# Storyboard Handbook Tips for Preparing and Presenting Improvement Stories from the Institute for Healthcare Improvement

## **About Storyboard Displays**

Storyboard displays chronicle specific improvement projects. They are an integral part of IHI's conferences and events , providing an opportunity for organizations to share their improvement strategies and celebrate their successes.

This handbook includes recommendations (page 2) for creating storyboards that demonstrate quality improvement projects in health care. While these are not requirements for submission, we strongly encourage storyboard submissions to contain most (if not all) of these recommended components.

**Storyboards should not merchandise products or services.** Sponsorships, advertising, and exhibiting opportunities should be used to generate interest and leads for products or services. Contact IHI at <a href="mailto:info@ihi.org">info@ihi.org</a> or 617-301-4800 to inquire about opportunities at various events.

## **Handouts**

Distributing handouts at the storyboard display is not recommended because of space restrictions. If you have brochures, documents, or other information you think would be helpful to those interested in your quality improvement project, we suggest that you collect business cards from those who want further information in order to send it to them after the conference. One way to do this is to attach a manila envelope for attendees to drop their business cards in, or to attach an envelope filled with a supply of your handouts. Unfortunately, there is not sufficient space to supply tables for the storyboards.

## Layout

Aim to create an attractive display that will draw participants to your storyboard and communicate clearly the main points of your display. The following guidelines may be helpful:

## Size

Storyboards will be mounted on 4 foot x 8 foot boards that are about 6 feet tall including the legs they stand on. The boards are set in frames and are covered in fabric. There will be 2 presentations per board. Your storyboard should fit into a space about 4 feet high and 4 feet wide. (Due to the perimeter of the frame, the actual usable amount of space per organization is 44.75" x 45.5".)

☐ 4 feet wide ☐	
☐ 4 feet high ☐	
Storyboard: Organization A	Storyboard: Organization B

# Appearance

Creative use of pictures, graphs, text blocks, color, headlines, etc., can attract others to your storyboard, prompt conversation, and enhance communication of your message. Avoid making your storyboard too "text heavy." Focus on the highlights of your display. If it can be communicated with numbers, graphs, or other visuals, do so.

## **Materials**

Storyboards may be mounted with Velcro, pushpins, thumbtacks, or staples. Please bring with you any materials needed to mount your display – we will not have them available on-site.

# Tips for Creating a Storyboard on Quality Improvement in Health Care

Improvement Advisors at the Institute for Healthcare Improvement developed the following recommendations for creating storyboards that demonstrate quality improvement projects in health care. Your storyboard submission should include the following:

- **1.** A clearly defined *Aim Statement* with an expected change in outcome indicator and time to expected change in the outcome indicator.
- 2. An outline of your *project design/strategy for change* that explains how you will reach your aim.
- 3. An explanation of the *changes made* to achieve improvement in the targeted process.
- **4.** Graphical representation of improvement. The use of statistical process control (SPC) tools (especially *annotated run charts* or *Shewhart control charts*) is preferred to demonstrate the performance of data over time. Bar and pie charts should not be used when building a poster for Quality Improvement projects.
- **5.** An indication that *changes were tested and/or adapted* to the local environment/organization prior to implementation.
- **6.** An explanation of how *multiple measures* were used to understand and show improvement in the target process.
- **7.** A listing of the *multi-disciplinary team* that was involved in achieving improvement (elements may include: content experts, patients, leadership, etc.)
- **8.** A demonstrated *sustainability* in improvement indicated by the data (if possible).
- **9.** A short summary of the *lessons learned* from the work and/or the message for readers.

Please note that these are recommendations and not requirements for submission. Storyboards without one or more of these elements will also be considered.

Note: To learn more about charting improvement work, visit IHI.org under Topics>Improvement or view the FREE On-Demand Trainings in Building Skills in <u>Data Collection and Understanding Variation</u> and <u>Using Run and Control Charts</u> to Understand Variation.

## **Example Storyboard**

An example storyboard has been included on page 3 of this document. The circled numbers on the example correspond to the tips listed in the section above.

# Redesign of Clinic Processes to Reduce ANC Visit Duration for Increased Service Patronage

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#### Context:

As part of an overall quality improvement effort in St. Evarist Clinic in Ullo in Jirapa District of the Upper West Region in Ghana, the clinic staff (midwife, field technician, community health nurse, community health officer & health extension workers) committed to reducing the time spent by antenatal care (ANC) clients in the clinic from an estimated 4hrs to less than 2hrs.

#### Problem:

ANC clients were complaining about spending too long in the clinic relative to the actual time with the midwife. This was causing stress on the clinic staff, patient dissatisfaction and was believed to be causing poor patronage of ANC services, especially making at least 4 visits before

#### Assessment of problem and analysis of its causes:

Baseline data on visit duration were unavailable but all staff were keenly aware of the problem; they estimated that on the average, ANC clients spent 4 hours in the clinic. After the establishment of the clinic's quality improvement team as part of an overall QI effort in Jirapa District in July 2008, the team prioritized the areas of work needing improvement. A baseline of 76% of expected pregnancies receiving a 4th visit before delivery was unsatisfactory to the team because a significant proportion missed the full complement of ANC care which could lead to a bad delivery outcome. This was most likely to do with the long visit durations caused by bottlenecks and inefficiencies in clinic processes. Thus, all members of the clinic staff brainstormed on changes that could be tested to improve the process of providing ANC.

# 1 Aim:

The aims of this project were to (1) reduce visit duration to less than 2hrs within 8 months (2) increase 4th attendance for ANC from 76% to 90% or more of expected pregnancies within 8 months.

- The changes tested were as follows:
  - A. Increasing access to ANC
  - Provide ANC service on all working days of the week from Monday to Friday rather than just 2 week days as was the previous practice.
  - Create ANC outreach points in distant communities for women who can not come to the clinic
  - B. Reduce ANC visit duration
  - · Instead of waiting until at least 10 women gather before starting health education talks, midwife provide health education to individual clients as
  - Instead of attending to curative care clients before attending to ANC clients, staff are split into 2 groups so both services are run concurrently
  - · Delay detailed data entry into the ANC register until the end of the day when there are no clients. Rather, needed information is captured in a simplified format on a sheet of paper.
  - Pre-pack routine drugs a day prior to the ANC clinic for clients. The packages are organized into categories based on the anticipated gestation ages of expected clients.

## 2 Strategy for change:

All the clinic staff were involved in testing and assessing whether these changes were leading to an improvement in visit duration. The clinic staff received technical support on a monthly basis from a QI project operating in the district (Project Fives Alive!). Results of our change process were disseminated during Learning Sessions of the Project Fives Alive! Improvement Collaborative Network in Jirapa District.

## Measurement of improvement:

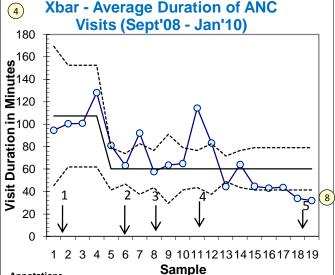
ANC visit duration

ANC registrants returning for ANC at least 3 more times before delivery

#### Results:

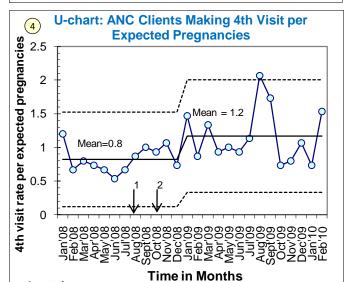
- Within 2 months of testing we achieved our aim of < 2hrs ANC visit duration. Client complaints reduced dramatically and clinic staff felt less stressed. We continuously improved this process and further reduced visit duration to about 1hr by the 13th month and < 1hr by the 15th
- ANC attendance has increased from a baseline mean rate of 0.8 to 1.2 ANC registrants receiving ANC service at least 3 more times before delivery per expected pregnancies.
- After achieving consistent performance, the team developed internal structures to implement and sustain these changes for the long-term





#### **Annotations**

- 1: Health education to individual clients + Running curative and ANC care concurrently (Sept'08)
- 2: Delayed entry of information into ANC register (Oct'08)
- 3: Pre-packing of routine drugs for ANC clients (Nov'08)
- 4: Key staff were not available at the facility (Feb'09)
- 5: Improvements appear to be continuing as staff refine their process of care (Jan'10)
- NB: Samples were taken between the time frame of 1st Sept 2008 and 31st Jan



#### **Annotations**

- 1: Made changes to reduce ANC visit duration
- 2: Begun testing changes to increase access to ANC care

#### Lessons learnt:

Improving access to ANC and improving patient flow reduces clients' waiting time, increases clients' satisfaction and reduces staff sense of stress. It also increases ANC attendance to maximize opportunities for early detection and management of complications, more frequent provision of health education and more time to work with clients on their birth preparedness plans.

#### Message for others:

Human resources for health, though constrained in rural Ghana, can be optimized through process efficiency and creating systems to support local innovation, testing and implementation of process improvements.

