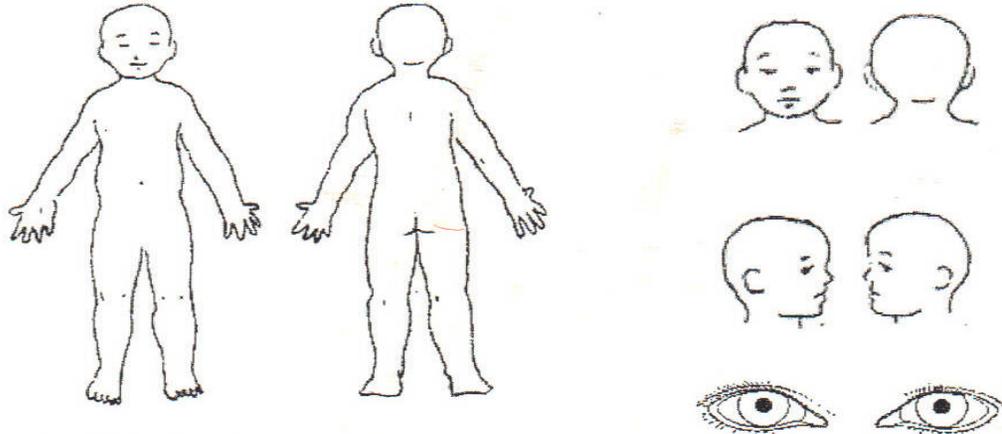
Location Injury Occurred
____ Playground   ____ Classroom   ____ Lunchroom   ____ Gym
____ Track/Athletic Field   ____ Restroom   ____ Hallway   ____ Other_____

Action Taken (mark all that apply)
____ Rest   ____ Ice Pack   ____ Splint
____ Wound Cleaned and band-aid   ____ Snack   ____ Returned to Class
____ Parent Contacted: Name_____ Phone____
____ Alternate Emergency Contact Person Contacted: Name_____ Phone____
____ Referred to Doctor
____ Referred to Hospital or Emergency Care Center
____ 911 called -- Response Time_____ Transported (circle): Yes or No
____ Follow up completed: Date_____

Comments:_____
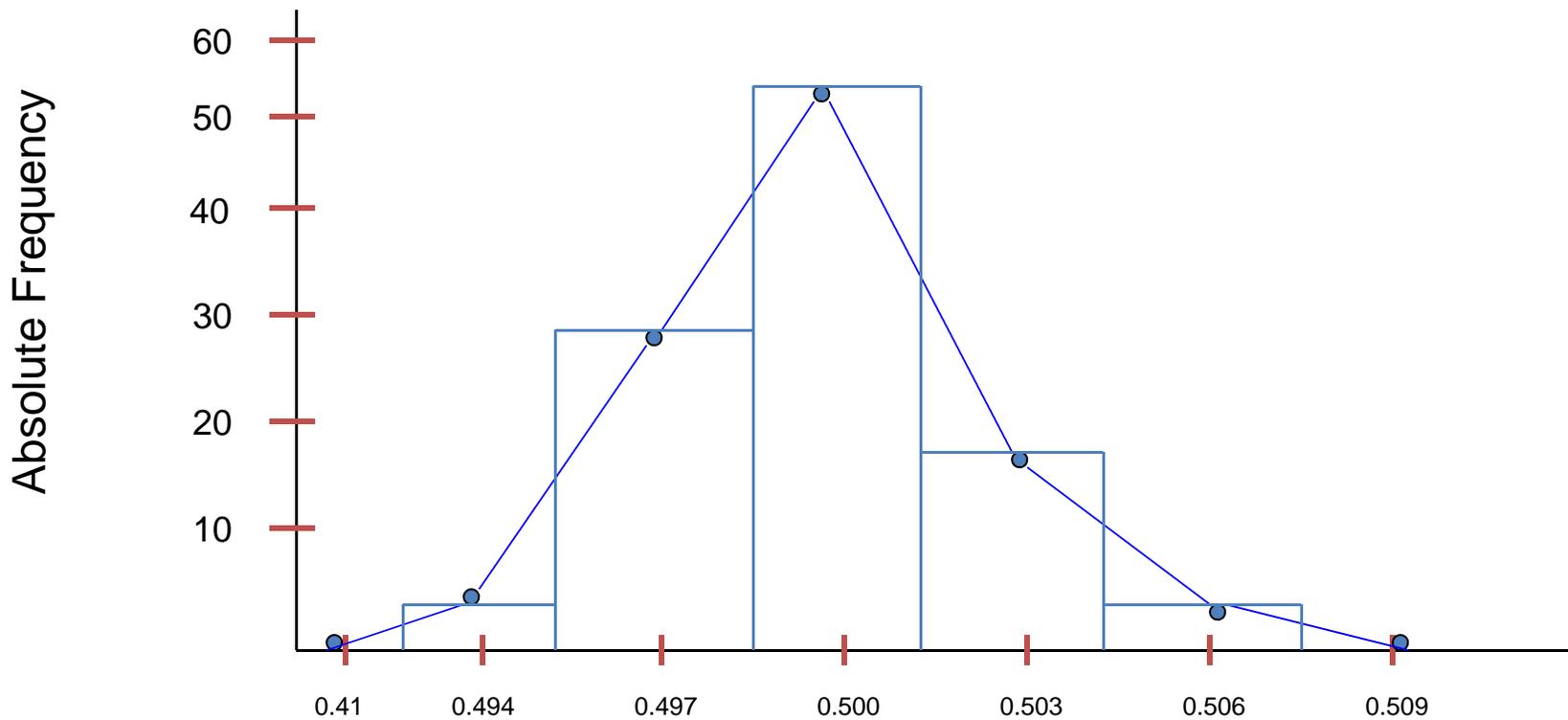_____
_____

Nurse Signature_____
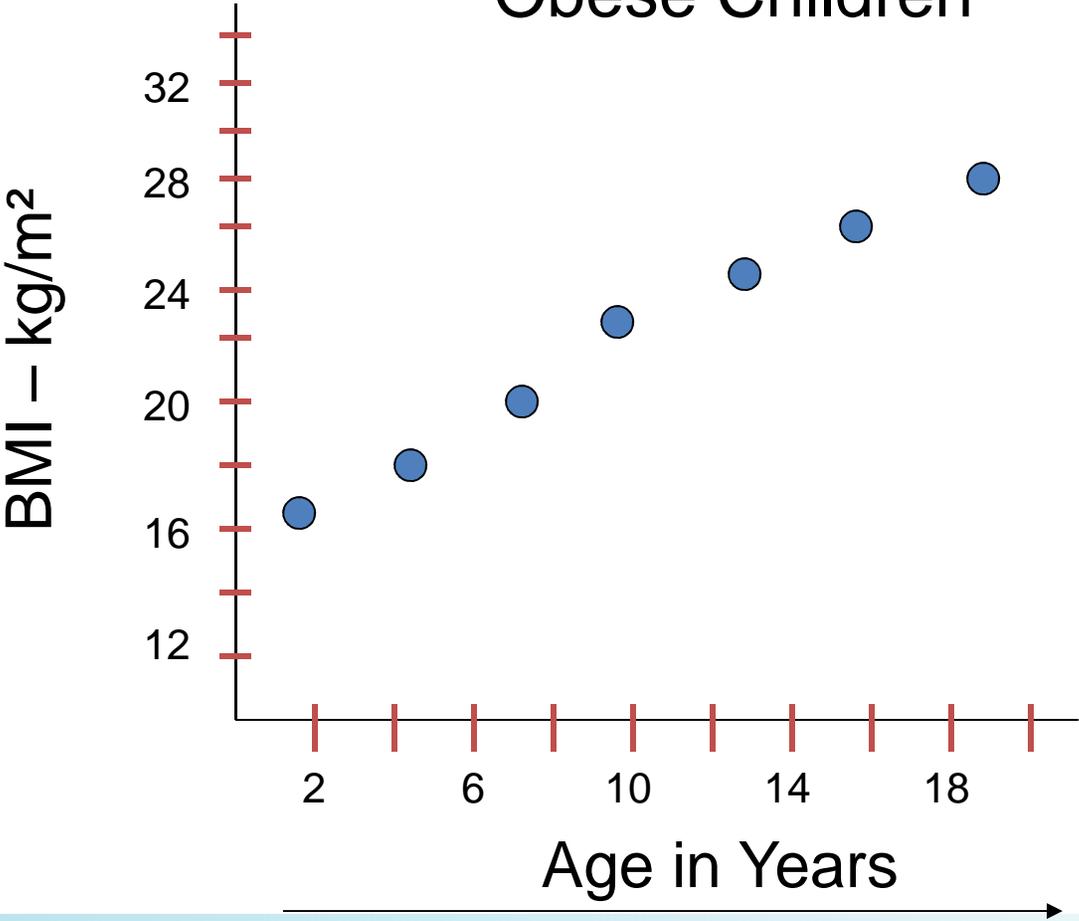
Grouped Frequency Distribution Table

Cell Boundary	Cell Mid-Point	Measured In Inches	Tally	Grouped Absolute Frequency	Absolute Cumulative Frequency	Relative Frequency	Cumulative Relative Frequency
.5075							
	.506	.507		3	100	0.01	1.00
		.506	I				
.5045		.505	II		99	0.02	0.99
		.504	IIII		97	0.04	0.97
	.503	.503	IIIII IIIII	29	93	0.10	0.93
.5015		.502	IIIII IIIII IIIII		83	0.15	0.83
		.501	IIIII IIIII IIIII III		68	0.18	0.68
		.500	IIIII IIIII IIIII IIIII I	53	50	0.21	0.50
	.500	.499	IIIII IIIII IIII		29	0.14	0.29
.4985		.498	IIIII IIII		15	0.09	0.15
		.497	IIII	14	6	0.04	0.06
.4955	.497	.496	I		2	0.01	0.02
		.495	I	1	1	0.01	0.01
	.494	.494					
.4925		.493					

Frequency Polygon & Histogram – Grouped Data

Scatter Plot

Obese Children — BMI – kg/m² vs Age in Years

Run Chart
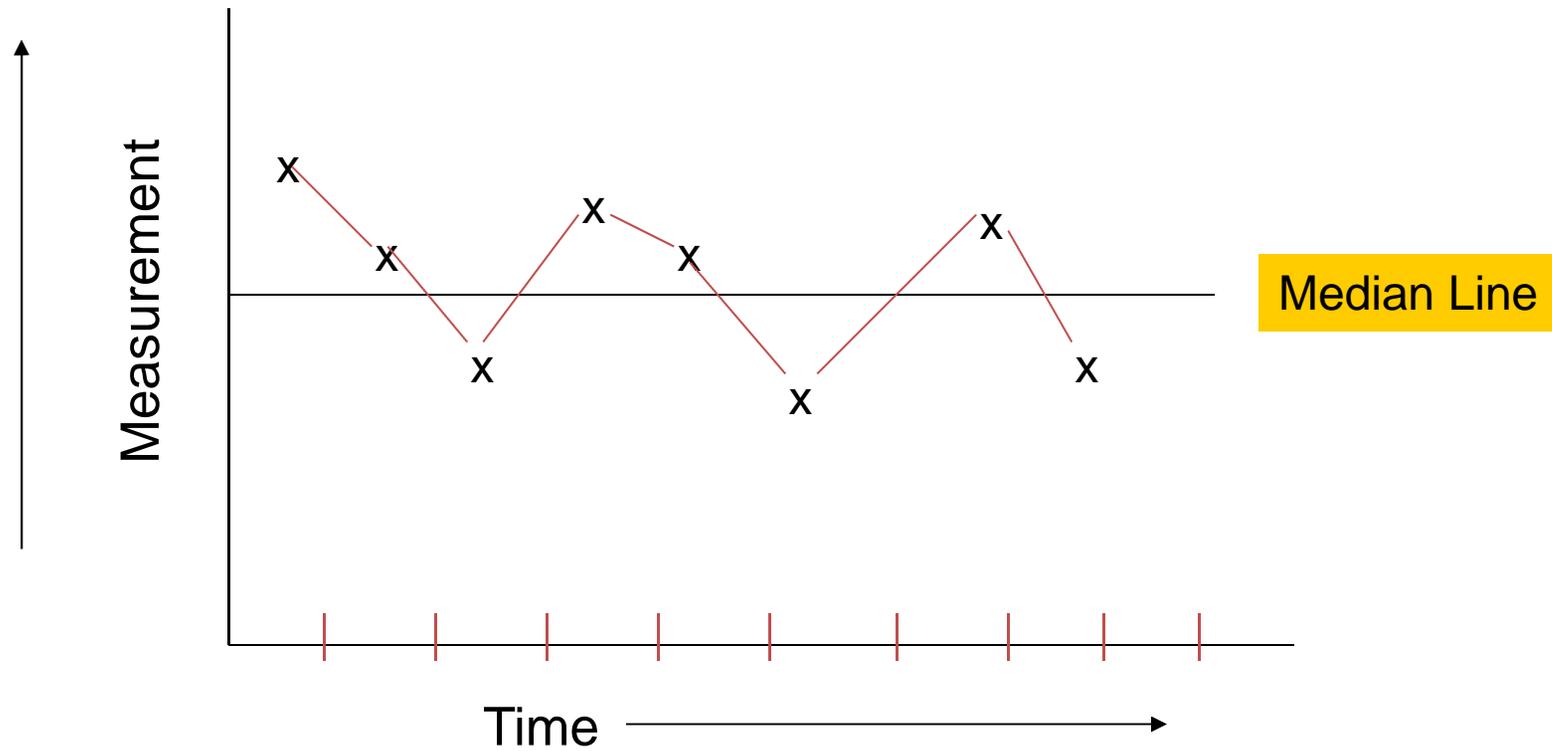
Jones County WIC Lobby Wait Time
XMR Chart

X Chart

Wait Time (Minutes)

UCL = 23.2
CL = 12.4
LCL = 1.6

MR Chart

Moving Range

UCL = 13.2
CL = 4.0
LCL = 0.0

Observation
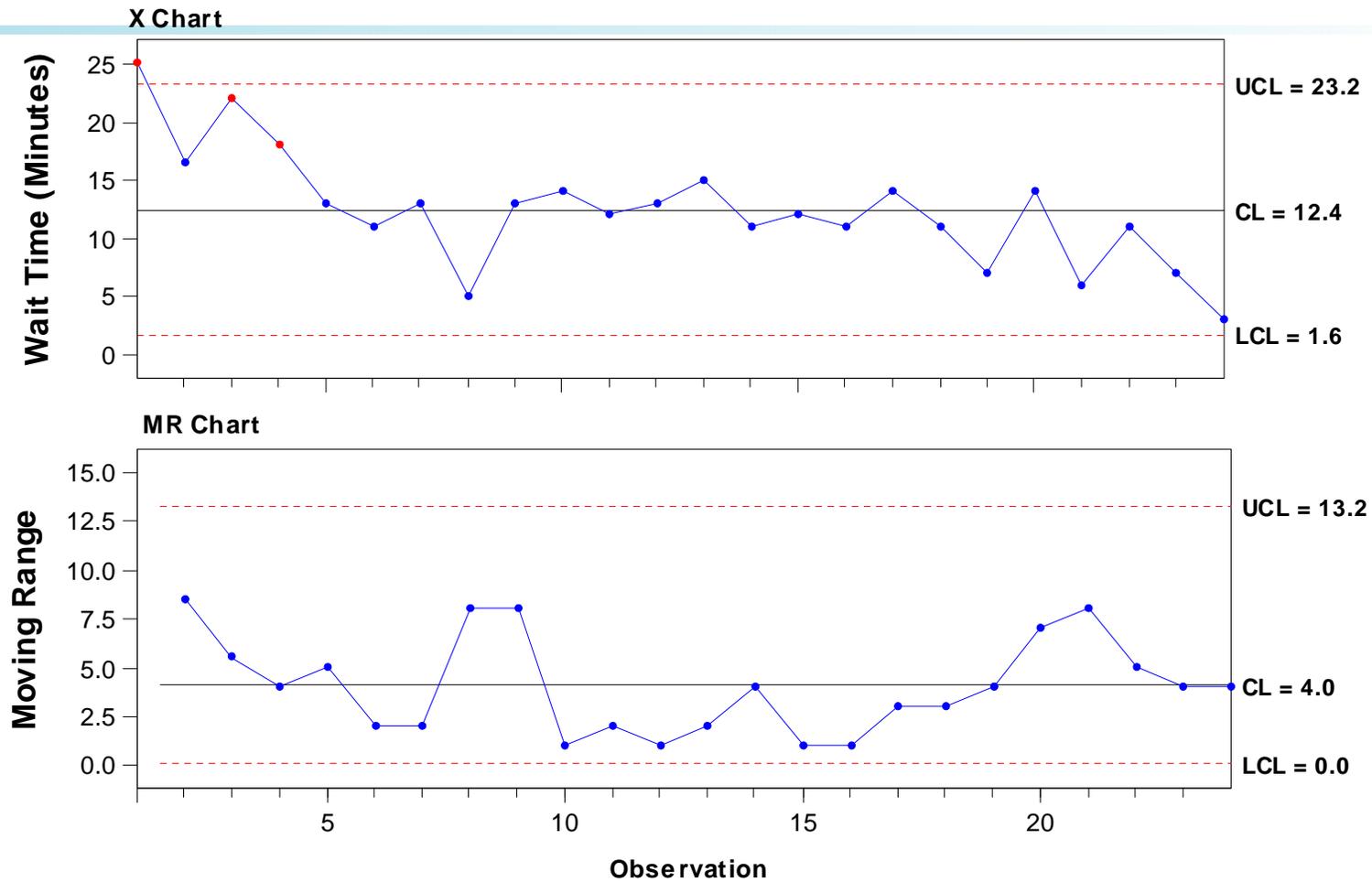
Documenting the Impact of QI

*www.**processexcellencenetwork**.com/*

Intervention and Impact Form

AIM Statement Description:

1. Intervention Number	2. Date	3. What Was The Change?	4. How Did It Impact The AIM?	5. How Did Your Thinking Change?	6. How Did It Impact Your Procedures?	7. How Did It Impact Your Customer?	8. How Do You Know? Measures

The following columns can be added to the Intervention and Impact Form when needed to track the impact of unintended consequences.

9	10	11	12	13	14	15
Unintended Consequence Letter	Unintended Consequence Description	Date It Happened	Impact To Aim Statement	Need a Sub AIM Statement?	Impact to Customer	Modifications Made

Stages Of Team Development

forming

performing

storming

norming

Adjourning

1970
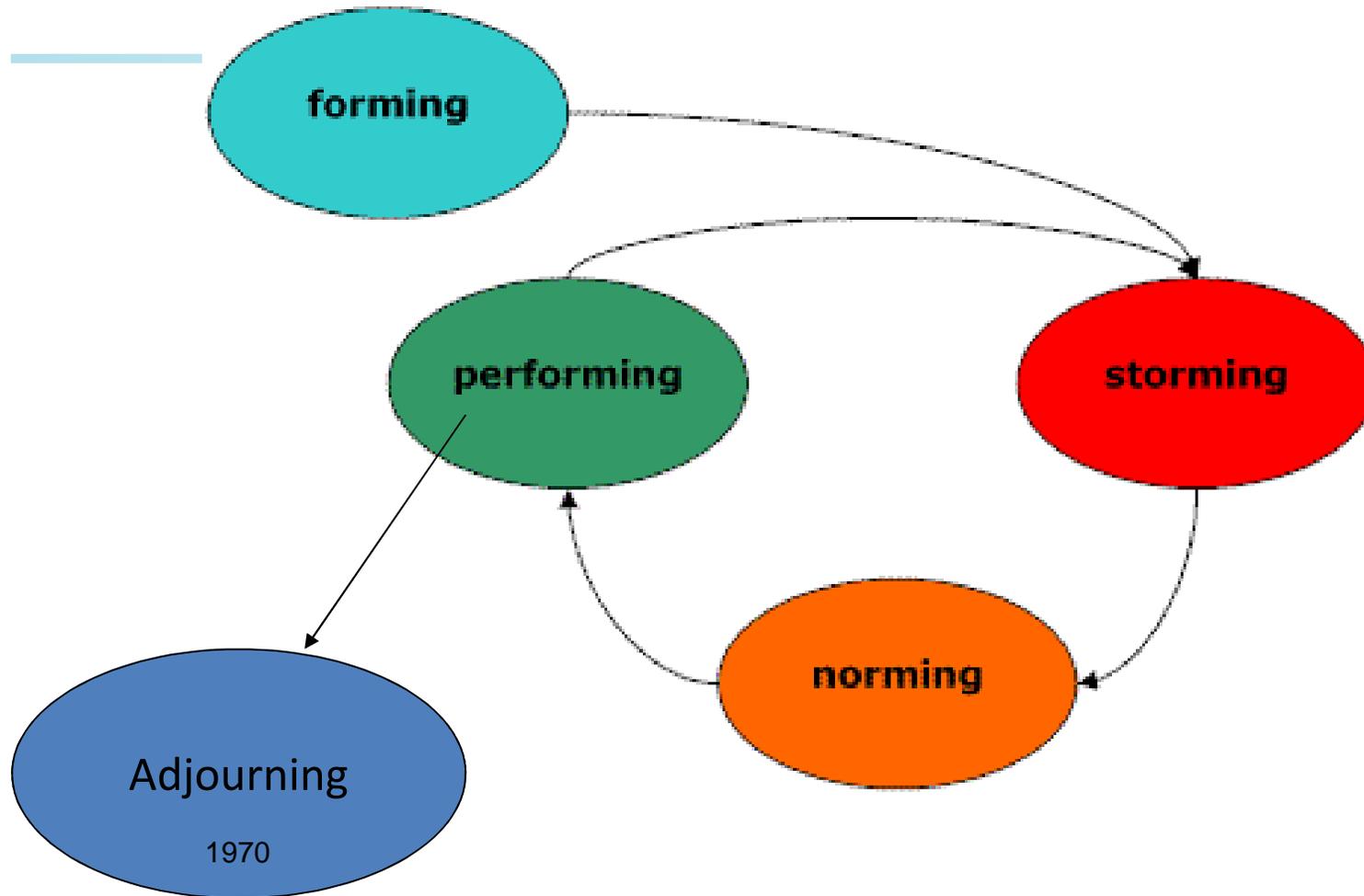
Bruce Tuckman, 1965

Stages Of Team Development

- Each stage has two components that compete with each other:

  - **Task Focus**

  - **Team Behavior**

Applications and Tools for Creating and Sustaining Healthy Teams, Public Health Foundation, April 2011
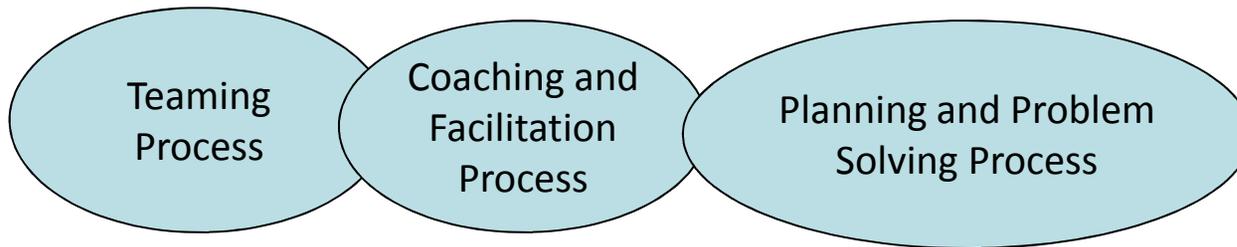
http://www.phf.org/resourcestools/Pages/Applications_and_Tools_for_Creating_and_Sustaining_Healthy_Teams.aspx

Three Step Process for Healthy Teams

Teaming Process

Coaching and Facilitation Process

Planning and Problem Solving Process

Top Ten Reasons Teams Fail

1. AIM Statement
2. Team Charter
3. Team Members
4. Problem Solving Process
5. Rapid Cycle
6. Team Maturity
7. Base Line Data
8. Training
9. Root Cause Analysis (RCA)
10. Pilot Testing

Helpful Resources

- **Public Health Improvement Resource Center:** http://www.phf.org/improvement

- **NPHPSP Online Resource Center:** http://www.phf.org/nphpsp

- *QI Results* **Resources:** http://www.phf.org/QualityImprovementResults/

- **QI Quick Guide & Tutorial:** http://www.phf.org/quickguide/

- **PHF QI Learning Series and Assistance:** http://www.phf.org/QIservices

- **Accreditation Preparation Resources (Domains 8 & 9):** http://www.phf.org/Accreditation

- **Public Health Quality Improvement Handbook and Other QI Resources:** http://bookstore.phf.org/index.php?cPath=50

- **TRAIN – 25,000 public health courses offered by more than 4,000 providers:** https://www.train.org/

Thank you for your time and attention

Questions?