



Quality Improvement and Public Health in Kansas

Storyboards

Tatiana Lin, M.A.
Kansas Health Institute

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PART I

WHAT IS A STORYBOARD



A Quality Storyboard Is:

A 3D rendered white figure of a person standing and holding a white rectangular sign with a thin grey border. The figure is positioned in the center of a white rectangular area, which is framed by a yellow border. The background of the slide is dark blue with a yellow horizontal line above the white area.

**A VISUAL method
for displaying a
quality improvement
story!**



Storyboard History & Use

- Surfaced at Walt Disney Studios during the 1920's to “articulate a story in an embraceable way!”
- Illustrated cartoons for short subjects then moved to larger scale efforts (*Gone with the Wind* in 1939!)
- Having proved themselves in other fields & industries, storyboards are now being applied to system development, web development, instructional design, and quality improvement



Why QI Storyboards?

- Tell your QI story in an organized way
- Depict your team's progress
- Guide the work of the team
- Help to document and share...
 - Steps that were taken to implement quality improvement projects
 - Lessons learned
 - Potential impact
- Give users real content that is easy to understand
- Highlight your accomplishments!



Sample Storyboard

MLC-2 in Kansas
West Central Public Health Initiative (WCPHI)
Five counties:
Gove, Logan, Ness, Sheridan and Trego
Serving a population of nearly 14,207

Influenza Vaccination QI Team Members:
Cindy Miller - Regional Coordinator
QI County Leaders:
Cheryl Gove & Yvonne Logan - Gove
Georgetta Schoenfeld & Rhonda Seaber - Logan
Sharon Anderson & Arlene Lanzer - Ness
Paloma Gosser & Heather Strick - Sheridan
Dana Parke & Nicole Meabner - Trego



Plan

1. Understand the system and select the team
How did we know there was an opportunity?

- Team brainstorming
- The anecdotal information gathered during conversations with nurses and other local health departments' staff suggested that influenza vaccination rates are too low in the West Central region.
- Initiative participants:
 - One regional coordinator and two staff members from each of the five participating counties
- Considered problems previously identified in:
 - Evaluation of data gathered for the region from 2004 to 2006
 - The regional vaccination rate is lower than CDC recommendation that all children ages 6 to 59 months should receive influenza vaccine yearly

4. Analyze the causes
After conducting an initial root cause analysis (Fishbone Diagram) of the possible reasons for the low influenza vaccination rates in the region, the team found that an overlapping issue in various categories was lack of parent knowledge/education regarding influenza vaccination.

- Root causes of low influenza vaccination rates in 6- to 59-month-old children:
 - Information about the flu vaccine for children ages 6 to 59 months is not readily available for the public.
 - Physicians are not recommending influenza vaccine for children of all ages.
 - LHDs have not previously directed efforts to educate parents and providers about the vaccine.
 - The region does not have uniform, printed materials about the flu vaccine.

- Conduct public information campaign:
 - Run various advertisements in each local county newspaper
 - Run public service announcements on area radio stations



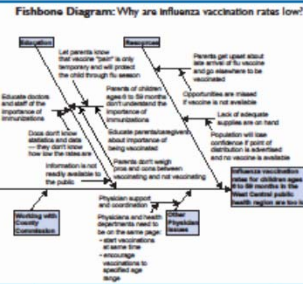
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Project results:
By the end of the project period, there was an increase of 62 percent over the previous three year average for the months of October and November in the number of 6- to 59-month-old children vaccinated (see chart below).

Increased collaboration between local health departments, day care providers, child care licensing surveyors, preschools, school districts, Kansas Association of Child Care Resource and Referral Agencies, physician office, WIC and Head Start

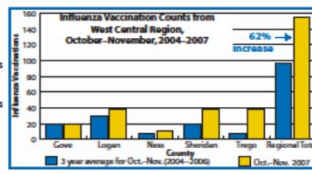
Act

- Standardize the improvement:
 - Continue to use PH-Clinic and KSWebIZ to look at all immunizations, including flu vaccination
 - Continue to educate and promote the importance of flu vaccination to the target population prior to each flu season
 - Continue to foster collaboration between LHDs and physicians offices
 - Continue to utilize QI tools in day-to-day activities
- Reflect and establish future plans:
 - QI will be expanded to other areas of the region
 - Continue familiarizing LHD staff with QI concepts, tools and methods



Do

- Select and implement a theory for improvement:
 - Activities:
 - Full up information and statistics about the flu
 - Review evidence and recommendations for increasing influenza vaccination rates
 - Calculate type and quantity of vaccine necessary
 - Order vaccine
 - Identify locations suitable for outreach activities
 - Select and print campaign materials (posters and fact sheets) from the CDC Flu Gallery
 - Distribute print campaign materials to health care clinics, elementary schools, hospitals, health departments, day cares and preschools
 - Create postcards to send directly to all targeted families



Project coordinated by Kansas Health Institute, Kansas Association of Local Health Departments, and Kansas Department of Health and Environment

MLC-2 in Kansas
East Central Kansas Public Health Coalition (ECKPHC)
Eight counties:
Chase, Coffey, Franklin, Greenwood, Lyon, Morris, Osage and Wabasa
Serving a population of nearly 117,000

QI Team Members:
Mala Rawson - Regional Coordinator
QI County Leaders:
Cheryl Jones - Chase
Lindae Prew - Coffey
Erinna James - Franklin
Dana Radcliff - Greenwood
Luzanne Marsh - Lyon
Ashley Hinkson - Morris
Meredith Knowles - Osage
Janet Wiersbacher - Wabasa



Plan

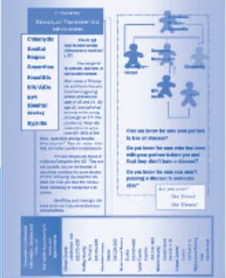
1. Understand the system and select the team
How did we know there was an opportunity?

- Team brainstorming
- Through examining the needs of local health department administrators and recognizing the lack of ability of local needs assessments and other community data, the project's staff suggested that there was a need to address health monitoring issues, including necessary training for instrument development and data interpretation relative to prenatal care within the Maternal and Child Health (MCH) program.
- Initiative participants:
 - One regional coordinator and one staff member from each of eight participating counties

- Learn and utilize Quality Improvement (QI) techniques to strengthen the regional capacity for providing certain public health service functions that could not be easily provided by each individual local health department
- Primary district/stakeholders and their needs:
 - Residents of the East Central region (Chase, Coffey, Franklin, Greenwood, Lyon, Morris, Osage and Wabasa counties), specifically all MCH program qualified clients (the target population), need public health service information regarding STI testing
 - Local health department (LHD) staff and managers need QI training and technical assistance, such as how to abstract STI data.
 - LHDs and physician offices need educational materials for patients and professionals such as posters, brochures, fact sheets, public service announcements and newspaper advertisements.

- Identify locations suitable for outreach activities
- Develop a regional STI testing and screening protocol
- Adopt a regional STI examination form
- Design and print regional promotional brochures of STI testing and screening
- Distribute print campaign materials
- Conduct public information campaign:
 - Place various advertisements in each local county newspaper
 - Place public service announcements on area radio stations

Brochure used by region:



Check

Project Results:
Established a uniform, basic level of STI testing and treatment in all eight health departments
Developed a regional protocol and a regional program brochures for STI testing and treatment
Equipped and trained all eight health departments to provide STI testing and treatment services as planned, beginning no later than January 1, 2008
Increased collaboration between LHDs and private providers
The staff learned how to use QI techniques to strengthen the regional capacity for providing certain public health service functions that could not be easily provided by each individual local health department

Act

- Standardize the improvement:
 - Continue to promote the importance of STI testing to the target population
 - Continue to utilize QI tools in day-to-day activities
- Reflect and establish future plans:
 - Expand QI to other areas of the region
 - Continue familiarizing the departments' staff with QI concepts, tools, and methods

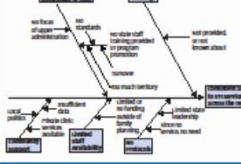
2. Define the opportunity
Problem statement:
The team initially chose to address the low percentage of pregnant women in the region who receive prenatal care. But after conducting the initial root cause analysis (Fishbone Diagram), the team's focus shifted to Sexually Transmitted Infection (STI) testing and treatment services across the region.

The team chose a new problem statement: Sexually Transmitted Infection (STI) testing and treatment procedures are not provided uniformly throughout the region.

- Justification for choosing area of focus:
 - STIs are prevalent across Kansas.
 - STIs have a great impact on birth outcomes and fertility.
 - Only two of the eight county health departments in the region regularly screen for STIs.
 - The region lacks quality and uniform services.
 - STI testing and treatment protocols are different for each local health department in the region.
 - STI testing and screening is not done outside of the family planning program, nor does it include the male population.

3. Study the current situation
The following data collection tools were used to gather baseline data for the project:

- Kansas Information for Communities (KIC) system, 2004
- KDHE Infertility Program reports
- HAWK, an integrated electronic disease surveillance system



Do

- Select and implement a theory for improvement:
 - Rationale: Distributing the promotional brochure of STI testing and screening in the region will increase community awareness of public health services provided by the East Central Kansas Public Health Coalition.
 - Activities:
 - Access information and statistics about STI rates
 - Conduct regional training in four sessions:
 - KDHE STI and HIV program explanation
 - Male STI exams
 - Female STI exams
 - Presentation by field staff on STIs and LHD practices
 - Review state and local protocols
 - Review evidence and recommendations for reducing STI rates in the region

Project coordinated by Kansas Health Institute, Kansas Association of Local Health Departments, and Kansas Department of Health and Environment



PART II

ORGANIZATION & COMPOSITION



Plan-Do-Check-Act

Plan

1. Understand the System and Select the Team
 - ✓ How did we know there was an opportunity?
Example: team brainstorming
2. Define the Opportunity
 - ✓ Problem statement
 - ✓ Justification for choosing area of focus
 - ✓ Goals
 - ✓ Primary clients/stakeholders
3. Study the Current Situation
 - ✓ Data collection tools
4. Analyze the causes
 - ✓ Root cause analysis (fishbone)



Plan-Do-Check-Act Cont'd....

Do

5. Select and Implement a Theory for Improvement

- ✓ Rationale
- ✓ Activities

Check

6. Project results (measurable)

- ✓ Increase of x% over the previous year

Act

7. Standardize Improvement

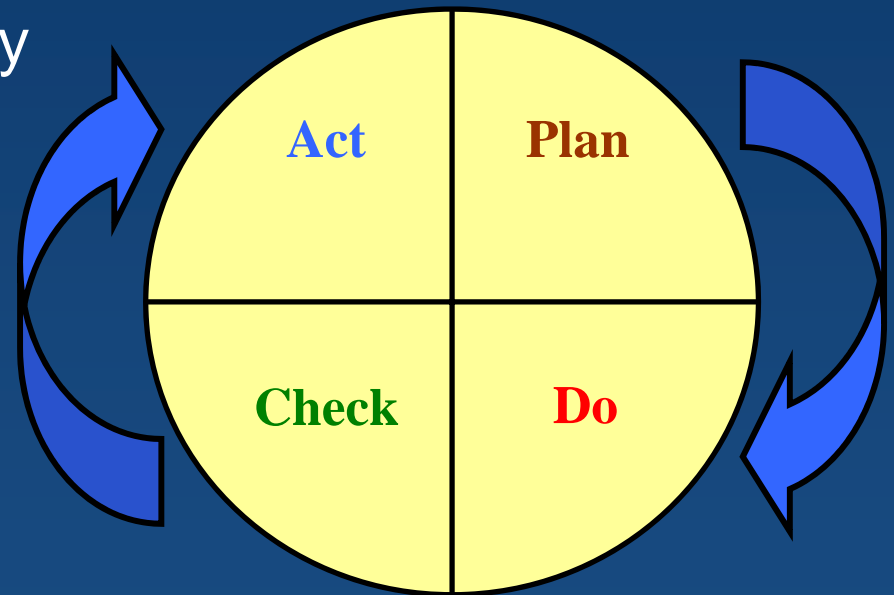
8. Reflect and Establish Future Plans



Milestones

In general, each team should strive to depict the:

- Aim Statement
- Improvement Theory
- Data & Results
- QI Tools Used
- Learning





PART III

Telling the Story



WCPHI Influenza Vaccination Project

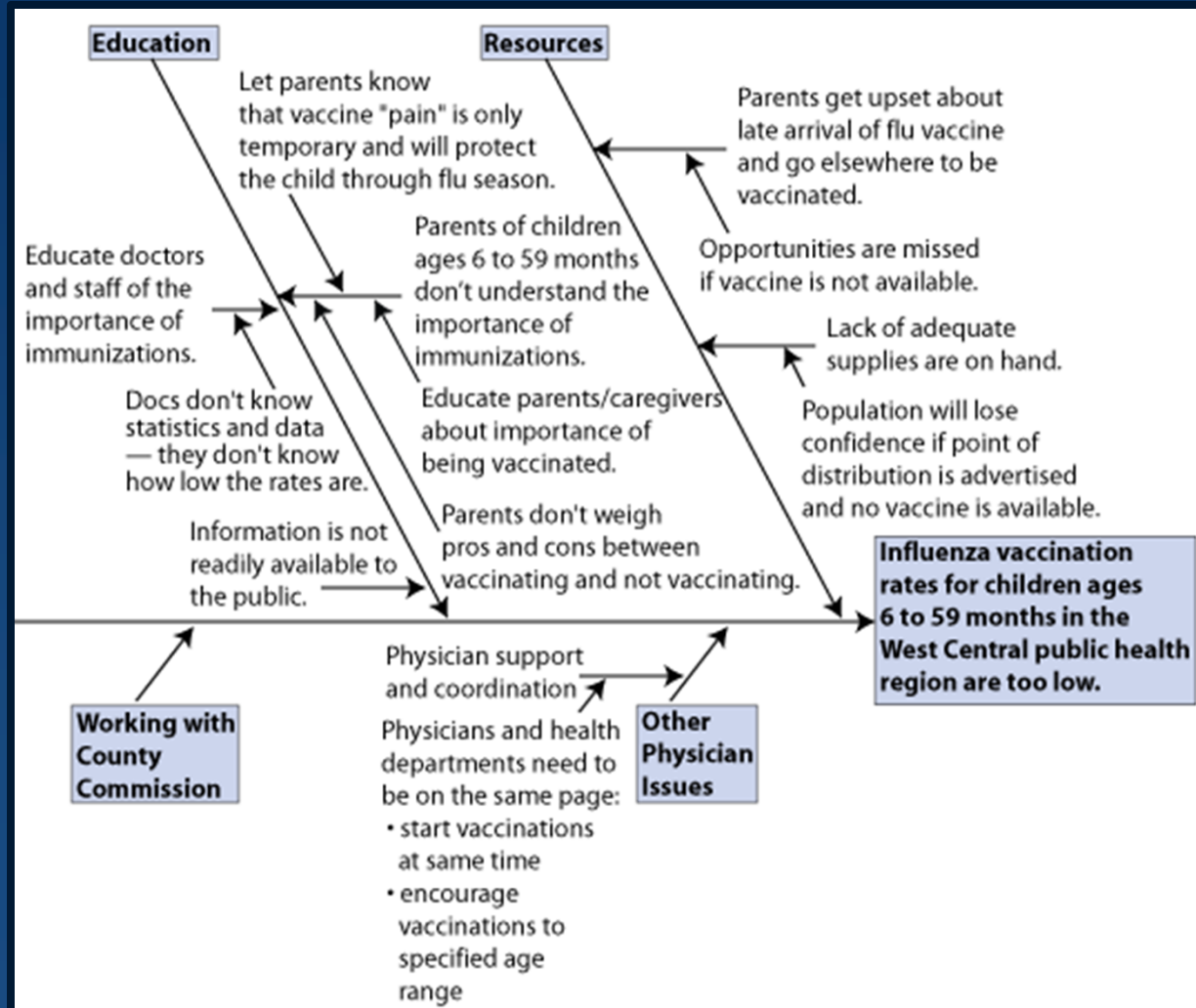
PLAN

1. Team brainstorming, anecdotal information, 2004 and 2006 data → influenza vaccination rates are too low
2. Problem Statement: Influenza vaccination rate for children 6 to 59 months in the West Central Public Health Region are too low.
3. Stakeholders and Their Needs: parents (need information), LHDs (QI training)
4. Data Collection Tools: KSWebIZ, PHClinic → **< 50% in each county**
5. Implement QI Tools (fishbone) → lack of parent knowledge



WCPHI Influenza Vaccination Project Cont'd....

Fishbone Diagram: Why are influenza vaccination rates low?





WCPHI Influenza Vaccination Project Cont'd...

Do

6. Activities:

- Pull up information and statistics about the flu
- Review evidence and recommendations
- Calculate type and quality of vaccine necessary
- Order vaccine
- Identify locations for outreach activities
- Select, print and distribute campaign materials
- Create and send postcards to target families

Check

7. Results: activities  62% increase over the previous 3 year average



WCPHI Influenza Vaccination Project Cont'd...

ACT

8. Continue to use data collection tools; continue to promote importance of flu vaccination; continue to use QI tools in day-to-day activities
9. Future Plans:
 - Expand QI to other areas
 - Continue familiarizing LHD staff with QI concepts and tools



PART IV

RECOMMENDATIONS



TIPS

- Assemble a “storyboard” team early in the process: 3 people
- Review the MLC-3 pilot projects’ storyboards
- Use storyboards as a part of the planning process
- Organize and keep all the project’s materials!!!





TIPS Cont'd.....

- Be as succinct as possible. Include only critical information
- Design for ease of comprehension and readability
- Use visual images such as charts & graphs
- Avoid jargon when possible
- Make the steps that you took to conduct the project readily apparent
- Display the data used throughout the process
- Outline conclusions based upon data
- Present plans for sustaining the improvement or further investigation



PART V

MLC-2 Storyboard experience



Storyboard package

- 3 storyboards
- 1 “short” + 1 “long version”
- 3 information sheets:
 - Quality Improvement and Public Health
 - “Functional regionalization” and Public Health
 - Kansas Pilot Projects



How Did We Use Storyboards?

- Used by the LHDs as internal communication tools to “tell the story”
- Used during MLC-2 and MLC-3 National Meetings to share Kansas QI progress & results with national partners and other states
- KALHD Mid-Year Meeting
- Convening with legislators



Regional “storyboard experience” rating...

Successes

- Served as powerful tools for learning more about the region’s own MLC-2 projects
- Helped communicate QI processes to LHD staff and other stakeholders
- Adopted storyboards for their future planning purposes

Pitfalls

- Storyboards developed at the end of the project
- Regions involved at the review stage of the process
- Could have served as helpful planning tools for the regions
- Spent more time than anticipated
- Lack of a uniform project documentation