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Improving Quality in Healthcare

A practical guide for health care providers

MARCH 2016

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DISCLAIMER

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Introduction

This document is designed to help professionals who want to start quality improvement (QI) programmes in their workplace. It starts with a real example about how staff at a hospital in India used QI methods to provide better care to pregnant women. The guide then provide more details about each QI step and includes annexes with tools that health workers can use to identify and solve problems on their own.

The document will also be useful for supervisors, managers and leaders who are supporting providers to deliver better care.

A Zonal Hospital's Use of Quality Improvement

The Zonal Hospital in Mandi, Himachal Pradesh is a 300-bed tertiary care hospital. Staff in the hospital decided that they wanted to do a better job of identifying and managing women with high-risk conditions during antenatal care visits. To achieve this goal, a team consisting of a medical officer, a nurse-midwife supervisor and three nurse-midwives started working together.

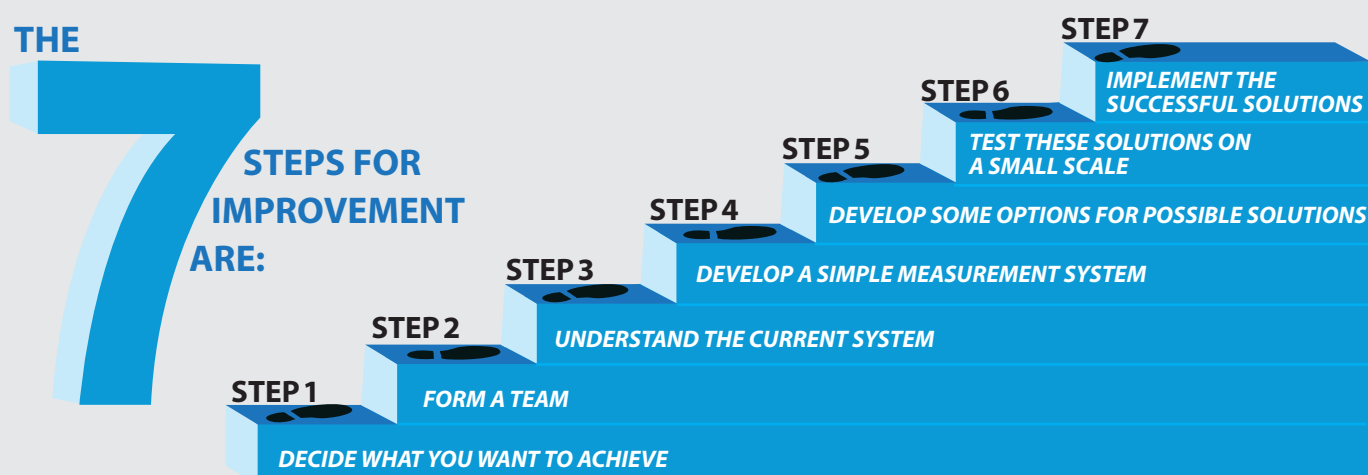
The team reviewed their data. They realised that they were not identifying many women with high-risk conditions. After discussing, they identified two problems. First, they were not always measuring blood pressure or testing for anemia. Second, many women were leaving the facility before anyone saw their laboratory results. The reason for both of these problems was that the clinic was not organised. All nurses were supposed to carry out all antenatal care activities, and there was no queue system. This meant that women had to wait a long time for care. Because the visits took so long, many pregnant women did not come back to the antenatal (ANC) clinic from the laboratory with their report.

The team started keeping track of how many women had their blood pressure (BP) and hemoglobin (Hb) measured and how many women with high-risk conditions they identified each day. They then planned some changes to organise care. They defined four steps for how women would move through the clinic and assigned nurses for each ANC step:

1. Registration and referral to laboratory (if necessary)
2. Laboratory visit (if necessary)
3. History and physical check up in the clinic
4. Review of findings, counseling, treatment, and referral to doctor (if necessary).

The team tried this new system for five pregnant women to see how it worked. They realised that it worked fairly well but they needed to adjust the specific tasks for some of the nurses. They reassigned some tasks and tried the new system the next day. They found that it worked and started using this system all the time. After making these changes, the staff are able to measure BP and Hb in over 95% of all women at the clinic and identify many women with high-risk conditions.

Staff at Mandi hospital used QI to provide better care to women coming for ANC. QI is a management approach used all over the world to help fix problems. There are a many different QI approaches, but they all have some common activities. The approach that the Mandi staff used involves following seven steps. These steps provide useful framework for a team of people to use to fix problems in their workplace.



The Steps for Improvement

1. Decide what you want to achieve

The first step to improving something is to decide what you want to improve. It is best to be very clear and specific about what you want to do. For example, deciding to reduce maternal mortality is too general. There are too many contributing factors, and staff will not know what to do next. Instead, it is best to break the problem down into something smaller. This means picking a goal that is more specific and setting a short timeline for achieving the goal. For example, a team may want to reduce maternal mortality. When they look at their data they see that many deaths are due to post-partum hemorrhage. So, the team sets an aim of reducing post-partum hemorrhage by ensuring that in the next month, all women delivering at the facility receive oxytocin within one minute of the baby's delivery.

After teams decide what they want to achieve, they should develop an aim statement that describes:

- a) What they want to achieve
- b) Where
- c) By when

Lessons from Mandi

The Zonal Hospital found that the women with high-risk pregnancies were not being identified during ANC, and they decided to improve their ability to identify these problems during ANC visits.

Mandi aim statement: Identify high-risk conditions in at least 10% of women in the next two months by testing blood pressure and hemoglobin.

2. Form a team

Once you define the aim, you should form a team of people to work on solving it. The team should be made of people involved in the work you are trying to fix. In general, a team will have:

Service providers

- You should involve team members from different cadres of staff depending on the aim. For example, a team to address post-partum hemorrhage (PPH) may include staff nurses, a medical officer, and a pharmacist, while a team to improve infection control may include staff nurses and cleaners. It is also often useful to have a patient or community member on the team.
- These people are crucial for the team for two reasons. First, they know what is happening and will have good ideas for how to fix problems. Second, it is good to involve them from the beginning so that they are more likely to buy in to new ways of working.

Managers and leaders

- The team should also include managers and leaders. These people are involved in providing direction, solving resource issues, and communicating with staff not on the QI team.
- For example, the teams working on PPH or infection control may include the matron, the gynecologist, and facility in-charge.

Enthusiastic team members are critical to the success of improvement projects. If there is more than one person in a cadre you want on your team, pick the person who wants to get involved.

Some facilities may have more than one improvement aim. If the aims are related, then there may be one team working on all of them. With unrelated aims, there may be different teams. Some team members may be involved in different aims, while some may only work on one.

Lessons from Mandi

Once the team decided to work on ANC care, they decided to include staff members who are involved in antenatal care. The QI team consisted of a medical officer, a nurse-midwife supervisor, and three nurse-midwives.

3. Understand the current system (why are we not getting the results we want?)

Once you know what you want to do and have formed a team, the next step is to understand why you are not getting the results you want. This step is crucial because people often jump to solutions too quickly and end up missing the real problem. To avoid this, there are different tools that you can use to find the real problem.

Flow charts, fishbone diagrams and 'Five Whys' are examples of tools you can use to find the real problem. These tools do not take much time to use and can stop you wasting time trying to fix the wrong problem.

Lessons from Mandi

Once they decided to improve antenatal care, the Mandi QI team first tried to find out why they were not able to identify many women with high-risk pregnancies. They did a flow chart to understand how patients move through the clinic and realised that the process was chaotic and even the staff were not clear about who should do what. Doing the flow chart also highlighted two major issues:

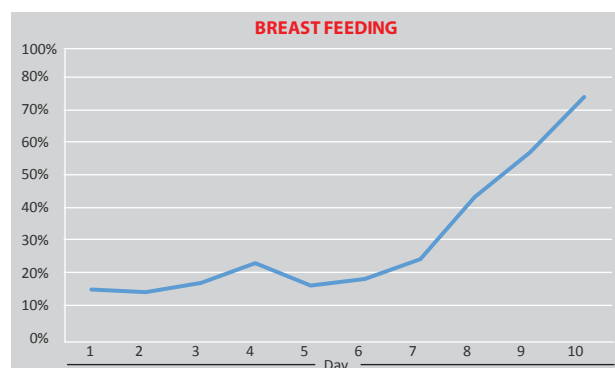
- *All staff were supposed to provide all care. This led to problems when more than one staff person was trying to use the same equipment or records at the same time. For example, if two nurses wanted the BP device at the same time. One of them would have to wait or not measure BP for that woman.*
- *Women were sent to the laboratory at the end of their visit. Some of them did not come back so women with anemia were sometimes being missed because no one saw their laboratory result.*

4. Develop a simple measurement system

Measurement helps us to:

- Identify barriers stopping us from getting the results we want
- Plan what to do next to get better results
- Learn if we are going in the right direction or not
- Learn if improvements in process are leading to actual improved outcomes

The indicators you use should be easy to collect (it is ideal if you are already collecting this indicator) and should tell you whether you are improving care or not. You should assign someone on the team to collect the data. To understand if your changes are working or not it is best to look at the indicator daily or weekly to learn. If you have many patients you do not need to look at the data for everyone but can just look at a sample.



Please refer to the Annexe 4 for detailed explanation of these tools and examples of how to develop a simple measurement system.

A good way to look at data is to put it on a graph showing how the indicator changes over time. This helps us to understand whether we are improving or not.

A time series chart is one of the way to measure the improvement. A time series is a line graph of data plotted over time. By collecting and charting data over time, you can find trends or patterns in the process. Please see the above example of breast feeding measurement every day. X-axis is showing the numbers of days and Y-axis is showing the improvement of breast feeding in percentile.

Lessons from Mandi

The QI team decided to measure three indicators:

1. *Percentage of women coming to ANC who were identified with high risk condition*
2. *Percentage of women coming to ANC who had a blood pressure (BP) measurement*
3. *Percentage of women coming to ANC who had a hemoglobin (Hb) measurement*

These data were already being collected on patient records. To make it easier to look at how they were doing each day they added a new column into the register to keep track of women identified with high risk condition. A few team members reviewed their performance at the end of every day. They discussed how well they were doing and what they needed to do next and fed back their learning and actions to the entire team. They kept a single piece of paper with each day's result recorded and also put all the data into a run chart to make it easier to understand the data.

5. Develop some options for possible solutions

The first four steps involve getting ready to make improvements. The next three steps involve changing how you work. Without change you will keep getting the same results. Coming up with new solutions is not always easy. We often fall into the trap of waiting for new staff, new training, new infrastructure but many problems can be fixed without any of these new resources. Teams should use what they learned when analysing the problem and from reviewing their data and then brainstorm to think of some new solutions. Some guidance for coming up with new 'change ideas' includes:

1. Start with changes that you can make quickly in your clinic or facility (e.g., rearrange tasks among existing staff rather than waiting for new staff to be hired)
2. Start with changes that do not require extensive new resources or permission from higher levels
 - E.g., keeping equipment in one standard place for everyone to use rather than procuring extra equipment
3. Think creatively – don't just think about training or new staff or more supervision
 - E.g., moving lab tests to the start of patient visits so that the results are ready when the patient sees the clinician instead of keeping lab tests to the end of the visit and then asking pregnant women to wait additional time for the clinician to review

Lessons from Mandi

The Mandi team realized that they had three main problems:

1. *Staff weren't sure who was doing what*
2. *Staff often wanted equipment or records at the same time*
3. *Patients often went home after the laboratory without anyone seeing their results.*

The team came up with three 'change ideas' to fix these:

1. *The team divided tasks between staff members so everyone knew who was supposed to do what.*
2. *Because only one person was responsible for each task, the team re-organized the clinic so that each person had the equipment she needed for that task.*
3. *The team moved the laboratory visit to just after registration so that the pregnant women would come to the ANC clinic with her results.*

6. Test these solutions on a small scale

After you brainstorm and come up with something that you think will improve care you then need to make the change. Unfortunately, not all changes are going to work. There are two main reasons why a change may not work. First, you may have not understood the problem completely so your solution does not address the real problem. Second, staff may be resistant to making the change.

To address these issues, it is a good idea to test your possible solutions on a small scale. This means, for example, trying them on a couple of patients or for one day in the clinic.

Doing a small-scale test is useful for four reasons:

1. If the solution does not work, the team can stop it and move on to other possible solutions. This saves time and energy.
2. The team will learn something from a small test. They can then use this learning to adapt the current solution so it works better or to pick a new solution to test.
3. If staff are resistant, planning to test a new idea for just one day or less may help in reducing that resistance.
4. Trying things for only one day or one patient allows you to try more solutions that are more creative.

A simple and effective tool known as 'plan-do-study-act cycles' (PDSA) can be used for testing these changes. PDSAs have four steps that you follow after deciding what possible solution you want to test.

A simple and effective tool known as 'plan-do-study-act cycles' (PDSA) can be used for testing these changes. PDSAs have four steps that you follow after deciding what possible solution you want to test.

1. Plan – the team decides:
 - a. Who should make the change, when, where, for how long
 - b. How to measure how it works
2. Do – the person who agreed to make the change makes it and gets information about how it works
3. Study – the person who made the change shares with the team how it went. This includes:
 - a. Whether it was possible to make the change
 - b. Whether the changed worked
4. Act – the team then decides what to do next. This will either be to implement that change for everyone, modify it to make it work better or discard it and try something else.

Lessons from Mandi

The Mandi QI team wanted to divide the tasks up among the team. They came up with a list of tasks for each staff member. They wanted to test it for a day to see if anyone had too much work or too little before finalizing the task list. They used a PDSA cycle to test:

Plan

- *Each staff member would carry out their assigned tasks for one day*
- *They would keep track of how much work they had*
- *They would measure the % of women how had their BP and Hb measured*

Do

- *They did the above for one day*

Study - the team met and discussed how the day went. They realized:

- *Over 90% of women had their BP and Hb measured*
- *Not all nurses felt that their work load was reduced but one nurse had too much work and a long line of patients waiting for her while another nurse had very little work*

Act

- *The team decided to share some tasks between the overworked and the under-worked nurse and try the change again*

7. Implement a change

Once you have tested an idea and made sure that it works it is time to implement it. Implementation is about making the change become part of everyday care so that it affects everyone. This involves communicating the change and its benefit to other members of the team so that they can apply it as well. Senior leaders in a team are important for supporting this to happen. In Mandi hospital, after testing the division of tasks among nurses over a few days, the team was happy that they had got it right. They then made this a permanent part of how the clinic functioned.

Conclusion

The seven steps describes in the guide are skills that health care staff can use to provide better care to their clients. By following these seven steps and using the tools provided, health workers will be able to solve many problems without new resources or external support.

Annexes: Quality Improvement Tools

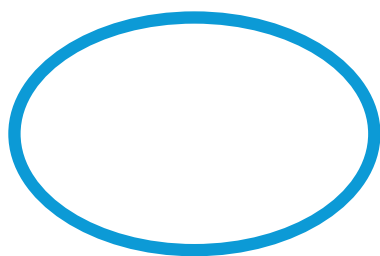
Annex 1: Flow Chart

What is a flow chart?

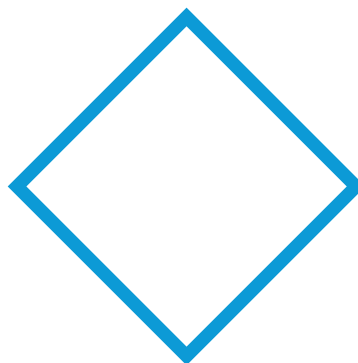
A flowchart is a type of diagram that represents a set of activities. You make a flowchart by drawing a shape to represent each step and by connecting them with arrows. Flowcharts are especially useful for helping teams of people understand how they are all working together and identifying places where we need to make changes. Examples of possible changes might include: clarifying who does what, changing the order of activities, and removing unnecessary steps.

How to construct a flow chart?

There are five main symbols which are used to draw a flowchart. These are:



Ovals are used for the first and last steps.



Diamonds are used for steps where decisions are made. After each decision point there are different options.



Clouds are used for steps where you don't really know what is happening.



Rectangles are used for the rest of the steps.

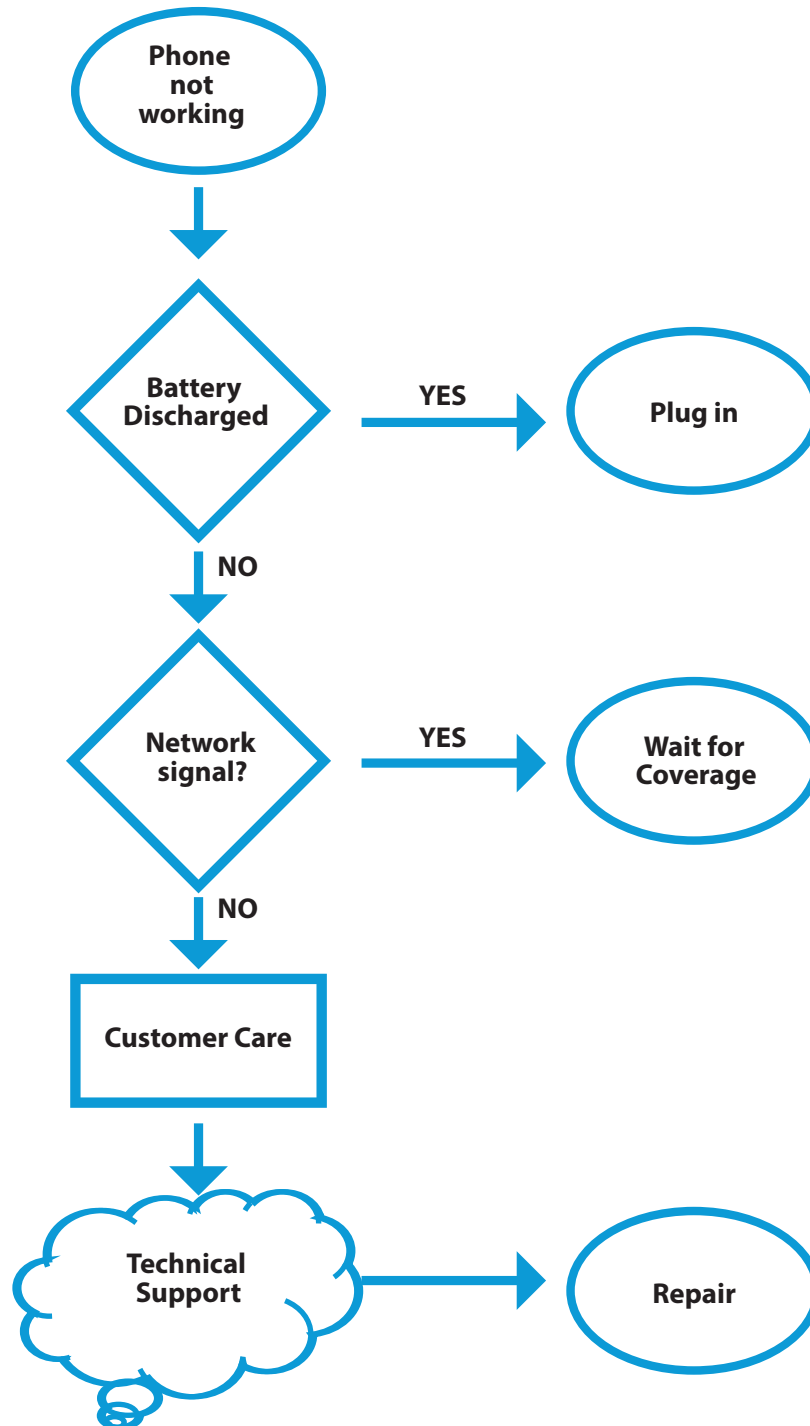


Arrows are used to connect different steps.

You can use a flow chart to describe many different types of problems. Below are applications of the flow chart from daily life and from a clinical setting.

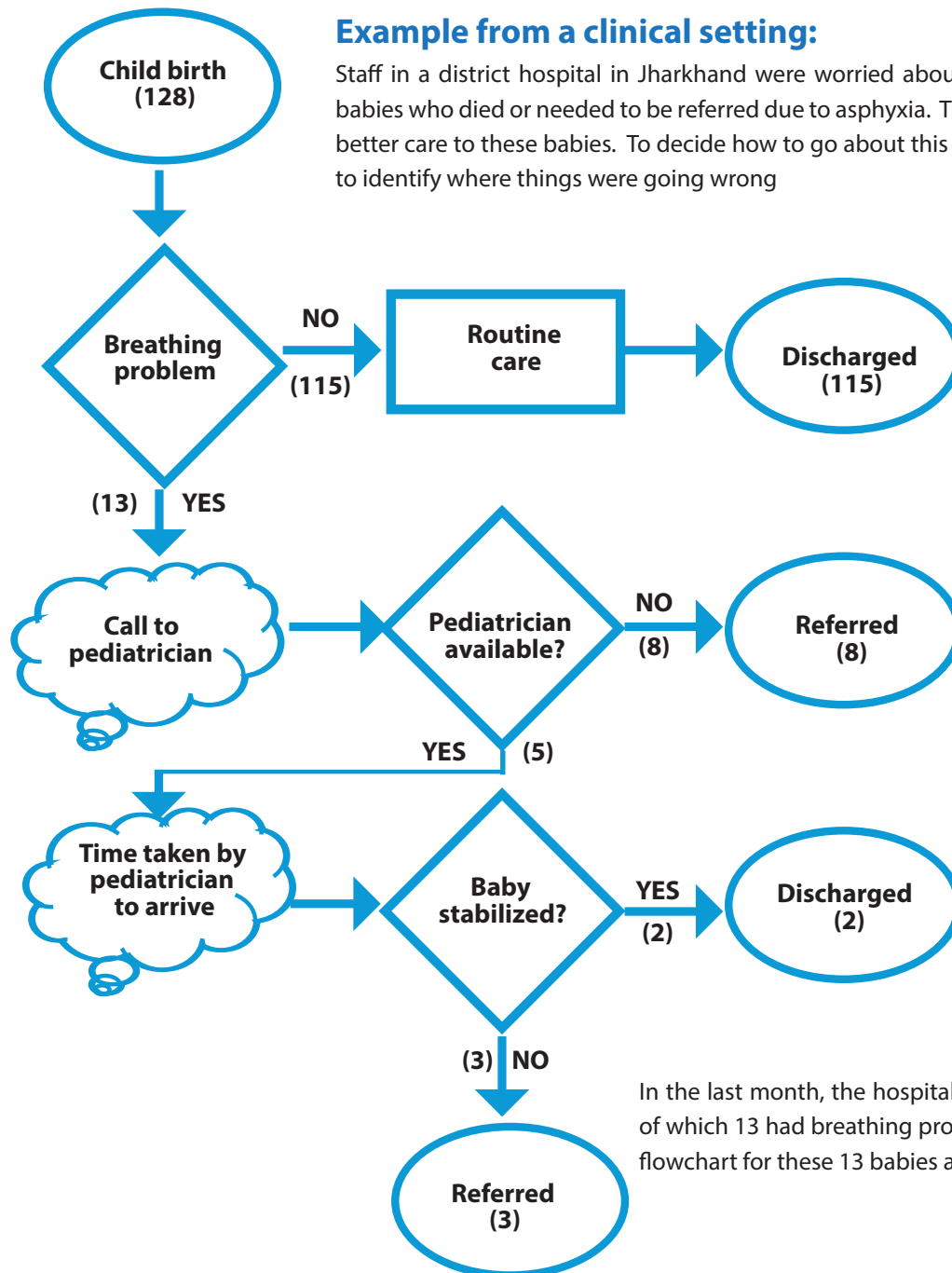
Example from daily life:

Below is a flowchart showing the steps a person may take when she sees that her phone is not working.



Example from a clinical setting:

Staff in a district hospital in Jharkhand were worried about the high number of babies who died or needed to be referred due to asphyxia. They wanted to provide better care to these babies. To decide how to go about this they used a flow chart to identify where things were going wrong



In the last month, the hospital had 128 deliveries, out of which 13 had breathing problems. The team drew a flowchart for these 13 babies as shown above.

The flowchart clarified a number of issues:

- 1) Most referrals happened when the paediatrician was not available
- 2) Even when the paediatrician was available, paediatrician still had to refer about half the patients that she saw
- 3) There were two steps where no one knew exactly what happened:
 - a. No one knew how long it took to call the paediatrician
 - b. No one knew how long it took for her to come to see the baby

Based on drawing the flowchart, the team realised that there were long delays in resuscitating babies because of the delay for the paediatrician to be called and to come. To address this, they decided that the delivering nurse would resuscitate the baby immediately while another nurse on duty would call the paediatrician. In addition, they moved the paediatrician's duty room closer to the labour room so the paediatrician could come faster and help with complicated cases.

Annex 2: Five Whys

What is Five Whys?

Five Whys is a tool that you can use to identify the 'root cause' of a problem so that your solutions will fix the real problem.

How to use Five Whys:

As per the name, five whys involves asking 'why'? five times when you are trying to understand a problem.

Notes:

- There is nothing special about asking five times. The point is to keep asking until you are sure you have the real problem, do not just stop at the first answer.
- Often, patients or families will be the people with the right answers. If you want to know why patients are acting in a certain way – ask them!

Example:

In a sub-district hospital in Punjab, staff were not able to initiate breast feeding of new-born despite staff telling women about the importance of breast feeding. To identify reasons for this so that they could come up with a solution, they asked why women were not initiating breast feeding. When they got the first answer, they asked why again and kept doing that until they found the main problem.

Why 1

Why were staff not able to get women to initiate breast feeding of new-borns?

Answer – Because mothers' tops were covered and they had difficulties getting undressed.

Why 2

Why were mothers having difficulties in getting undressed?

Answer – Because mothers were wearing gowns that were closed at the front and open at the back.

Why 3

Why mothers were wearing this type of gown?

Answer – Because the facility only had this type of gown available.

Why 4

Why was this the only type of gown available?

Answer – Because the storekeeper only ordered this type of gown.

Why 5

Why was the store keeper only ordering this type of gown?

Answer – Because he did not know that there was a need for a different type of gown.

Based on this simple and fast analysis using Five Whys, the staff realised that they needed to talk to the storekeeper and ask him to order a different type of gown that would make breast feeding easier.

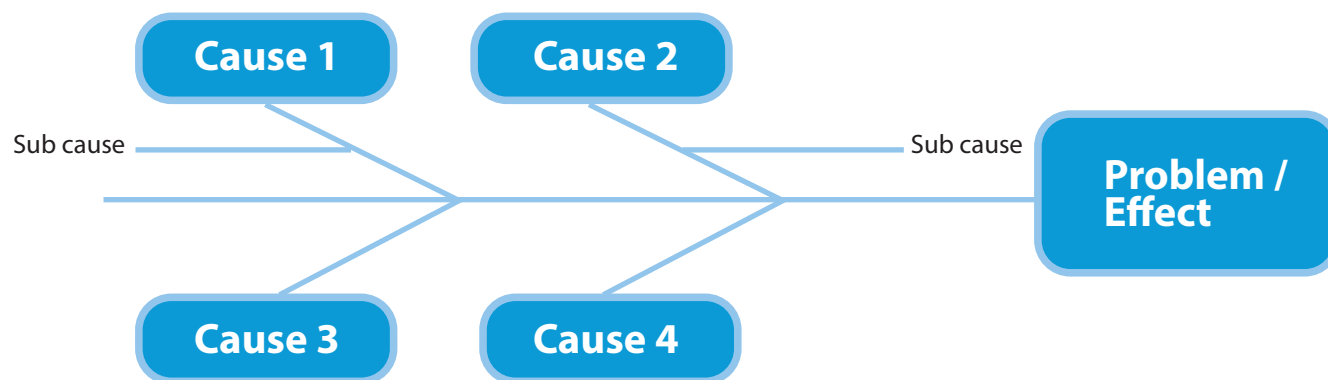
Notes:

- Asking women why they are not comfortable getting undressed was crucial for identifying the need to change the gowns for women in the labour room.
- In the above example, Five Whys gave useful answer but sometimes three questions is enough, and sometimes you need more than five.

Annex 3: Fishbone Diagram

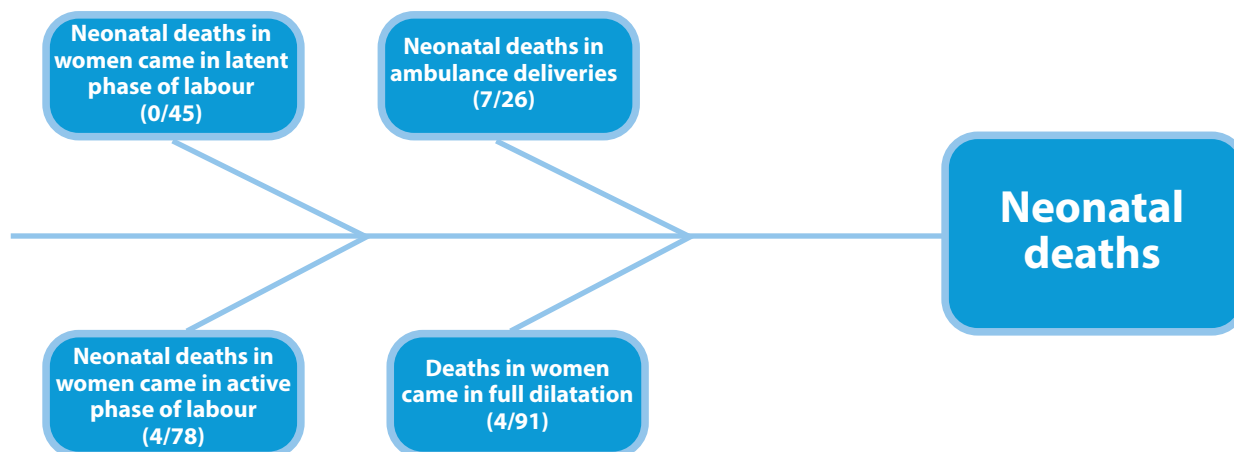
What is a fishbone diagram: Fishbone diagrams are a type of diagram that help us categorise all the different possible causes for a particular problem. They help us to identify which ones can be most easily addressed and which can have the greatest impact.

How to develop a fishbone diagram: Draw a horizontal line and at one end write the problem you are trying to analyse. Then draw lines coming off the horizontal line with what you think are possible causes of that problem (they come off the horizontal line like bones off a fish backbone). You can break each of these causes into smaller causes using smaller 'bones'.



Example:

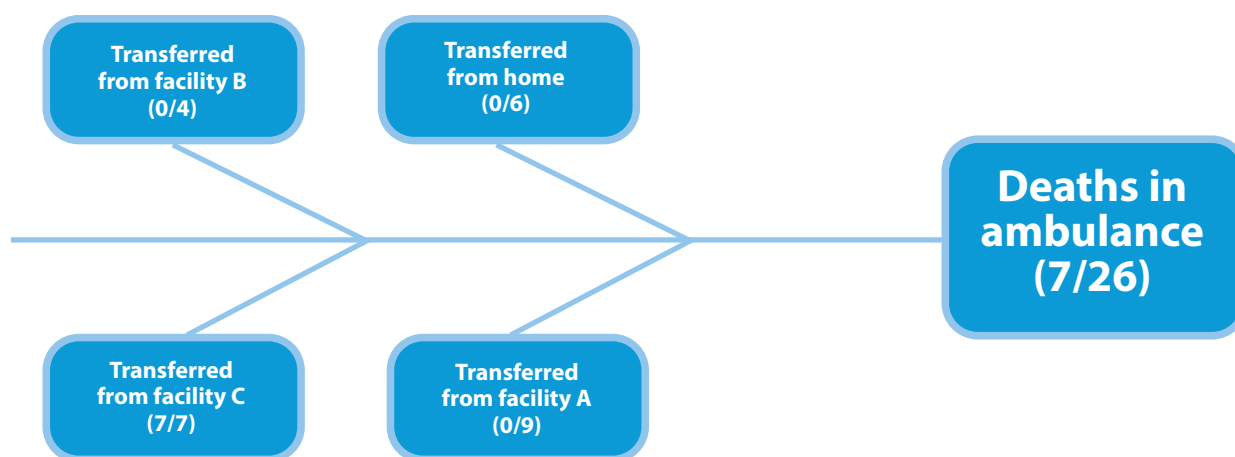
Staff in a hospital in Haryana were trying to improve neonatal mortality. They decided to use a fishbone diagram to make sure they understood what was contributing to newborn deaths. Because they thought that most deaths occurred when mothers came late to the facility they decided to draw 'bones' on the diagram related to when the mother came to the facility and when babies died. So they had "a bone" for deliveries in the ambulance, deliveries in women coming to the facility in the latent phase of labour, the active phase of labour, and when fully dilated. Then they added number of deliveries that took place in these four groups and the number of neonatal deaths. They used this to organise the past month's data.



Doing this showed them two things:

1. When women come in latent labour, their babies do very well (there were no deaths). This suggests that care in the labour room was good.
2. 26 Baby delivered in the ambulance and 7 of these babies died. These 7 deaths accounted for almost half of the deaths at the facility.

They realised that to reduce new-born mortality they needed to stop babies from dying before they came to their hospital. They wanted to know why babies were dying in the ambulance. They didn't know if it was because there was a problem in care being given in the ambulance, if there was a problem in care being provided at the referring facility, or if women were calling the ambulance too late. Each of these options would need a different solution, so they used fishbone diagrams to help understand what was going on. They collected data on the number of pregnant mothers who were transferred in the ambulance from home or other facilities and the number of neonatal deaths that took place in each group. There were 26 mothers who were transferred in the ambulance and 7 deaths; all 7 deaths came from facility C.



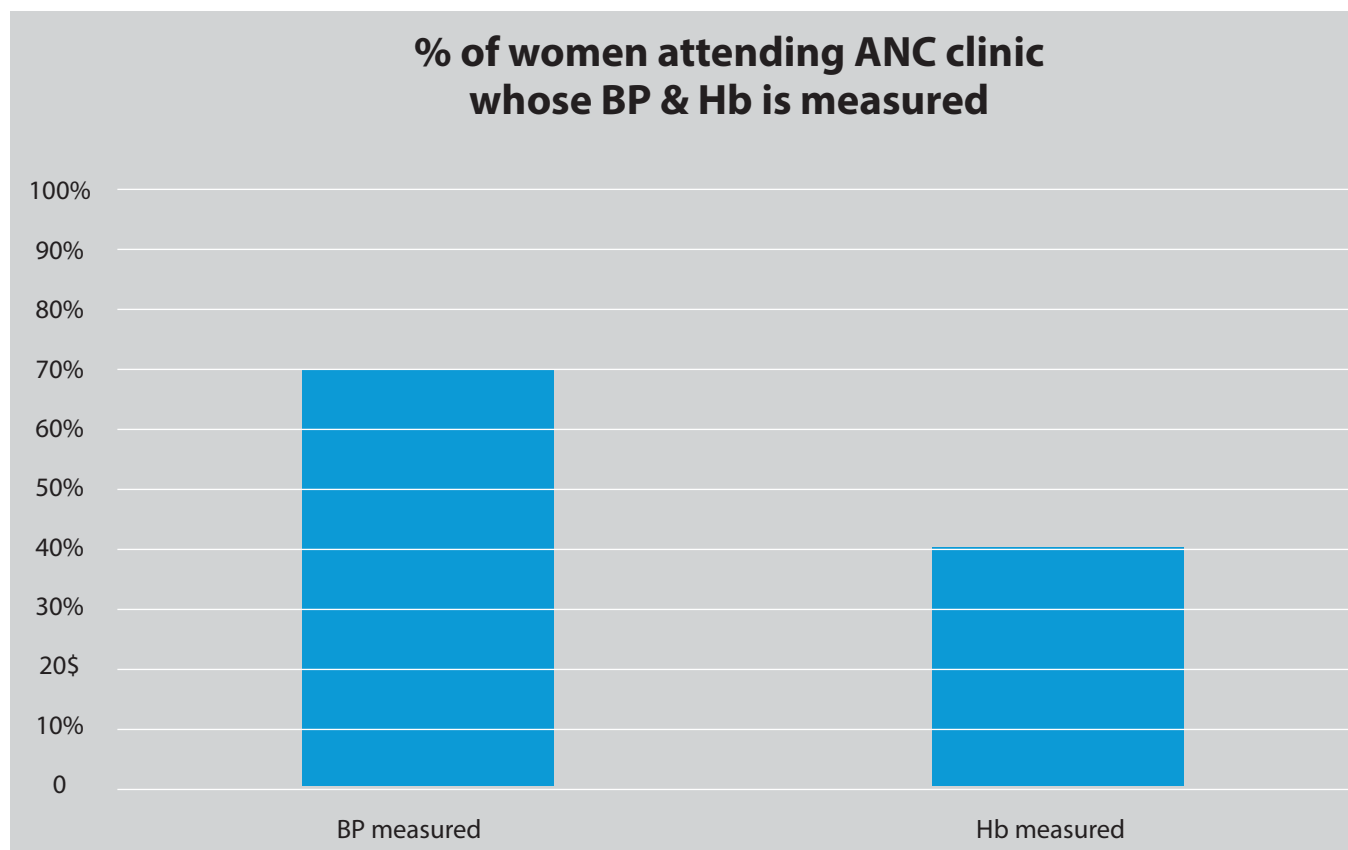
Based on these fishbone diagrams, the team realised that they needed to meet with staff from facility C and help them improve the safety of referrals.

Annex 4: Times Series Charts

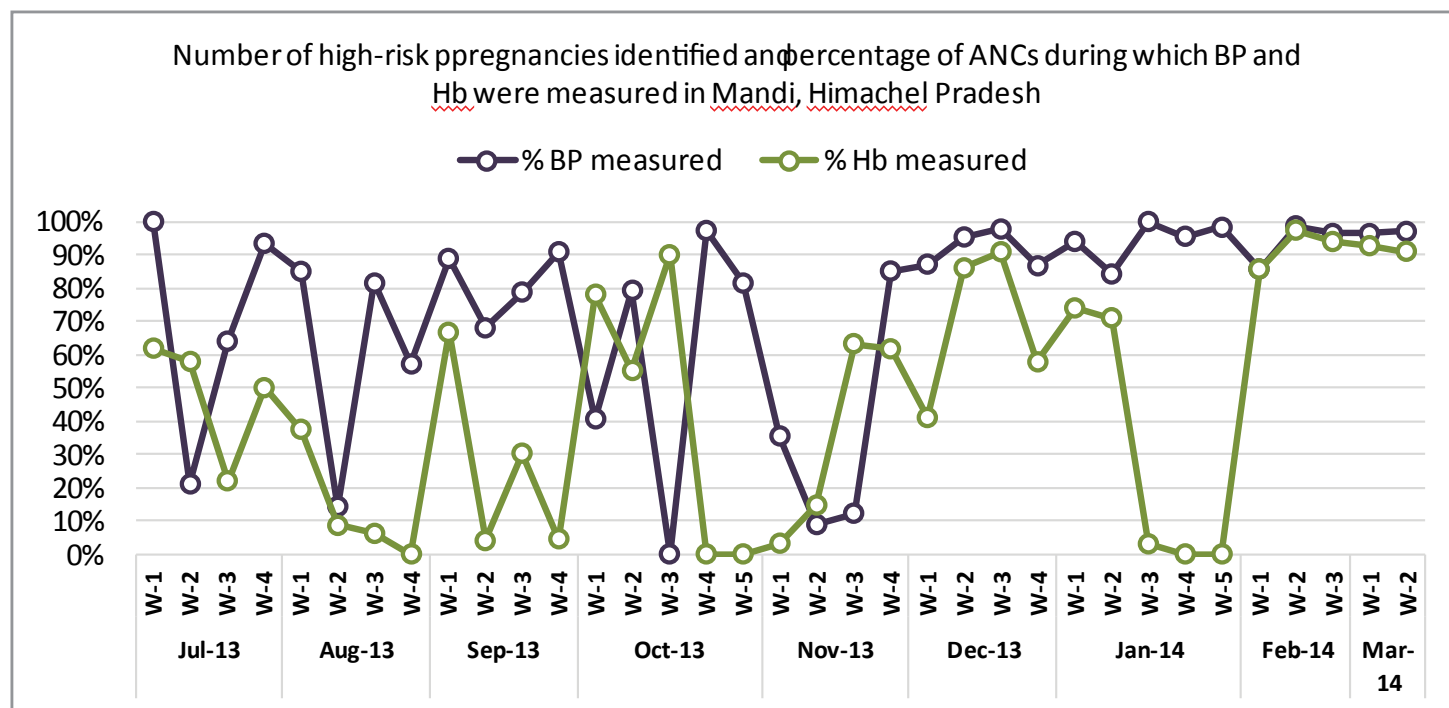
What is a time series chart? Time series charts are used to display data over time and help us to understand what is happening.

How to plot a time series chart: When you plot a time series chart, display the time on the X-axis (horizontal) and the indicator being tracked on the Y-axis (vertical).

Example of a time series chart: Zonal Hospital Mandi was trying to improve ANC. They knew that they were not doing BP and Hb in all women and decided to measure the proportion of women who were getting the tests. They found that 70% of the women got their BP measured and 40% of the women got their Hb tested. The bar graph shows six months of data, but not plotted by time as in a time series chart. Looking at data in this way does not give us much information about what to do next to fix the problem.



It is more useful to look at data week by week or day by day to decide what to do next. When the team looked at their data week by week, they found a lot of variation. Some weeks Hb was good and BP was bad, and other weeks it was the other way round. This happened even though the same staff were delivering care.



This helped them to understand that the problem with care was not lack of knowledge, skill and motivation (because some days everybody got Hb and BP done). Instead, there was something else that needed to be fixed. Then the team used Five Whys to understand why some days are good while some are bad. In this case, looking at data over time helped them ask questions about why there was so much variation. This helped them develop solutions that they otherwise may not have come up with.

For more details on time series charts, please access the following link:

https://www.usaidassist.org/sites/assist/files/hci_guidance_for_analyzing_time_series_charts_sept10_0.pdf

Data collection tool:

You may need to create a simple tool to collect data where you can record the numerator and denominator along with the %.

Indicator	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
No. of ANCs for which hemoglobin was checked	16	18	18	19	22	19	24	26	22
Total no. of ANCs reviewed	28	29	29	30	28	29	30	30	27
% of ANCs during which hemoglobin of pregnant woman was checked	64	62	62	63	79	66	80	87	81

Annex 5: Plan-Do-Study-Act

What is PDSA? PDSA stands for plan-do-study-act. It is a method for testing whether changes that you think will work actually do. PDSAs provide guidance on how to try a new way of working on a few patients, or for a few days, to study what happens and then to decide what to do next.

How to use: After you come up with a possible solution for a problem, you should use PDSA to find out how well it works in the real world:

- 1) **Plan:** Develop a plan – who will try the change, where, for how long
- 2) **Do:** The person who agrees to test it will put the plan into action
- 3) **Study:** Get some feedback about how well the change worked
- 4) **Act:** Decide what to do next. This will either be to implement that change for everyone, modify it to make it work better, or discard it and try something else.

Example:

In a large hospital in Delhi, a lot of women had died in the postpartum period in recent months. The staff thought it was because they were not assessing women properly after delivery. The Government of India's guidelines suggest that women should be assessed eleven times in first six hours of birth, but the staff found that women were only assessed twice. The team decided to increase the frequency of assessments. To achieve this aim, the team decided to introduce a change idea: Instructions from the head of the hospital to assess women at least six times. This idea seemed like it would work, so they did a PDSA to test whether it really did (PDSA 1).

The team noticed that increasing the number of assessments resulted in massive overcrowding in the labour room, with all the delivering women kept there until they were assessed six times. So the team decided to run a second test with a modification: instructing nurses to transfer women to the post-partum ward but continue to assess them there (PDSA 2).

Change Idea 1: Communication from the head of the institute

PDSA 1	PDSA 2
Plan • They planned to get a letter issued from the Deputy Medical Superintendent instructing nurses to assess women six times in the first six hours after delivery • Check at the end of the day how many times women were assessed • Check with nurses how it went	Plan • They planned to get a modified letter from the Deputy Medical Superintendent instructing nurses to assess women in labour room and post-partum ward • Check at the end of the day how many times women were assessed • Check whether there was over crowding in labour room or not • Check with the nurses how it went
Do • The letter was sent • Data were collected at the end of the day	Do • The letter was sent • Data were collected at the end of the day
Study • The QI team observed the data of one day and found that the assessment increased but there was overcrowding in the labour room as the nurses thought they had to keep the women in the labour room for 6 hours	Study • The QI team observed the data of one day and found that the assessment has increased without overcrowding in the labour room • Despite more assessment women with complications were still not being identified.
Act • Ask the Deputy Medical Superintendant to modify the letter to clarify that nurses should shift mothers to the post-partum ward and nurses there should carry on the assessment	Act • They decided to try another change idea

Based on this second test, the team felt that the change seemed to work – there were more assessments but still the team were not able to pick up the cases with complications. Now the team decided to first understand the problem that why they were not able to identify complicated cases. So they decided to test a new change idea.

Change Idea 2: Better understanding of the problem

The team met and discussed the fact that assessments were increasing in frequency but the number of women being identified with complications was not increasing. They thought that the reason was that because of workload, staff were not doing the assessment carefully. They wondered if they could find ways of making the assessment more efficient – to find any activities that weren't useful and stop them so that nurses could have more time to do proper assessments.

PDSA 1
Plan Have one nurse time each component of the assessment for five patients in the post partum ward
Do The nurse timed five assessment
Study - Each assessment took around 20 minutes 15 minutes were taken in finding the women and finding the equipment on the ward
Act They planned to reorganise the ward

To find out how to make the assessments more effective, the team planned a PDSA to time each part of the assessment.

The team realised that they were not doing proper assessments because they were spending a lot of time looking for equipment and patients. They thought if they could come up with ideas to save time looking for equipment and patients, they would have more time to provide care. They thought that reorganising the ward to create one room where all newly delivered women were placed would help.

Change Idea 3: Reorganising the ward

Reorganising a ward is a large change. The team wasn't completely sure that it would work to improve assessment so they decided to test it first.

The first thing they did was to time how long it took to do an assessment when women were placed by chance into the planned observation room compared to how long it took for women in other parts of the ward (PDSA 1).

By simply timing to how long it took for assessment, the nurses got some information that this change would probably work. They wanted to reorganise but some of the nurses were worried about how much work that would take. The team compromised and decided that for the next shift they would put all the newly delivered women in the planned observation room to see whether it worked (PDSA 2).

PDSA 1	PDSA 2
Plan - Have one nurse time the assessment for: 3 women who by chance were placed in the planned observation room 3 women who were placed in other parts of the ward	Plan - All newly delivered women are given beds in the planned room - See whether this is possible - See whether this improves assessment
Do The nurse timed the six assessment	Do - All newly delivered women were given beds in the planned room - Data were collected at the end of the shift
Study It took about 5 minutes to do the assessments for women in the planned observation room and 20 minutes for women in other parts of the ward	Study - There were no problems in giving beds in the planned room to newly delivered women - It was easier to do the assessment & identify women with complications
Act Set up the observation room	Act - Since this change led to better care and less work, they decided to make it permanent - The team also wanted to involve patients families – to see if they could be used as an 'early warning system' to let staff know if there was a change in a woman's condition

Team members were happy because they were able to identify the complications and this motivated them to try to do even better. They decided to test if family members could help in identifying women with early complications.

Change Idea 4: Partnering with patients

To see if patients and their families could help identify if women were having problems the team did a two-day test.

PDSA 1
Plan • Nurses in the observation room will counsel new patients and their families about danger signs and tell them that if they want a nurse to reassess them they just need to ask • Nurses to try this for 2 days and see if: - Patients and families get involved - This helps identify women with complications - How this adds to work load
Do • This was tested for 2 days • Data were collected at the end of two days
Study • More complications were identified • Patients and families liked the system • No additional work for nurses
Act • Adopt this change permanently

After the reorganisation of the ward, five women (1.6%) were identified with danger signs, two of which were picked up by relatives. All were identified early, managed appropriately, and discharged within a week. Using small tests of change focused on achieving a specific goal, let the staff try new things and improve care at no cost.



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