

Quality Improvement: The Journey Continues

**MLC -3
Learning Session
June 1-2**



- ▶ This better be good, I'm giving up my nap.

Four Basic Principles

- ▶ Develop a strong customer (client) focus
- ▶ Continually improve all processes
- ▶ Involve employees
- ▶ Mobilize both data and team knowledge to improve decision-making

Three Key Questions

- ▶ What are we trying to accomplish?
- ▶ How will we know that a change is an improvement?
- ▶ What changes can we make that will result in improvement?

EMBRACING QUALITY IN LOCAL PUBLIC HEALTH



.....
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Where

Do

We

Begin?

Guidebook: Content and Structure



PDSA is the primary focus. Other sections include:

- ▶ Customers & Stakeholders
- ▶ Importance of Data
- ▶ Writing an Aim Statement
- ▶ QI Tools & Measures of Improvement
- ▶ PH Example of PDSA
- ▶ Case Studies: Berrien, Genesee, Kent & Ottawa

Plan-Do-Study-Act (PDSA)

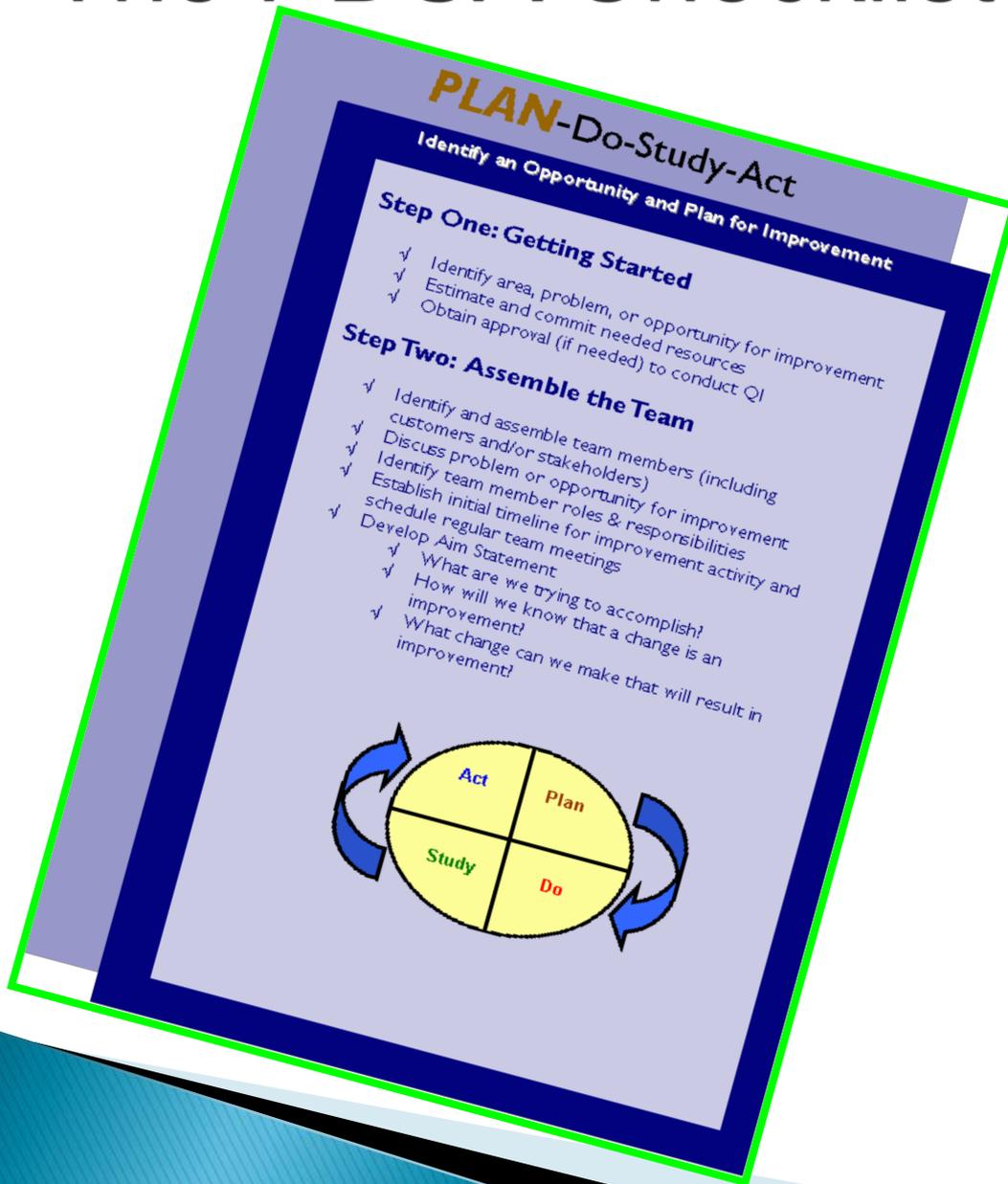
- ▶ PDSA, made popular by Dr. W. Edwards Deming, is also known as **Plan-Do-Check-Act (PDCA)** is widely used by quality professionals, process improvement engineers & health care professionals
- ▶ Science based, data driven, iterative process improvement methodology
- ▶ Turns ideas into action and connects that action to learning

PDSA – An Introduction



- ▶ PDSA
- ▶ Four stages
- ▶ Nine steps
- ▶ Repeatable steps
- ▶ Can be used by one person, a team, or department
- ▶ Used to improve existing processes

The PDSA Checklist



Quick
Reference
Guide

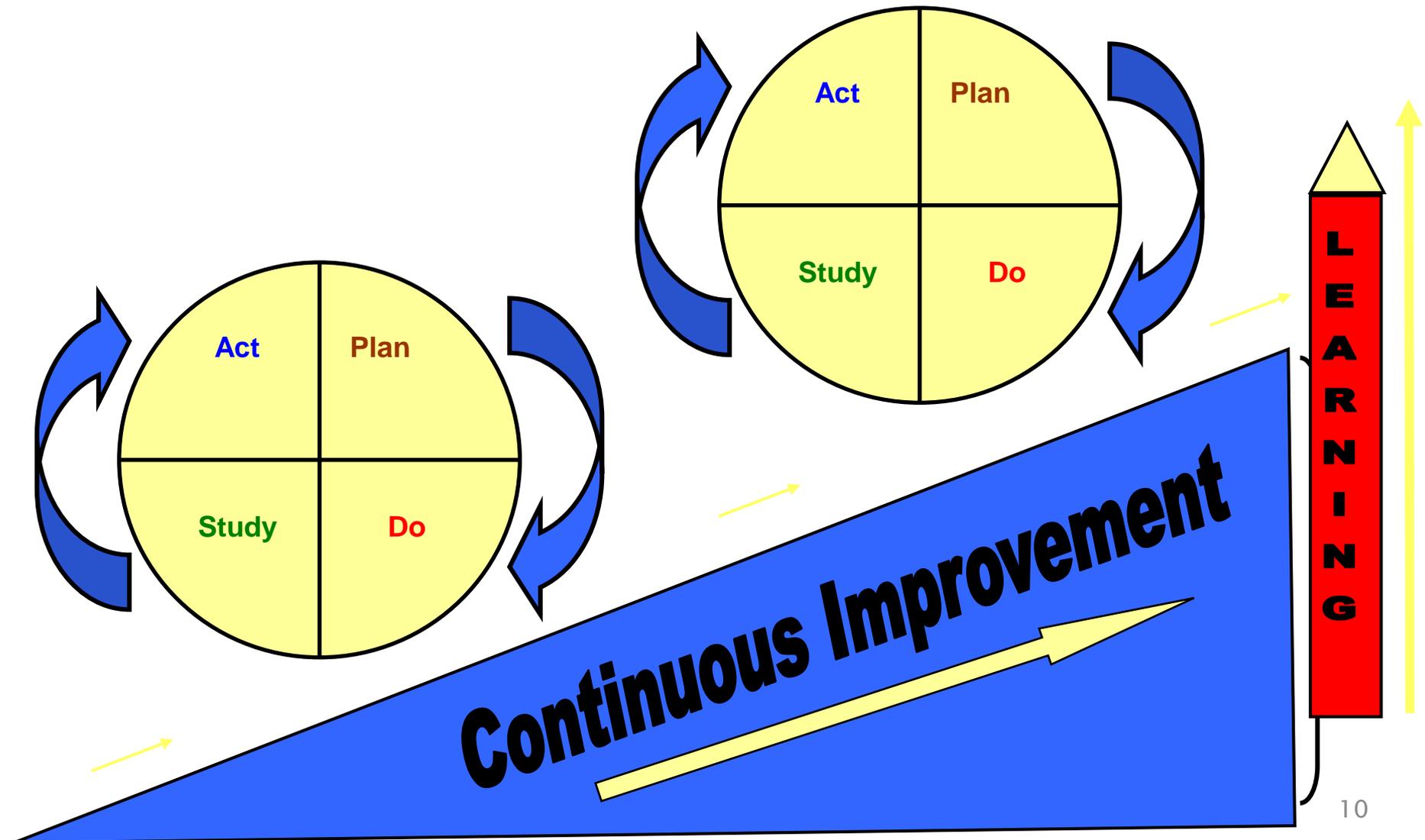
SMART CRITERIA

Helpful when selecting an Improvement and writing an **AIM Statement**



- ▶ S – Specific
- ▶ M – Measurable
- ▶ A – Achievable
- ▶ R – Relevant
- ▶ T – Time-bound

Continuous Improvement/Learning





Are we having
fun yet???

I really need a
break!

BREAK

PLAN Stage

Getting Started-Assemble the Team

Steps One and Two

- ▶ Identify improvement
- ▶ Convene team
- ▶ Discuss the improvement
- ▶ Establish initial timeline
- ▶ Develop initial AIM statement

PLAN-Do-Study-Act

Identify an Opportunity and Plan for Improvement

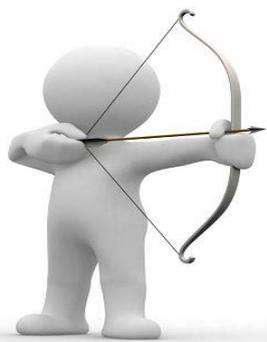
Step One: Getting Started

- ✓ Identify area, problem, or opportunity for improvement
- ✓ Estimate and commit needed resources
- ✓ Obtain approval (if needed) to conduct QI

Step Two: Assemble the Team

- ✓ Identify and assemble team members (including customers and/or stakeholders)
- ✓ Discuss problem or opportunity for improvement
- ✓ Identify team member roles & responsibilities
- ✓ Establish initial timeline for improvement activity and schedule regular team meetings
- ✓ Develop Aim Statement
 - ✓ What are we trying to accomplish?
 - ✓ How will we know that a change is an improvement?
 - ✓ What change can we make that will result in improvement?





AIM STATEMENT

A concise, specific, written statement that defines what the team hopes to accomplish with its improvement. Describes What, not How

- ▶ What? What is the team striving to accomplish?
- ▶ When? What is the timeline?
- ▶ How Much? What is the specific numerical measure the team wishes to achieve?
- ▶ For Whom? Who is the population?

Muskegon County

Goal - Reduce the rates of chronic disease in our community

- ▶ *A 20% reduction in the number of Tobacco Cessation class participants that relapse within 6 months due to weight gain or fear of weight gain by April 2009.*
- ▶ *PHMC and partners will increase the statistical significance of the collected data by 75% to determine program effectiveness for participants to reduce weight gain anxiety as a cause of relapse by April 2009.*

- ▶ *PHMC and partners will improve the quality of the tobacco cessation data collection process by 75% to determine program effectiveness by April 2009 for participants who cite their reason for failure as weight gain anxiety.*
- ▶ *A 50% increase in tobacco cessation participants completing the survey process by April 14, 2009.*

Questions?



I think I need an
assistant to do this
stuff.

Hey MOM!

Work Session

- ▶ Break into teams
- ▶ Do Introductions if needed
- ▶ Identify a Recorder, a Reporter, and a Timekeeper
- ▶ Discuss improvement chosen, identify improvement opportunity and problem you hope to resolve
- ▶ Create initial Aim Statement
- ▶ Be prepared to report

LUNCH

Examine the Current Approach Process Mapping

Step Three

- ▶ What are we doing?
- ▶ How do we do it?
- ▶ What are the major steps?
- ▶ Who is involved?
- ▶ What do they do?
- ▶ What is being done well?
- ▶ What could be done better?

PLAN-Do-Study-Act

Identify an Opportunity and Plan for Improvement

Step Three: Examine the Current Approach

- ✓ Examine the current approach or process flow
- ✓ Obtain existing baseline data, or create and execute data collection plan to understand the current approach
- ✓ Obtain input from customers and/or stakeholders
- ✓ Analyze and display baseline data
- ✓ Determine root cause(s) of problem
- ✓ Revise Aim Statement based on baseline data as needed

Step Four: Identify Potential Solutions

- ✓ Identify all potential solutions to the problem based on the root cause(s)
- ✓ Review model or best practices to identify potential improvements
- ✓ Pick the best solution (the one most likely to accomplish your Aim Statement)

Step Five: Develop an Improvement Theory

- ✓ Develop a theory for improvement
 - ✓ What is your prediction?
 - ✓ Use an "If . . . Then" approach
- ✓ Develop a strategy to test the theory
 - ✓ What will be tested? How? When?
 - ✓ Who needs to know about the test?



Flowcharting—sometimes called Process Maps or IS Maps

Quality Improvement Works on Existing Processes

- ▶ A process is a series of steps or actions performed to achieve a specific purpose.
- ▶ A process can describe the way things get done.
- ▶ Your work involves many processes.

What is a Flowchart?

- ▶ A pictorial representation of the sequence of actions that comprise a process.

Why is Flowcharting Important?

- ▶ It provides an opportunity to learn about work that is being performed.
- ▶ Dr. Myron Tribus said,
*“You don’t learn to flowchart,
You flowchart to learn.”*
- ▶ Most processes today are undocumented.

Flowcharts are used to:

- ▶ Document processes.
 - Provide a reference to discuss how things get done.
 - Describe and understand the work we do.
- ▶ Analyze and improve on processes.
 - Identify of areas of complexity and re-work.
 - To generate ideas for improvement.
 - Illustrate process improvements.

Preparing to Flowchart

- ▶ Assemble the Team.
- ▶ Agree on which process you wish to flowchart.
- ▶ Agree on the purpose of the process.
- ▶ Agree on beginning and ending points.
- ▶ Agree on level of detail to be displayed.
- ▶ Start by preparing an outline of steps.
- ▶ Identify other people who should be involved in the flowchart creation, or asked for input, or to review drafts as they are prepared.

Symbols used to Flowchart

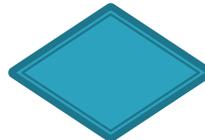
- ▶ **Start & End:** An **oval** is used to show the materials, information or action (inputs) to start the process or to show the results at the end (output) of the process.



- ▶ **Activity:** A **box or rectangle** is used to show a task or activity performed in the process. Although multiple arrows may come into each box, usually only one arrow leaves each box.



- ▶ **Decision:** A **diamond** shows those points in the process where a yes/no question is being asked or a decision is required.



- ▶ **Break:** A **circle** with either a letter or a number identifies a break in the Flowchart and is continued elsewhere on the same page or another page.



Hints and Tips

- ▶ Flowchart what is, not what you would like the process to be.
- ▶ Flowcharting is dynamic. Use Post-it notes, dry erase markers, pencil, etc.
- ▶ All flowcharts must have start and stop points.

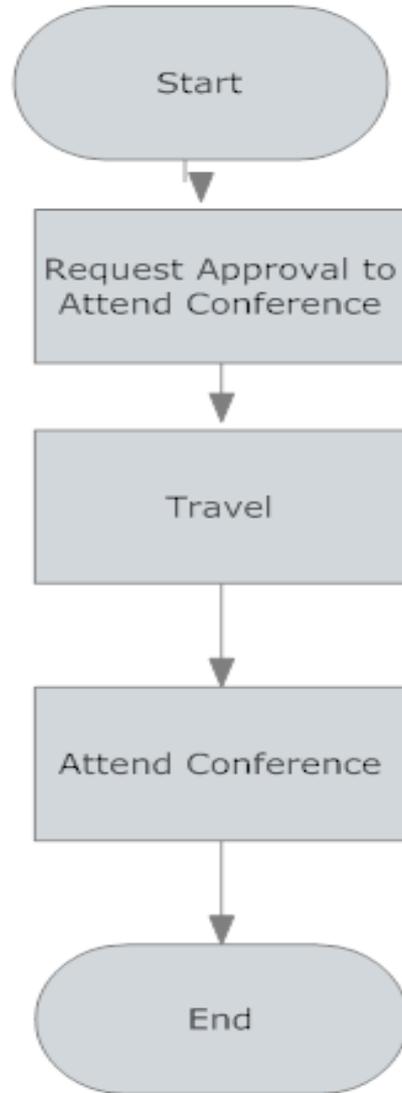
Flowchart of Conference Approvals

Sample Exercise

- ▶ Flowchart the process that is used to obtain approval to attend conferences.

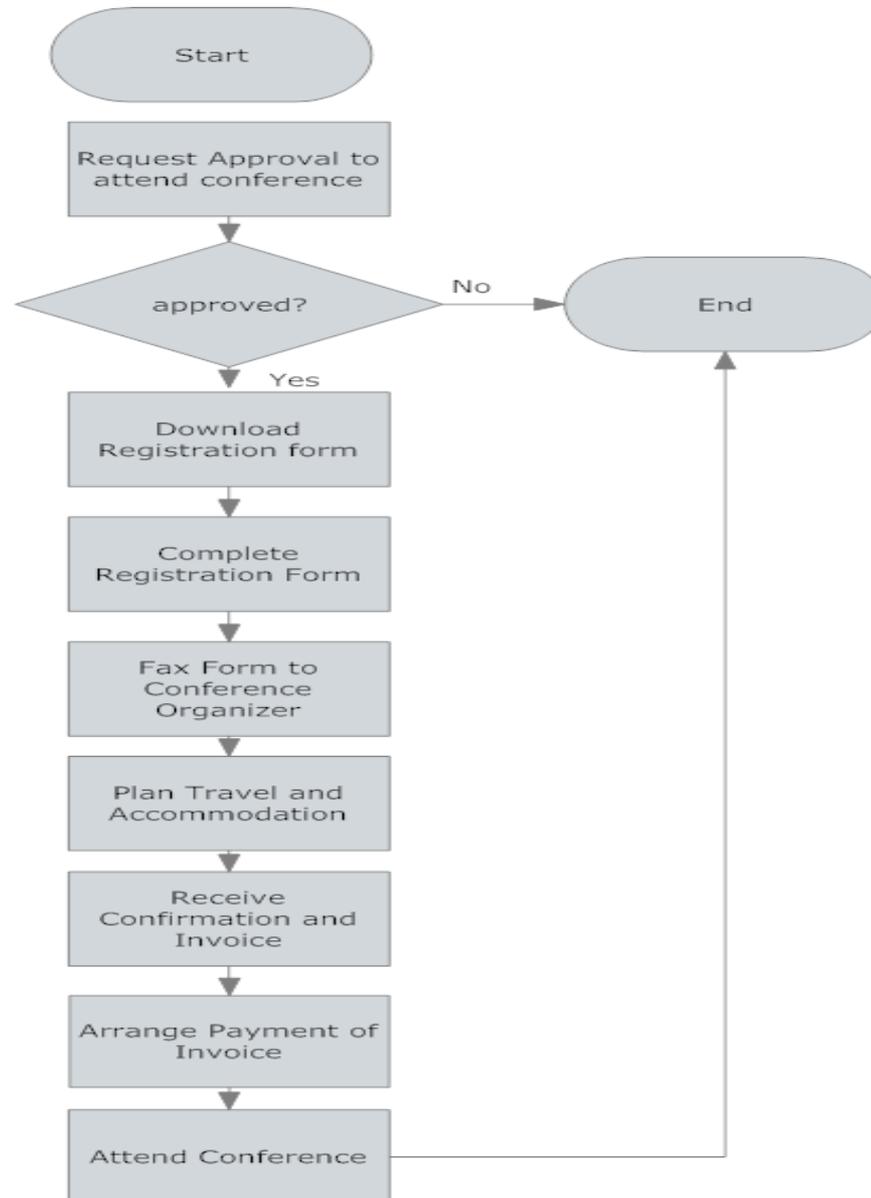
Sample One

Sample One



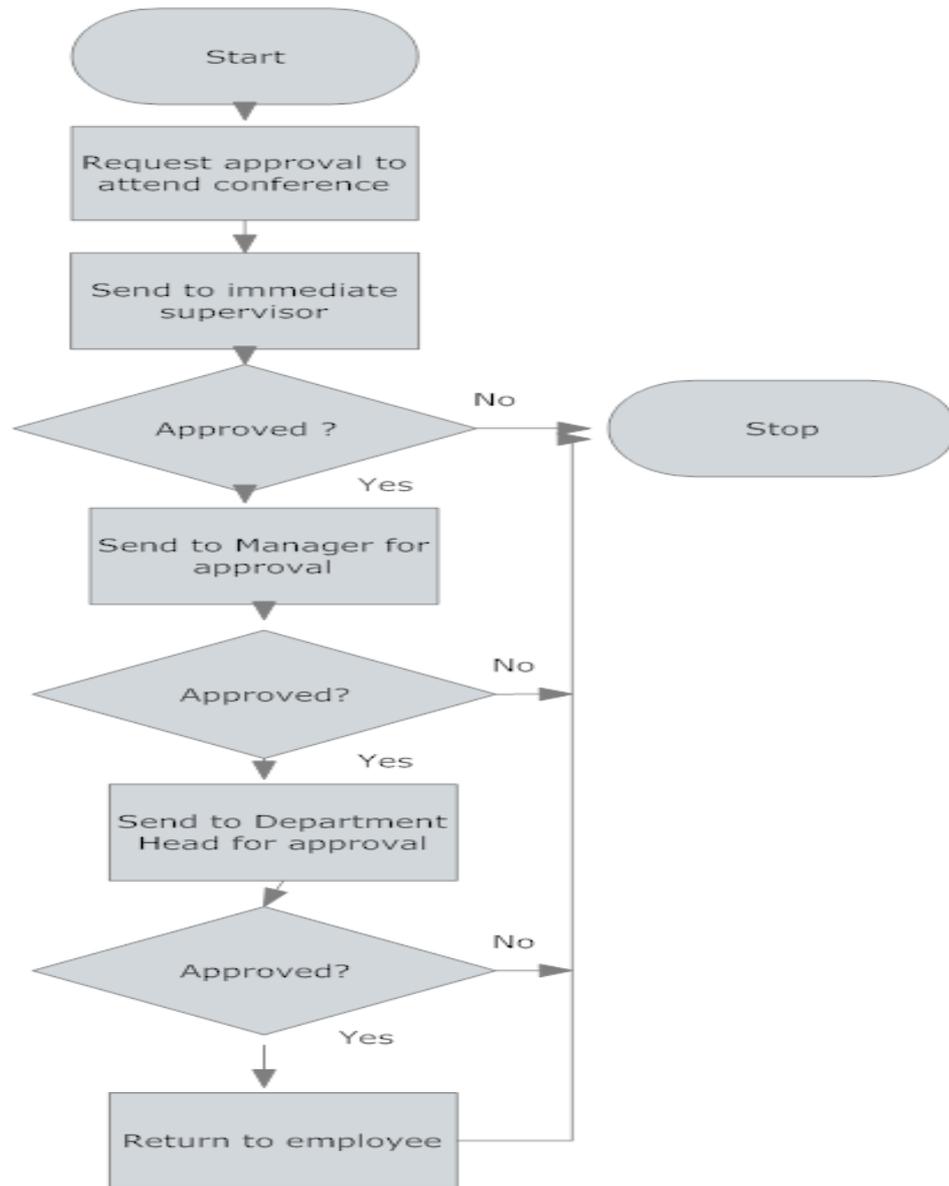
Sample Two

Sample Two



Sample Three

Sample Three



Hints and Tips

- ▶ Brainstorming and Affinity Diagrams can be used to identify processes you wish to flowchart.
- ▶ There is no single right way to flowchart. It is a tool to learn about your organization and work.
- ▶ Flowcharts can be used in a variety of settings outside Quality Improvement, such as:
 - Orienting new employees
 - In-service presentations
 - Brainstorming possible process changes
 - Creating or revising policies and procedures that support the process
 - Creating measures
 - Identifying logical outcomes of a process

Questions?



What's wrong with
finger painting?

Work Session

- ▶ Each LHD meets and develop a Process Map documenting the existing process they plan to improve

BREAK

Examine the Current Approach (cont.)

Step Three

You cannot improve a process until you understand it! *Deming*

- ▶ Obtain data from the current process
- ▶ Seek customer input
- ▶ ID Root Cause
- ▶ Fishbone diagrams
- ▶ The 5 Whys

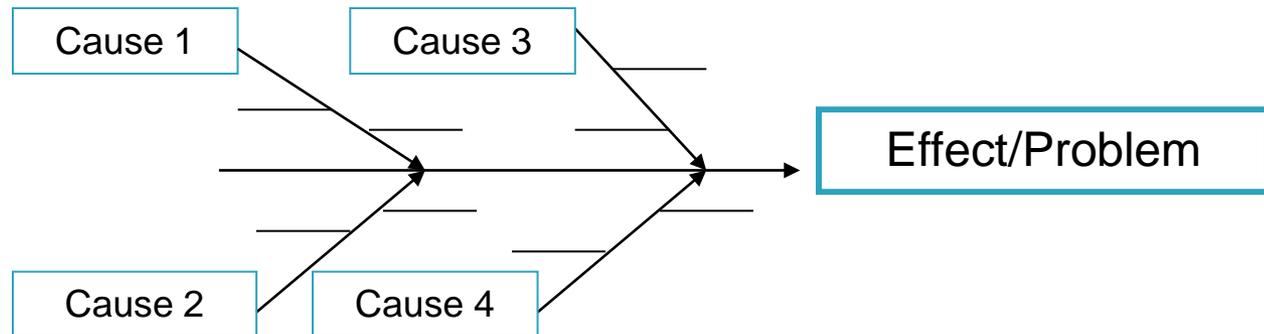
Fishbone Diagrams: Purpose

- ▶ To identify underlying or root causes of a problem
- ▶ To identify a target for your improvement that is likely to lead to change

Fishbone Diagrams: Construction

► Construction

- Draw an arrow leading to a box that contains a statement of the problem
- Draw smaller arrows (bones) leading to the center line, and label these arrows with either major *causal categories* or *process categories*
- For each cause, identify deeper, root causes

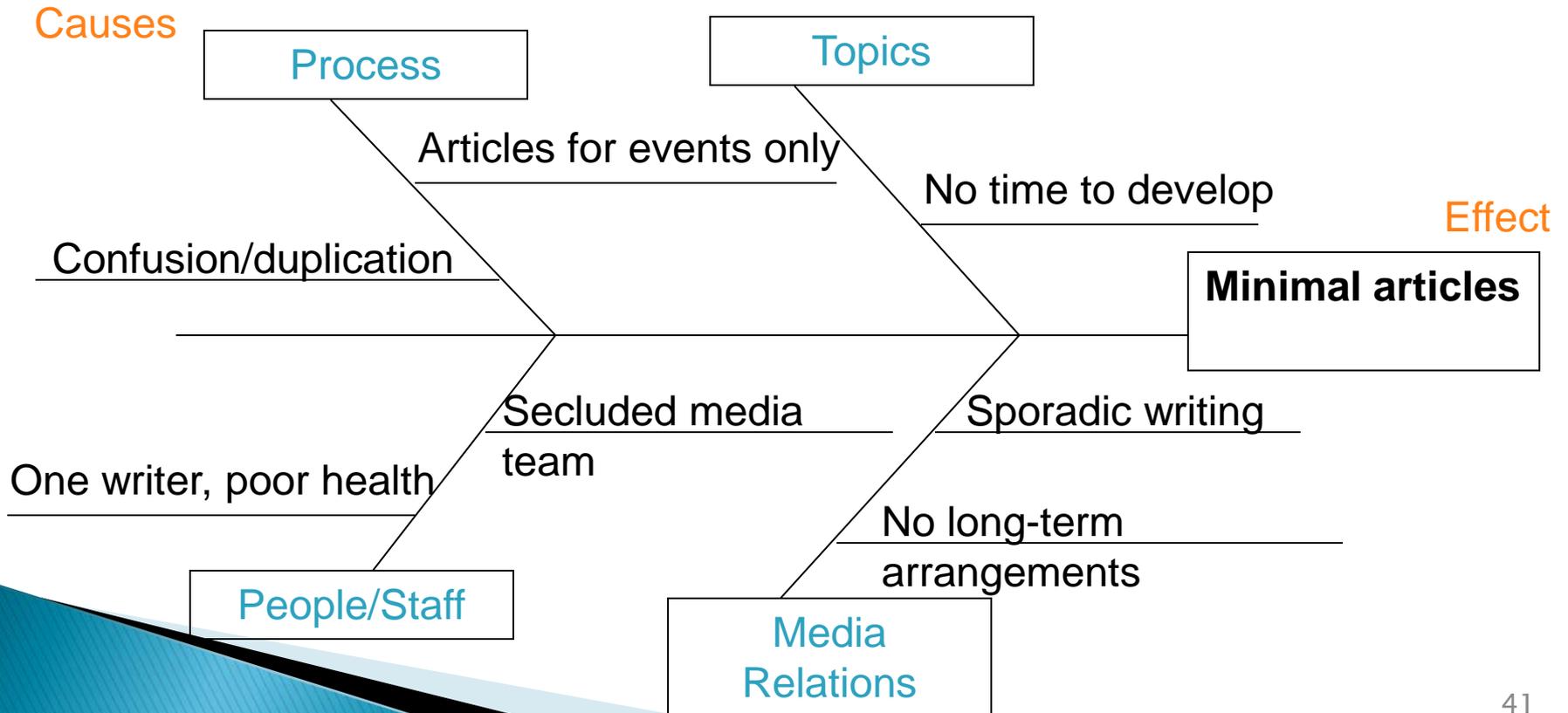


Fishbone Diagrams: Hints & Tricks

- ▶ Find the right problem or effect statement
 - The problem statement should reflect an outcome of a process that you **control or influence**
 - Be specific
 - Reach consensus
- ▶ Find causes that make sense and that you can impact
 - Generate categories through:
 - Brainstorming
 - Looking at your data
 - Ask “why?” to achieve a deeper understanding
 - Know when to stop
 - Stick to what you and your managers can control or directly influence
- ▶ Make use of your results
 - Decide if you need more data
 - Consider causes that come up again and again, and causes that group members feel are particularly important

Berrien County Fishbone

Root causes for lack of BCHD general PH articles



Five Whys

- ▶ The **5 Whys** is a question-asking method used to explore the cause/effect relationships underlying a particular problem. Ultimately, the goal of applying the 5 Whys method is to determine a root cause of a defect or problem.

Wikipedia

Five Whys (cont.)

Example

- ▶ My car will not start. (the problem)
- ▶ *Why?* - The battery is dead. (first why)
- ▶ *Why?* - The alternator is not functioning. (second why)
- ▶ *Why?* - The alternator belt has broken. (third why)
- ▶ *Why?* - The alternator belt was well beyond its useful service life and has never been replaced. (fourth why)
- ▶ *Why?* - I have not been maintaining my car according to the recommended service schedule. (fifth why, root cause)

Wikipedia

Questions?



Gee, Five Whys sounds like
two year old talk.
I can't count to five!

Work Session

- ▶ Each LHD meets and develops an initial Fishbone Diagram.
- ▶ Perform five whys on the problem they hope to address in the process they have chosen to improve.

Good Morning!



Oh brother,
I didn't sleep worth a darn
last night!
Did you?

Identity Potential Solutions

Step Four

- ▶ Using root cause
- ▶ Brainstorm for possible solutions
- ▶ Search for similar practices
- ▶ Narrow to those you have control or influence over
- ▶ Pick one most likely to accomplish
- ▶ Revisit AIM Statement

PLAN-Do-Study-Act

Identify an Opportunity and Plan for Improvement

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Group Discussion

BREAK

Develop An Improvement Theory

Step Five

- ▶ Make a prediction
- ▶ Define outcomes
- ▶ Use If....Then technique
- ▶ Develop strategy to test the improvement theory

PLAN-Do-Study-Act

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Let's see
If I eat too much,
Then I'll XXX too much!
I've got it!

Group Discussion

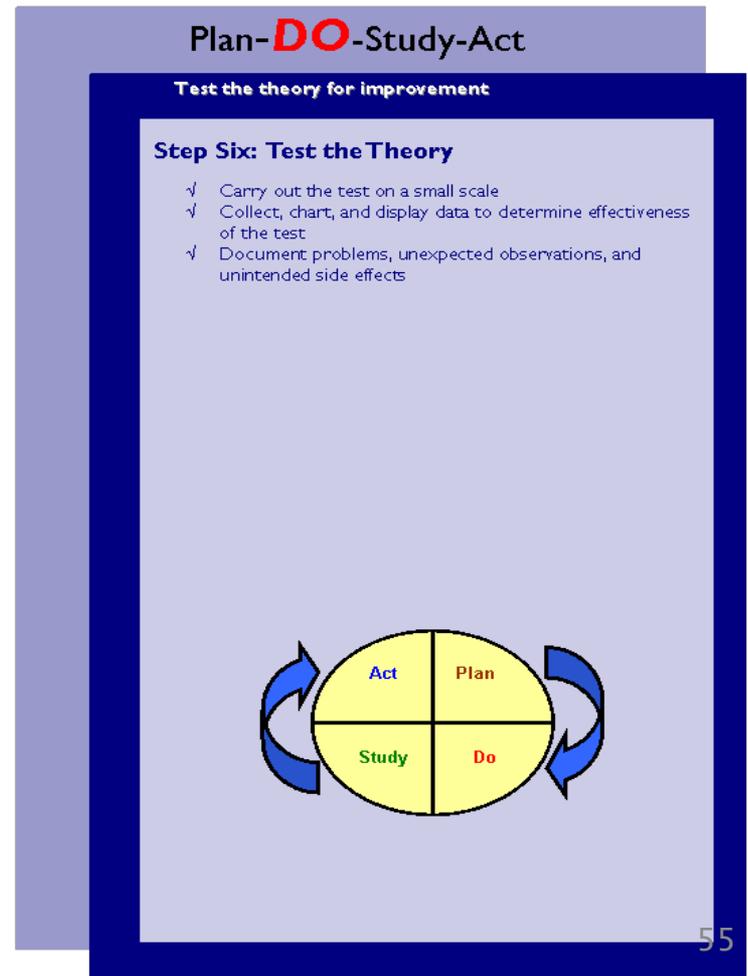
LUNCH

Do Stage

Test the Theory

Step Six

- ▶ Test the theory (small scale)
- ▶ Document everything
- ▶ Consider using Rapid Cycle Improvement (RCI)



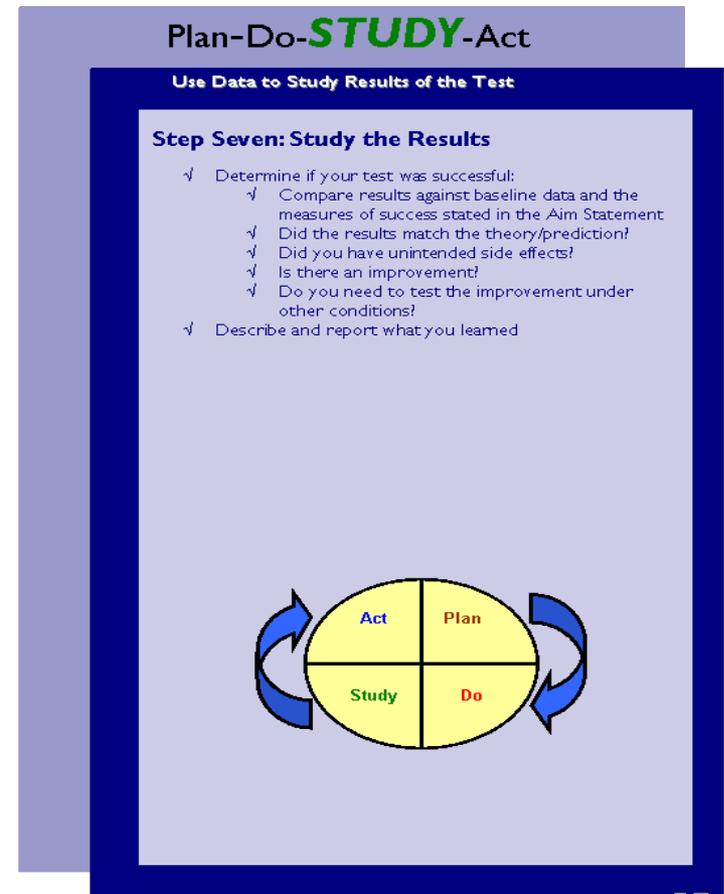
Group Discussion

Study Stage

Study the Results

Step Seven

- ▶ Test work?
- ▶ Results match prediction?
- ▶ Trends?
- ▶ Unintended side effects?
- ▶ Improvement?
- ▶ More testing?
- ▶ Report findings





I need a hug!

Group Discussion

ACT Stage

Standardize or Repeat?

Future Plans

Steps Eight and Nine

- ▶ Test on larger scale?
- ▶ Implement?
- ▶ New theory?
- ▶ Plan for continuing
- ▶ Repeat PDSA?

Plan-Do-Study-**ACT**

Standardize the Improvement and Establish Future Plans

Step Eight: Standardize the Improvement or Develop a New Theory

- ✓ If your improvement was successful on a small scale test it on a wider scale
 - ✓ Continue testing until an acceptable level of improvement is achieved
 - ✓ Make plans to standardize the improvement
- ✓ If your change was not an improvement, develop a new theory and test it; often several cycles are needed to produce the desired improvement

Step Nine: Establish Future Plans

- ✓ Celebrate your success
- ✓ Communicate your accomplishments to internal and external customers
- ✓ Take steps to preserve your gains and sustain your accomplishments
- ✓ Make long term plans for additional improvements
- ✓ Conduct iterative PDSA cycles, when needed



Group Discussion

Remember:

Not all changes are Improvements



Deming said of all the changes he had observed, “only about 5% were improvements... the rest, at best were illusions of progress!”

How Will I Know That a Change is An Improvement?



- ▶ Data, pre-post
- ▶ Can be measures or observations
- ▶ If you can observe an event (or even its effects) you can measure it. If you can measure it you can improve it.

Variation

- ▶ Every process and measure has variation
- ▶ There are two types, Common Cause and Special Cause
- ▶ Important to understand the differences between Common and Special Cause
- ▶ Special Cause is unpredictable and can lead to unstable processes
- ▶ Improvement should focus on stable processes; data can you help determine stability (Section 3 Guidebook)

Quality Improvement Tools

Working with ideas/Concepts

- ▶ Fishbone/Cause and Effect
- ▶ Gantt
- ▶ Flowchart
- ▶ Storyboard
- ▶ Logic Model

Working with Numbers

- ▶ Pareto
- ▶ Run Charts
- ▶ Scatter Diagram
- ▶ Check Sheet
- ▶ Stratification
- ▶ Data Points
- ▶ Histogram
- ▶ Control Charts

Tools in white to be presented in future webinar sessions.

Gantt

MLC2 - MACQIC Berrien County Timeline																
ID	Task Name	Date	Q1 07		Q2 07			Q3 07			Q4 07			Q1 08		Completed?
			Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
1	MPHI announce MACQIC awards	2/2/2007	x													yes
2	Kick-off teleconference	2/14/2007	x													yes
3	Pre-learning session teleconference	2/28/2007	x													yes
4	Learning Session	3/26/2007		x												yes
5	Submit first article	3/29/2007		x												yes
6	Establish baseline data	4/3/2007			x											yes
7	Check financial constraints	4/3/2007			x											yes
8	Finalize AIMS statement	4/15/2007			x											yes
9	Finalize Benton Spirit contract	5/1/2007				x										yes
10	Develop evaluation tools	5/15/2007				x										working
11	1st implementation teleconference	5/14/2007				x										yes
12	Report due ot MPHI	6/21/2007					x									yes
13	2nd teleconference - face to face	6/28/2007					x									yes
	Tech assistance confer with Mmason	7/18/2007						x								yes
	MLC2 Michigan Site Visit	8/17/2007							x							yes
14	Report due to MPHI	10/1/2007										x				yes
15	3rd implemenation teleconference	10/8/2007										x				yes
	MI SuperConference Poster Session	10/17/2007										x				yes
16	Report due to MPHI	12/3/2007											x			yes
17	4th implemenation teleconference	12/10/2007											x			yes
18	Project showcase presentation	1/31/2008												x		
19	MACQIC core team meetings	1st Thursdays			x	x	x	x	x	x	x	x	x	x	x	working
20	and	3rd Thursday			x		x	x	x	x	x	x	x	x	x	working
21	Management Team Reports	quarterly			x			x			x			x		working
22	Meet with Benton Spirit	quarterly			x		x		x			x		x		no

Story Boards

Story Boards

- ▶ Tell your QI story in an organized way
- ▶ Harness the ‘power of the visual’
- ▶ Depict your process improvement
- ▶ Give users real content that is easy to digest
- ▶ Provide an embraceable approach that needs little explanation
- ▶ Highlight your accomplishments!

Sample Story Boards

Ottawa County Health Department (OCHD)
115 employees
Four offices; main office in Holland
Serving a population of 260,000



Team Members:
Lisa Anderson - Health Officer
Dr. Paul Regehr - Medical Director
Tara Egan - Administrator
Tara Egan - Health Promotion Manager
Tara Egan - Director of Public Health
Laura Doyle - Community Health Manager
Alicia Johnson - Organizational Development Manager
Caitie Smith - Administrative Assistant



Plan

Identify an Opportunity and Plan for Improvement

1. Getting Started
Ottawa County Health Department (OCHD) was transitioning from a traditional top-down to a shared change of organizational values and expectations. To help address the OCHD organizational areas of opportunity a current of the Strategic Organizational Assessment Survey was implemented.



OCHD leadership was supportive of the planned improvements and consisted the personnel and financial resources to the project.

Quality Improvement Map - January 2008

Area	Current State	Target State
Leadership	3.5	4.0
Communication	3.0	3.5
Planning	2.5	3.0
Customer Focus	3.0	3.5
Systems	2.5	3.0
People	3.0	3.5
Financial	2.5	3.0
Other	3.0	3.5

2. Assemble the Team
The OCHD team consisted of the OCHD Administrative Team because the nature of the project required a department-wide approach. A workshop and timeline were created and regular meetings were scheduled.

AIM Statement
Improve organizational health by improving the relationship between staff and management by addressing communication issues highlighted in the annual employee survey and providing leadership development to current and future leaders.

3. Examine the Current Approach
The initial process flow of the health department was "business as usual". Organizational changes were implemented based on anecdotal evidence and informal employee communication. A process was developed and mapped to examine and improve the three key organizational elements.

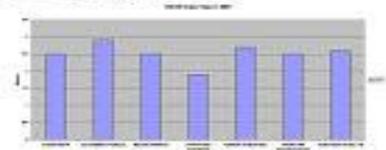
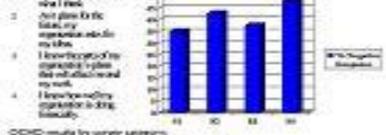


OCHD required baseline data by administering an employee survey based on the 2008 organizational assessment tool to staff. The survey evaluated their organization to assess ongoing leadership, customer focus, measurement, planning, human resources, process, and results.

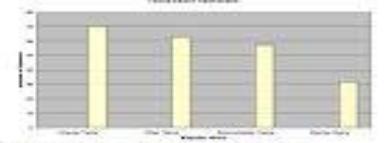
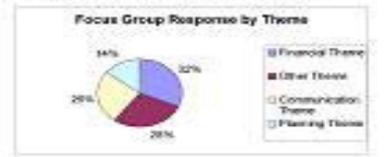
OCHD GRADE REPORT

Category	Score	Target Score
1. LEADERSHIP	3.7	4.0
2. CUSTOMER FOCUS	3.4	3.5
3. MEASUREMENT	2.9	3.0
4. STRATEGIC PLANNING	2.2	3.0
5. HUMAN RESOURCES	2.9	3.0
6. PROCESS MANAGEMENT	2.7	3.0
7. BUSINESS RESULTS	2.8	3.0
GPA	2.8	3.0

Assessing ongoing leadership and strategic planning were low survey priorities in the organizational theme. In addition, the lowest scored element involved financial knowledge.



4. Identify Potential Solutions
Based on the survey and focus group findings the team determined three actions: 1) increase communication through the department's network, 2) develop a "Business 101" course to assist staff in understanding the financial details of the department, and 3) provide leadership development for super-intory personnel. OCHD used the survey evidence to determine the reason for a broad range of top-level staff the issues in their OCHD conducted focus groups.



5. Develop an Improvement Theory
Predictions:
1. If OCHD increases focus groups, then communication between staff and management will improve as measured by the annual Organizational Assessment Survey administered in January 2008.
2. If OCHD creates an internal course procedure and process, then communication between staff and management will improve as measured by the annual Organizational Assessment Survey administered in January 2008.
3. If OCHD implements supervisor training initiatives, then the capacity of current and future leaders will be developed as measured by the annual Organizational Assessment Survey (Leadership category) administered in January 2008.

Do

Test the Theory for Improvement

6. Test the Theory
OCHD theories will continue to be tested using data from an employee survey which will be administered on an annual basis. In January during the first iteration of the survey, leadership can sometimes be confusing to staff, what does "organizational" mean? The survey will be modified in year two so it is more based on the results.
Annual results will be compared against the baseline survey data to determine if an increase in employee communication and leadership capacity in super-intory staff occurred.

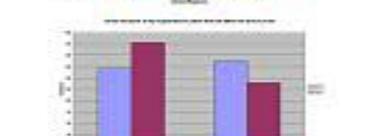
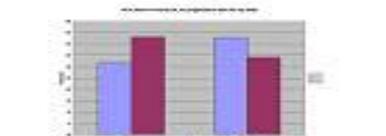
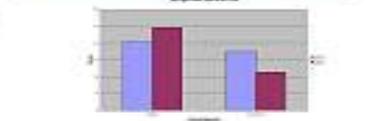
Study

Use Data to Study Results of the Test

7. Study the Results
The new survey data was compared against the previous year's baseline data. The new data showed improvement both with percent and weighted scores.

ORGANIZATIONAL ASSESSMENT

Category	Score
Leadership	3.7
Communication	3.5
Planning	3.0
Customer Focus	3.5
Systems	3.0
People	3.5
Financial	3.0
Other	3.5



Act

Standardize the Improvement and Establish Future Plans

8. Standardize the Improvement or Develop a New Theory
Some organizational changes have been behavior of (communication and leadership) and these will continue to be reflected in the annual survey results. Furthermore, development of a formal "Business 101" training will provide long-term staff access regarding the financial aspects of the organization. The leadership development program will continue to reinforce positive leadership in many facets of the organization.
9. Establish Future Plans
OCHD will celebrate their accomplishments and continue to share organizational improvements. OCHD will use the survey annually (quarterly) to monitor and will review the survey data and determine focus areas for improvement, standing as multiple factors such as work, recovery or other department initiatives.

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Organization & Composition

Organized around **Plan-Do-Study-Act** and the **Nine Key Steps** listed in Michigan's QI Guidebook:

- ▶ **Getting Started**
- ▶ **Assemble Team**
- ▶ **Examine Current Approach**
- ▶ **Identify Potential Solutions**
- ▶ **Develop Improvement Theory**
- ▶ **Test The Theory**
- ▶ **Study Results**
- ▶ **Standardize Improvement**
- ▶ **Establish Future Plans**

A Story Board Template

Health Department Name		Team Members:	
Location	Insert your LHD's logo here	 Quality Improvement Story Board Your LHD's Project Title	
Size			
Population Served			
Plan Identify an Opportunity and Plan for Improvement		Study Use Data to Study Results of the Test	
1. Getting Started		7. Study the Results	
2. Assemble the Team			
Aim Statement:		5. Develop an Improvement Theory	
3. Examine the Current Approach		9. Establish Future Plans	
		Act Standardize the Improvement and Establish Future Plans	
		6. Test the Theory	
		Do Test the Theory for Improvement	

Hints and Tips

- ▶ Formatting storyboards can be challenging and very time consuming
- ▶ Graphic depictions & color add more interest than text
- ▶ Building story boards throughout the improvement process may be more efficient than waiting until the end

Logic Models

Time to organize the Data

Logic Model

- ▶ *A logic model is a valuable organizational planning, implementation, funding and quality improvement process tool. It describes how programs or projects are expected to work in achieving desired outcomes, while identifying the need for adjustments and improvements.*

Logic Model

- ▶ Commonly used in Program planning
- ▶ Helps managers “plan with the end in mind”
- ▶ Focus is on outcomes
- ▶ Provides “big picture” of the process improvement

Logic Model

DRAFT
07-27-07

MACQIC – FBI Project
Logic Model
Genesee County Health Department

Individual, Community, and System Conditions	Inputs	Planned Activities	Outputs	Outcomes
<p>Outdated processes are used in EH to document FBI information and data (handwritten/word processed forms handwritten logs, no database)</p> <p>There are gaps in surveillance quality in and between EH, CD, and Epi</p> <p>There are communication gaps between EH and CD</p> <p>There is a burden of FBI in Genesee County</p> <p>Undetected outbreaks result in the perpetuation of ignorance about safe food handling in the community</p> <p>There are too many forms and duplication of effort</p> <p>Administration wants MACQIC to expand QI and CQI in the GCHD</p> <p>Michigan's LHD accreditation program is moving toward including a CQI component</p>	<p>MIS support</p> <p>CD support</p> <p>EH support</p> <p>Epi support</p> <p>Software</p> <p>Available Forms</p> <p>Available Data</p> <p>Physician/Care/Lab network</p> <p>Community participation (self reporting)</p> <p>MDCH</p> <p>MDA</p> <p>CDC</p> <p>Funds from non-MACQIC sources</p> <p>MACQIC funds</p> <p>MACQIC expertise</p>	<p>Create Aim Statement and Work Plan</p> <p>Create FBI process maps for both EH and CD</p> <p>Digitize EH surveillance data: clerical interview form, FBI log, sanitarian interview form</p> <p>Study communication between EH, CD, and Epi</p> <p>Conduct PDCA/RCI tests</p> <p>Establish benchmarks</p> <p>Determine measurements</p> <p>Conduct EH "chart reviews"</p> <p>Investigate best practices</p> <p>Survey EH clerical and Food Sans regarding needs / thoughts</p> <p>Create a complete list of data fields needed for electronic form</p> <p>Collaborate with the three other MACQIC teams</p> <p>Consult with MACQIC experts</p> <p>Report to MACQIC</p> <p>Present findings</p>	<p>Aim Statement and Work Plan created and used to drive improvement</p> <p>Process maps created and used to drive improvement</p> <p>Communication gaps between EH, CD, and Epi identified</p> <p># of PDCA tests conducted</p> <p>Benchmarks and measurements used to document improvement</p> <p>Chart reviews yield data to design electronic form and to provide benchmark info</p> <p># of best practices investigated</p> <p>Beneficial ideas shared with other MACQIC teams</p> <p>GCHD MACQIC effort improved through consultation and reporting to MACQIC</p> <p># of presentations of findings</p>	<p>SHORT TERM</p> <p>Digitization of 100% of EH FBI complaint reports and log with:</p> <ul style="list-style-type: none"> 100% of needed fields capability to generate 90% of needed reports electronically 90% user satisfaction <p>Increase in successful and appropriate communication between EH, CD, and Epidemiology, measured by % of timely and complete notifications between EH, CD, and epidemiology at the communication points shown on the work flow maps</p> <p>LONG TERM</p> <p>Improved FBI surveillance</p> <p>Increase in identification of FBI outbreaks</p> <p>Decrease in FBI in the county</p> <p>Increase in confidence among GCHD staff using CQI techniques such as PDCA, etc.</p> <p>Increase in CQI activity in non-MACQIC LHDs in as a result of presentation / MACQIC work</p>

Hints & Tips

- ▶ Start the logic model early in the PDSA cycle
- ▶ Add and modify as the process improvement more fully develops
- ▶ Share the model often with other members of the department who may not be on the QI team, ask for input

Pareto Charts:

What's the problem?

Pareto Charts: Purpose

- ▶ To identify the causes that are likely to have the greatest impact on the problem if addressed
 - ▶ “80% of the effects come from 20% of the causes”
- ▶ To bring focus to a small number of potential causes
- ▶ To guide the process of selecting improvements to test

Pareto Charts: When to Use

- ▶ When you have, or can collect, quantitative or numeric data on several potential causes
- ▶ Example:
 - When clients wait longer than 10 minutes to be seen, staff track the primary reason for the long wait
 - They use a form that includes a list of possible reasons, such as:
 - The previous appointment went long
 - They couldn't find the chart
 - The provider was overbooked
 - Emergency appointments came up
 - They were short staffed

Pareto Charts: DATA

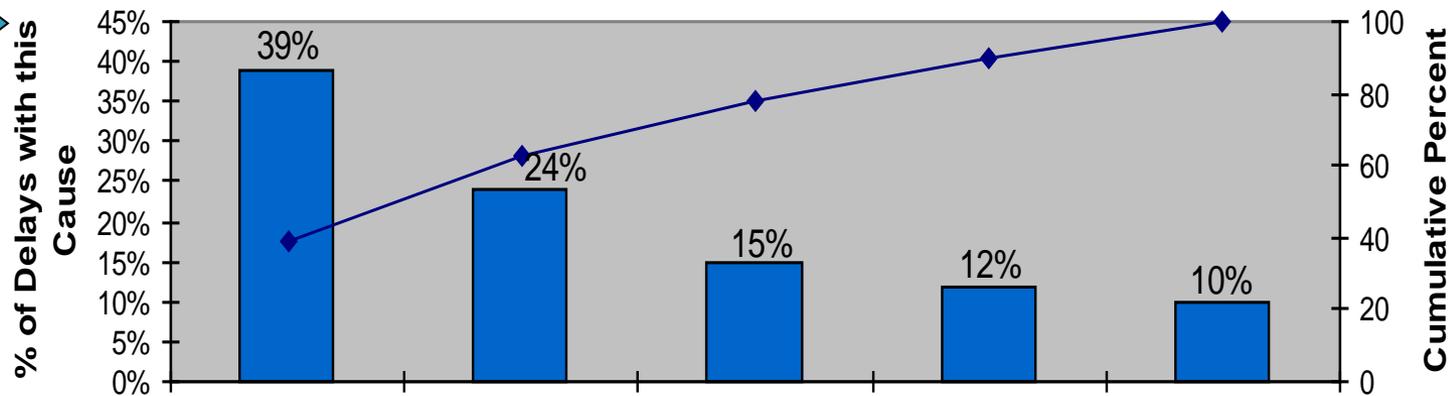
Problem: Long clinic wait times (10 min+)				Name: J. Heany			Time: 12-8	
Location: Sunnyside Clinic				Dates: 6/8-6/14/09				
	Date							Total
Reason	6/8	6/9	6/10	6/11	6/12	6/13	6/14	
Short Staffed	3	4	3	2	3	4	0	19
Overbooked	10	12	6	3	0	0	0	31
Went long	0	0	2	3	6	1	0	12
No chart	2	2	1	2	0	0	1	8
Emergencies	2	3	1	2	1	0	1	10
Total	17	21	13	12	10	5	2	80

Pareto Charts: Sample

Reasons for Clinic Wait Longer than 10 Minutes

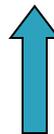
% of occurrences with each cause along y-axis

Cumulative percent along y-axis

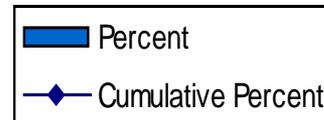


Listed most to least common

Cause



Causes along x-axis



Pareto Charts: Hints & Tips

- ▶ You'll only learn about causes that you investigate - be inclusive!
- ▶ Check and double check your data
 - Little errors can make a big difference
- ▶ Results can be used in more than one way and they can be used differently at different points in time
 - Revisit your Pareto throughout your project – the meaning may change for you as you go
 - A complete step-by-step example of creating Pareto Charts is in your manual

Run Charts

Time to Measure

Run Charts: Purpose

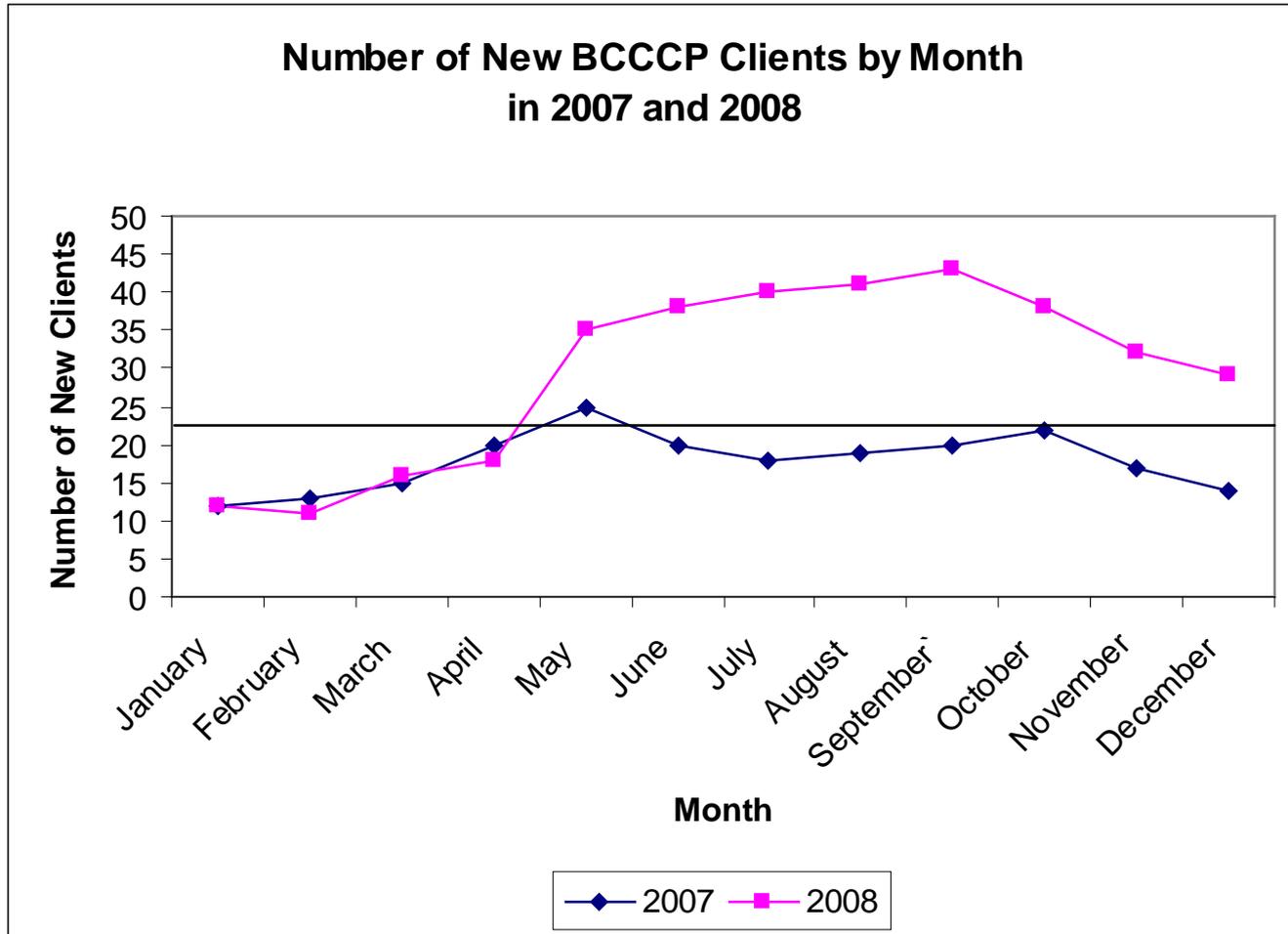
- ▶ To study data measured over time
- ▶ Run charts help to:
 - Measure the performance of a process
 - Identify trends over time
 - Measure change in outcomes following a change in process

Run Charts: When to Use

- ▶ When you have, or can collect:
 - Quantitative or numeric data
 - On a measure of the performance of a process
 - Over time

- ▶ Example:
 - Each month the health department tracks the number of new BCCCP clients enrolled in the program to measure the impact of advertising the program in an additional local newspaper starting in April 2008.

Run Chart: Sample



Run Charts: Hints & Tips

- ▶ Every process will have some variation
 - Be cautious about assuming that variation from the average has meaning
- ▶ Be sure to track data over a long enough period of time
 - This will help you identify the true mean and the true level of variability within the process
 - A complete step-by-step example of creating Pareto Charts is in your manual

Tool Sources

- ▶ Quality Improvement Guidebook, Page 98
- ▶ Public Health Memory Jogger II
- ▶ Tool Time (Langford Press)
- ▶ Internet/Google

NOTE: These are all referenced in the Guidebook beginning on page 98



Tools? No way!
Where are the
Toys?

BREAK

A Review

- ▶ Aim statements
- ▶ Process Maps
- ▶ Fishbone Diagram
- ▶ Five Whys & Root Cause
- ▶ Notes of Key take a ways
- ▶ Tools

Next Steps

- ▶ Meet and review notes from the Learning Session
- ▶ Revise work-plan based on Learning Session
- ▶ Revise AIM Statement
- ▶ Complete Process Map
- ▶ Complete Fishbone Diagram

Future Plans

- ▶ Schedule date for Support Team Site Visit one month from Learning Session
- ▶ Schedule teleconferences with all LHDs and support team
- ▶ Schedule bi-monthly mini-collaborative teleconferences

WRAP-UP

- ▶ Questions
- ▶ Evaluations
- ▶ Adjourn



Whew, glad we're done! Can I go home now?

Thank You!