

Self-Evaluation

Step 1: Choose and Define an Appropriate Indicator

From community and facility data you can calculate indicators of the strengths and weaknesses of delivery care in your area. There are four basic indicators that health workers can use to conduct self-evaluation of safe delivery care (see box). To begin, the health worker should select only one indicator and analyze it. Here we suggest starting with the first indicator in the box—coverage of assisted deliveries—which is an important measure of the effectiveness of safe delivery care.

Define the Indicator for Coverage of Assisted Deliveries

$$\frac{\text{Number of deliveries in the health center catchment area handled by a qualified health professional or trained birth attendant *last quarter*}}{\text{Number of expected pregnancies in the health center catchment area during *last quarter*}} \times 100$$

Key Indicators for Safe Delivery Care

- ◆ Coverage of assisted deliveries
- ◆ Percentage of villages located more than one hour away by foot (5 km) served by a qualified health professional or trained birth attendant and monitored by the health center
- ◆ Stockout of supplies for delivery in the last six months
- ◆ Postnatal care coverage

REMEMBER! The numerator and the denominator can cover any period of time (quarter, year, etc.). However, the time period related to the numerator and the denominator in a single indicator must always be the same.

STEP 2: Analyze the Data (Calculate—Interpret—Present)

Calculate the Indicator

The Numerator

The numerator is calculated with information recorded in the records kept by trained birth attendants, data records (delivery log or pregnancy monitoring sheets or cards), monthly or quarterly reports, and management charts. Use this information to determine the number of assisted deliveries last quarter.

Example: 35 pregnant women had deliveries that were handled by a qualified health professional or trained birth attendant last quarter.

The Denominator

The denominator is calculated using the catchment population as defined in the last census. These figures should be provided by the district health office or the local government.

Example: Total population of 10,000 multiplied by 0.05 (equal to 5%, or the percent of women expected to be pregnant each year) = 500.

This means that there are an estimated 500 pregnant women each year for a population of 10,000 people. Since the

numerator relates to only one quarter, the denominator should be divided by four. $500/4 = 125$ expected pregnancies last quarter.

Coverage

Using examples from above, divide the numerator by the denominator and multiply by 100: $(35/125) \times 100 = 28\%$.

Interpret the Indicator: What Does this Indicator Tell You?

You can use this indicator to:

- ◆ **Describe the problem: Is it big or small?**
 - 28% of pregnant women in the community were delivered by a qualified health professional or trained birth attendant last quarter.
 - 72% of pregnant women were not delivered by a qualified health professional or trained birth attendant last quarter.
- ◆ **Compare the indicator with the target. Did you reach the target? Is coverage improving?**

There may be a target for assisted deliveries that has been set for your district. Is your indicator for the last quarter higher

or lower than the target? What does this information tell you about your health service? If the annual target was set at 50% for this year, what can you do to ensure that coverage reaches this level?

REMEMBER! A target is different than the denominator. The denominator represents 100% of all possible assisted deliveries. A target is usually a certain portion of the total target population that you believe you can reach in a specific time period. It can be expressed as a percentage or as a number. For example, you may want 50% of all pregnant women to have assisted deliveries this year. Based on the examples above, your target would be 50% of 500, or 250 (calculation: $500 \times 0.5 = 250$). Over the year you would plan to reach at least 250 women. Each quarter you would therefore hope to reach 63 women, or about one quarter of 250).

If there is no target set for assisted deliveries for your area, you can choose a target based on the indicator you have just calculated in the example above (see the help section on target setting).

- ◆ **Determine who is affected most by this problem?**
You may want to know where coverage is the lowest. To identify these areas, look at the total coverage per village or group of villages. List the village with the lowest coverage to identify where most of the women that have not received the benefits of assisted delivery are living. What do these villages have in common that might cause coverage to be especially low?

Presenting the Data

It is sometimes helpful to make a picture with the data (a graph or table) to illustrate changes in coverage over time, discover where coverage is the lowest, and compare coverage to the target. These pictures can be used to explain the data to others, such as members of the management committee, other community leaders, and your supervisors.

Making a Graph or Table

You can make a graph that shows changes in the percentage of assisted deliveries over time. To depict cumulative coverage for the year, record a marker or dot across from the total number of assisted deliveries for the first quarter. For the next quarter, add the total number of assisted deliveries to that of the first quarter, and so on for the rest of the year. You can then compare one quarter with the next to see if your total coverage is improving. Each point is connected with a line until the year is complete.

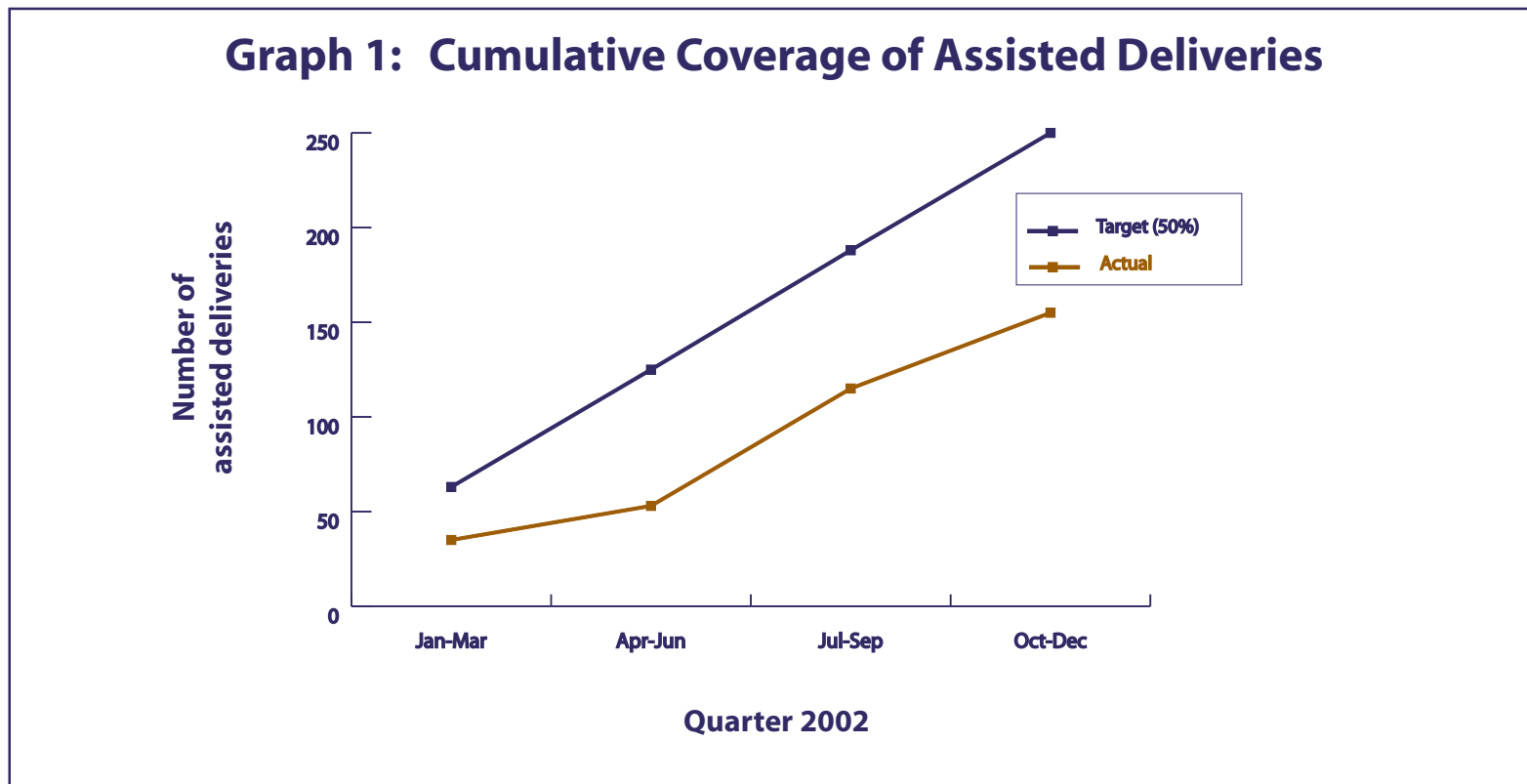
You can also place markers or dots on the graph that relate to the coverage target set for your area. Using the example on the following page, if the total annual target is 50%, then each year 250 women must be delivered by a trained assistant. Each quarter you would expect about 63 women to be assisted in delivery. Connect the dots to make a line that shows the cumulative progress of the target throughout the year. Compare the two lines to compare your actual numbers to the target.

In the example graph, coverage of assisted deliveries improved faster in the third quarter, but slowed again in the last quarter.

A second way of illustrating the data is to make a table that shows the actual number of assisted deliveries per village, the total number of expected pregnancies (or a target of 100%), and the actual coverage for each quarter. You can only complete this table if you record the name of each woman's village when

you fill in the forms or the register. If you do not collect this information, you might consider changing the patient record form or the register. From your register, you tally up the number of women from each village who had an assisted delivery. The tally sheet might look like **Table 1** (page 48).

When you finish the tallies, you can fill in the numbers in **Table 2** (page 49) and calculate the coverage of assisted deliveries by



Assisted delivery

village and the total catchment population in the same way you calculated the coverage indicator above. Then look at the information carefully to see what it tells you. From this table, you can see that coverage in Mazeras is lower than coverage in Bakana. Based on this data, you may want to make an extra

effort to encourage women from Mazeras to seek a trained birth attendant for their next delivery. Again, you may want to look at more than one quarter of data to determine if coverage is lower in certain villages than in others.

TABLE 1: Tally Sheet for Assisted Deliveries

Health center: Kissi Indicator: Assisted deliveries Year: 2002

Village	Quarter 1 Assisted deliveries	Quarter 2 Assisted deliveries	Quarter 3 Assisted deliveries	Quarter 4 Assisted deliveries	Total
<i>Villages less than 5 km</i>					
1. Bakana	### III	III	### ###	### III	29
2. Matumbi	III	II	### IIII	###	19
3. Konna	### IIII	IIII	### ### III	### IIII	35
4. Hombori	###	II	### ### I	### ###	28
Total <5 km	25	11	43	32	111
<i>Villages 5 km or more</i>					
1. Mazeras	-	I	III	I	5
2. Kudzecha	II	I	IIII	II	9
3. Daraba	I	I	III	I	6
4. Madari	III	II	IIII	II	11
5. Sidami	II	I	II	I	6
6. Kanakoro	II	I	III	I	7
Total > 5km	10	7	19	8	44
Total by period	35	18	62	40	155

TABLE 2: Coverage of Assisted Deliveries by Village

Health center: Kissi

Indicator: Assisted deliveries

Target: 50%

Year: 2002

Village	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Year
	Assisted deliveries	Pregnant women 1/4	Coverage rate	Assisted deliveries	Pregnant women 1/4	Coverage rate	Assisted deliveries	Pregnant women 1/4	Coverage rate	Assisted deliveries	Pregnant women 1/4	Coverage rate	Total coverage
<i>Villages less than 5 km</i>													
1. Bakana	8	12	67	3	12	25	10	12	83	8	12	67	60
2. Matumbi	3	17	18	2	17	12	9	17	41	5	17	29	26
3. Konna	9	14	64	4	14	29	13	14	93	9	14	64	63
4. Hombori	5	11	45	2	11	18	11	11	100	10	11	91	64
Total <5 km	25	54	46	11	54	20	43	54	76	32	54	59	50
<i>Villages 5 km or more</i>													
1. Mazeras	0	10	0	1	10	10	3	10	30	1	10	10	13
2. Kudzecha	2	15	13	1	15	7	4	15	27	2	15	13	15
3. Daraba	1	9	11	1	9	11	3	9	33	1	9	11	17
4. Madari	3	11	27	2	11	18	4	11	36	2	11	18	24
5. Sidami	2	14	14	1	14	7	2	14	14	1	14	7	11
6. Kanakoro	2	12	17	1	12	8	3	12	25	1	12	8	15
Total >5 km	10	71	14	7	71	10	19	71	27	8	71	11	15
Total per period	35	125	28	18	125	14	62	125	48	40	125	32	31

* Blank tables are located in Annex 2 at the end of the document.

STEP 3: Assess the Situation

Now use the indicator, the graph, and the table to assess the situation and decide what to do.

The **indicator** tells you the overall size of the problem at a specific time. Coverage of assisted deliveries last quarter was 28%, and the annual target is 50%.

The **graph** tells you whether there have been improvements over time and how actual coverage compares to the target.

Table 2 tells you where the problem is greatest or where your program is working well.

WHAT IF...

- ✓ If the level of overall coverage is acceptable (getting closer, equal to, or exceeding the target), then you may decide that you do not need to make any additional effort to improve coverage of assisted deliveries. Give this information to the community and tell them that things are going well.
- ✓ If the indicator is too low, or improvements are not happening fast enough to meet your target by the end of the year, you may want to consider possible **causes and solutions**.

The **cause of low coverage of assisted deliveries** may be found in the community, in the health center, or in both.

In the community, you might consider:

- ✓ The distance women live from the health center and the time it takes them to reach it;
- ✓ The lack of information or understanding about the importance of assisted delivery;
- ✓ Cultural constraints; and
- ✓ The cost of assisted delivery in terms of fees or time lost by people who accompany the woman.

In the health center, you might consider:

- ✓ Whether women feel comfortable and supported when they deliver at the health center or when they are assisted by a trained birth attendant;
- ✓ The perceived quality of the assistance that they receive (Do women believe they will benefit from assisted delivery?); and
- ✓ The technical quality of assisted delivery. (Are basic supplies, such as gloves, sutures, and blood, available when needed?)

These are only examples. There may be many other reasons why women do not choose assisted delivery. To explore the possible causes and solutions, you should discuss the problem with other health staff, the management committee for the health center, your supervisor, district managers, and especially the community. Key sources of information in the community are village health workers and traditional birth attendants, both trained and untrained. During the meeting, use both the data that you have analyzed and the tables and graphs that you have made to illustrate the problem. Then hold a discussion about possible solutions.

Depending on the cause, these are steps that you could take to **increase use of trained birth attendants**:

- ✓ Improve the technical quality of the service by retraining health staff and community-based birth attendants in safe delivery techniques.
- ✓ Organize the service differently. For example, work more closely with trained birth attendants during their deliveries.
- ✓ Avoid interruptions in inventory of essential supplies and medications by ordering supplies regularly and collecting them as needed to ensure that they do not run out.
- ✓ Improve the way in which women are treated at the health center or during deliveries. Communication is important. Make each woman and her family feel comfortable at the health center or during delivery. Be supportive of their efforts, even if they may have made some errors in their support of the woman during delivery, such as waiting too long to seek assistance. Listen attentively to all concerns. Encourage the woman to visit the health center for postnatal care.
- ✓ Conduct IEC (information, education, and communication) activities in remote villages with the support of the management committee. During these sessions, emphasize the importance of assisted delivery and encourage women to make arrangements for assisted delivery long before they are ready to deliver.
- ✓ Provide access to assisted delivery in remote villages either by training and supporting local birth attendants or providing transportation to the health center when a woman is close to delivery or facing an emergency.
- ✓ Get support from village representatives, women's groups, and associations to promote the use of trained birth attendants.

STEP 4: Finding a Solution

Organize a Meeting

To begin to address the problem, you may want to hold a meeting with other health workers or community members. These meetings should follow the steps indicated below.

Set Priorities

First, decide what is the most important and easiest step to take. Start with something that relates to your direct responsibilities in the health facility. Then move on to the community. For example:

1. *If you have run out of essential supplies, such as delivery kits:*
 - ☑ Order essential supplies immediately and, in the future, order them on a regular basis to ensure that they arrive before you need them.
2. *If you have learned from your discussions in the community or in the health center that more women are likely to choose to deliver with a trained birth attendant if they feel that the health staff are supportive and capable:*
 - ☑ Change the way you assist deliveries and let people know about it!
3. *If women do not believe that assisted delivery is important:*
 - ☑ Find out why and learn more about local customs and beliefs; and
 - ☑ Speak to women who have used a trained birth attendant and ask them why other women may not want to do the same.
4. *If the population does not have enough information about the importance of delivery with a trained birth attendant and where this service is available:*
 - ☑ Conduct IEC activities in the villages with women's groups and associations, village representatives, and networks to increase local knowledge of the benefits of assisted delivery and encourage utilization of these services.
5. *If some women say they cannot come to the health center because they live too far away or cannot find appropriate transportation:*
 - ☑ Form a network of trained and untrained birth attendants to provide services such as IEC, identifying high risk pregnancies and transporting women to the health center near their delivery date;
 - ☑ Train or re-train local birth attendant in safe delivery practices and provide delivery kits; and

- ✓ **Supervise and support** the networks and the trained birth attendants.

6. *If cultural beliefs may be influencing women and preventing them from taking advantage of assisted delivery:*

- ✓ **Respect** cultural beliefs, but **find out** more about them;
- ✓ **Choose** health messages that reflect local beliefs;
- ✓ **Collaborate** with local leaders to encourage them to accept the importance of assisted delivery and promote it in their communities; and
- ✓ **Involve** women’s groups and other associations to help promote the use of trained birth attendants.

Only you and the community together can decide the best steps to take to address the problem in your community.

Develop an Action Plan

Work with other health staff or community members to make a plan. A plan is an agreed set of activities that will be conducted to address a problem or achieve a result. This plan might include improving the health service, setting a coverage target for the next few quarters, or introducing new activities to encourage more women to use trained birth attendants. The plan should list all the activities that will be done, when they should be completed, and who is responsible for completing them.

Action plan for Improving Coverage of Assisted Deliveries

Activities to improve coverage of assisted deliveries	Date to be completed?	Who is responsible?	Results achieved or not? Comments
Order delivery kits	3/4/02	Moses	
Conduct refresher training of local birth attendants	1/5/02-31/7/02	Rachel	
Start IEC activities and promote use of trained birth attendants	1/8/02	Health workers Management committee Women’s groups	

* Blank tables are located in Annex 2 at the end of the document.

Work with the Community

Next, continue to work with the community to implement the plan. While both the health workers and the community can take responsibility for implementing the action plan, the community may need your help to do their part.

Seek Support

If you need help, you could request support from the district health management team, a local NGO, local government, or other community groups. Teachers can help spread health messages. A local NGO might let you borrow essential supplies while you wait for yours to arrive. Solving health problems in the community is everyone's responsibility.

STEP 5: Monitoring the Results of the Action Plan

It is important to monitor what happens as a result of your action plan. Did your activities lead to an improvement in use of trained birth attendants?

Fill in the Action Plan and Note the Results That Were Achieved

- ✓ Assess the same indicator after a period of time to see if there has been any change. Be sure to share that information with all those involved in identifying and addressing the problem.

If you reach the target or make any improvement:

- ✓ **Inform** the management committee and the

community of this success, congratulate them, and thank them;

- ✓ **Ask** them to make an effort to maintain or even improve on this good result; and
- ✓ If necessary, **work** with the community to set a higher target for the next period and define activities that will help you reach it.

If you do not reach the target or your indicators remain low:

- ✓ **Identify** the villages in the area with the lowest participation; and
- ✓ **Hold** a meeting with the committee to help identify the causes for low coverage and find solutions.

The Results of Self-Evaluation

After Moses and Rachel finished examining the data on coverage of assisted deliveries, they presented the results to the health center management committee at its monthly meeting. They gave each member a copy of the graphs and tables produced during data analysis. They also gave the committee additional information on:

- ◆ The number of women they treated for problems related to child birth, such as postpartum infection; and
- ◆ The number of women reported to have died from problems associated with pregnancy and delivery.

With this graph, Moses explained that very few women were using trained birth attendants and that this practice was contributing to high rates of illness and death among women of child-bearing age in Kissi. Rachel added that she would like to see Kissi improve its coverage of assisted deliveries and reach the national target of 50% by the end of 2002. Moses then presented them with a one-page action plan and budget for addressing this problem.

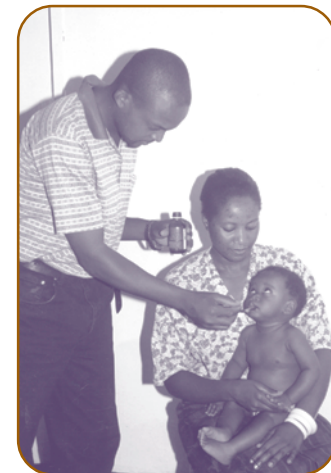
Next, the health workers and the management committee met with local government officials and suggested that the district government provide resources to retrain local birth attendants, support for conducting supervision of these birth attendants, and IEC activities. The district officials were convinced by their argument because they could understand the information provided by the health staff. They then gave the Kissi health center funds to organize the training. However, they suggested that the team also find ways to draw funds from their existing budget to conduct supervision and IEC. Moses and Rachel agreed to reassess the data every three months after the training to determine whether coverage had improved sufficiently and report this information back to the management committee. If their approach was indeed improving coverage, district government officials agreed to provide additional support for supervision on a regular basis.

Essential Service: Preventive Infant Visit (PIV)

The Story of Ruth and Sarah

Ruth delivered her third child four months ago. After taking the appropriate time to rest following her delivery, she is now working again selling vegetables in the market. She takes her son with her because there is no one at home to care for him. Sarah, Ruth's sister, often sits with her while she works. Sarah has a baby that is just six weeks old. Ruth asks Sarah whether she has taken her baby to the health clinic to be checked by the health staff. Sarah laughs and says her mother-in-law would never let her go. There is a small fee for the service and, besides, the baby is well. He is eating and growing.

Just as they finish their conversation, Mary, the nurse from the health center, walks by, and Ruth calls her to come talk with her and her sister. After greeting the two women, Mary thanks Ruth for bringing her baby to the health center for a check-up every two months. Ruth jokes with Mary and says that she is more clever than her sister because her sister refuses to



Elements of First Well-Baby Check

- ◆ Examine head and fontanelle
- ◆ Assess eyes for infection and jaundice
- ◆ Assess respiration rate
- ◆ Assess heart rate (rate and murmur)
- ◆ Assess skin for pallor, jaundice, petechiae, and infection
- ◆ Examine extremities and skeletal system for symmetry, movement, and broken bones
- ◆ Examine umbilicus
- ◆ Assess general alertness
- ◆ Assess suction reflex
- ◆ Assess Moro reflex
- ◆ Assess response to brightness
- ◆ Assess response to sound
- ◆ Measure weight and length
- ◆ Measure head circumference
- ◆ Plot information on a growth chart
- ◆ Advise on exclusive breast feeding and maternal nutrition while breast feeding
- ◆ Give vitamin A according to age
- ◆ Verify BCG status (Bacilli Calmette-Guerin, a vaccine to protect against tuberculosis) and give if needed
- ◆ Give DPT1 and OPV1 if the child has reached six weeks of age
- ◆ Advise on an immunization schedule
- ◆ Advise on danger signs in the child
- ◆ Promote well-child care
- ◆ Schedule the next visit

take her baby to the health center for a check-up. Sarah is embarrassed, but Mary says that she is not alone. Unfortunately, many young mothers do not understand the benefits of preventive infant care, and their husbands and mothers-in-law tell them not to “waste time” going to the doctor.

Mary explains that the first preventive visit should take place before the child is two months old. This is one of the most vulnerable times in a child’s life. During this visit, the nurse or doctor checks whether the child is developing properly. The health worker weighs the baby and checks for important signs of health in a newborn. The child receives its first immunization, and the health staff advises the mother not to introduce any solid food until the child is six months old. Often the child’s mother will receive her own check-up to ensure that she is regaining her strength after delivery. Sarah is still not convinced that her mother-in-law will allow her to go to the health center, but she promises to try.

Mary decides to return to the health center and look at the data on coverage of all first preventive infant visits. She wants to know whether coverage has improved since the women’s committees have become involved in promoting early check-ups for newborn children.

Reflection

This story explains the difficulty health workers face in promoting preventive care for children. Children aged less than one year are at risk of contracting a number of common diseases. Immunization, growth monitoring, appropriate feeding practices, and care of the umbilicus are intended to reduce this risk and improve the child's chances of surviving beyond age one. It is difficult for health workers to contact mothers after delivery to promote attendance for early preventive infant care. They often wait for the mother to bring the child to the health center after he or she has become ill. Parents may feel there is no benefit from growth monitoring, or they may feel cheated if the health service does not offer any food or medicine for the child. Sometimes it is easier to promote early immunization and then provide a full check-up when the child is brought in for DPT1 and OPV1.

Consider these questions:

- ◆ Do you experience similar problems at your health facility?
- ◆ Do you know how many children are born each year in your catchment area?
- ◆ Do you know how many of these children attend their first preventive infant visit (PIV) by age 2 months?
- ◆ Among those who do attend for PIVs, where are they located? Near the health center? In a particular village?
- ◆ What can you do to encourage more mothers to bring their children for a PIV?

To answer these questions, **begin** by looking at the data you collect at your health center and the data available on the community. Then follow the five steps of self-evaluation.

Self-Evaluation

Step 1: Choose and Define an Appropriate Indicator

From community and facility data you can calculate indicators of the strengths and weaknesses of well-baby care. There are four basic indicators that health workers can use to conduct self-evaluation of this service (see box). To begin, the health worker should select only one indicator and analyze it. Here we suggest starting with the first indicator in the box—coverage of first preventive infant visit—which is a key indicator for assessing the effectiveness of preventive infant care.

Key Indicators of Well-Baby Care

- ◆ Coverage of first preventive infant visit
- ◆ Coverage of DPT1 and OPV1
- ◆ Percentage of malnourished children
- ◆ Coverage of BCG

Define the Indicator for Coverage of the First Preventive Infant Visit

$$\frac{\text{Number of children aged less than 8 weeks who attended a health facility for the first preventive infant visit last quarter}}{\text{Number of children aged 0-11 months}^3 \text{ present in the community last quarter}} \times 100$$

REMEMBER! The numerator and the denominator can cover any period of time (quarter, year, etc.). However, the time period related to the numerator and the denominator in a single indicator must always be the same.

³This denominator should reflect the total number of children surviving to 12 months of age (live births minus infant deaths). However, in the interest of simplicity and to ease calculation, the total number of children aged 0-11 months is taken as 4% of the population. Used consistently over time, this estimate will provide adequate evidence of change for decision making at the facility level.

STEP 2: Analyze the Data (Calculate—Interpret—Present)

Calculate the Indicator

The Numerator

The numerator is calculated with information from the register. Use a tally sheet to record the number of first preventive infant visits last quarter among children aged less than 8 weeks.

Example: 25 children aged less than 8 weeks attended the health center for the first preventive infant visit last quarter.

The Denominator

The denominator is calculated using the total population in the catchment area reported in the latest census multiplied by .04 (4%). The total population of the catchment areas should be provided by the district health office or local government.

Example: Total population of 10,000 multiplied by .04 (equal to 4%, or the percent of children expected to fall between 0-11 months each year) = 400.

This means that there are an estimated 400 children aged 0-11 months in the catchment population each year. Since the numerator relates to only one quarter, the denominator should be divided by four. $400/4 = 100$ children aged 0-11 months last quarter.

Coverage

Using examples from above, divide the numerator by the denominator and multiply by 100: $(25/100) \times 100 = 25\%$.

Interpret the Indicator: What Does this Indicator Tell You?

You can use this indicator to:

- ◆ **Describe the problem: Is it big or small?**
 - 25% of all children aged less than 8 weeks came to the health center for their first preventive infant visit last quarter.
 - 75% of all children aged less than 8 weeks **did not** come to the health center for their first preventive infant visit last quarter.
- ◆ **Compare the indicator with the target. Did you reach the target? Is coverage improving?**

Is your indicator for the last quarter higher or lower than the target? Is it higher or lower than coverage during the previous quarter? What does this information tell you about the health service? If coverage is improving, do you know why? If it is not improving, do you understand why?

REMEMBER! A target is different than the denominator. The denominator represents 100% of all possible preventive infant visits. A target is usually a certain portion of the total target population that you believe you can reach in a specific time period. It can be expressed as a percentage or as a number. For example, during this year, you may want 50% of all infants to attend a first preventive visit by the time they are 8 weeks old. Based on the examples above, your target would be 50% of 400, or 200 (calculation: $400 \times 0.5 = 200$). Over the year, you would plan to reach at least 200 infants. Each quarter you would therefore hope to reach at least 50 (about one quarter of 200).

If there is no target set for preventive infant visits for your area, you can choose a target based on the indicator you have just calculated (see the help section on target setting in Annex 4).

Presenting the Data

Like the other indicators, you can illustrate changes in coverage over time, discover where coverage is the lowest, and compare coverage to the target. These pictures can help you show the problem more clearly and explain the problem to others, such as your supervisor or the community.

Making a Graph or Table

You can make a **graph** that shows changes in first preventive infant visits over time. To depict cumulative coverage for the year, record a marker or dot across from the total number of first preventive infant visits for the first quarter. For the next quarter, add the total number of visits to that of the first quarter, and so on for the rest of the year. You can then compare one quarter with the next to see if your total coverage is improving. Each point is connected with a line until the year is complete.

You can also place dots on the graph to mark the targets set for each quarter, and then you can connect them. When you have done this, you can compare your coverage with the target. Using the example above, if the total annual target is 50%, then each year you would expect 200 children aged less than 8 weeks to come for their first preventive infant visit. Each quarter you would expect 50 visits. In **Graph 1** (page 63), coverage is below the target, but it increases steadily throughout the year.

A second way of illustrating the data is to make a **table** that shows the actual number of first preventive infant visits per village, the total number of expected live births (100% of the target), and actual coverage for each quarter. You can only complete this table if you record the name of each child's village when you fill in the forms or the register.

If you do not collect this information, you might consider changing the patient record form or the register. From your register, tally up the number of children aged less than 8 weeks who came for a first preventive infant visit. The tally sheet might look like **Table 1** on page 64.

When you finish the tallies, you can fill in the numbers in **Table 2** (page 65) and calculate the coverage of first preventive infant

visits by village and by total catchment population in the same way you calculated the coverage indicator above. When this is done, look at the information carefully to see what it tells you. You can see that coverage in Mgandini in the first quarter is lower than coverage in Kenango. Based on this data, the health worker may want to speak to the health committee in Mgandini and ask for their assistance in encouraging women to take their children to the health center before the children are two months old.

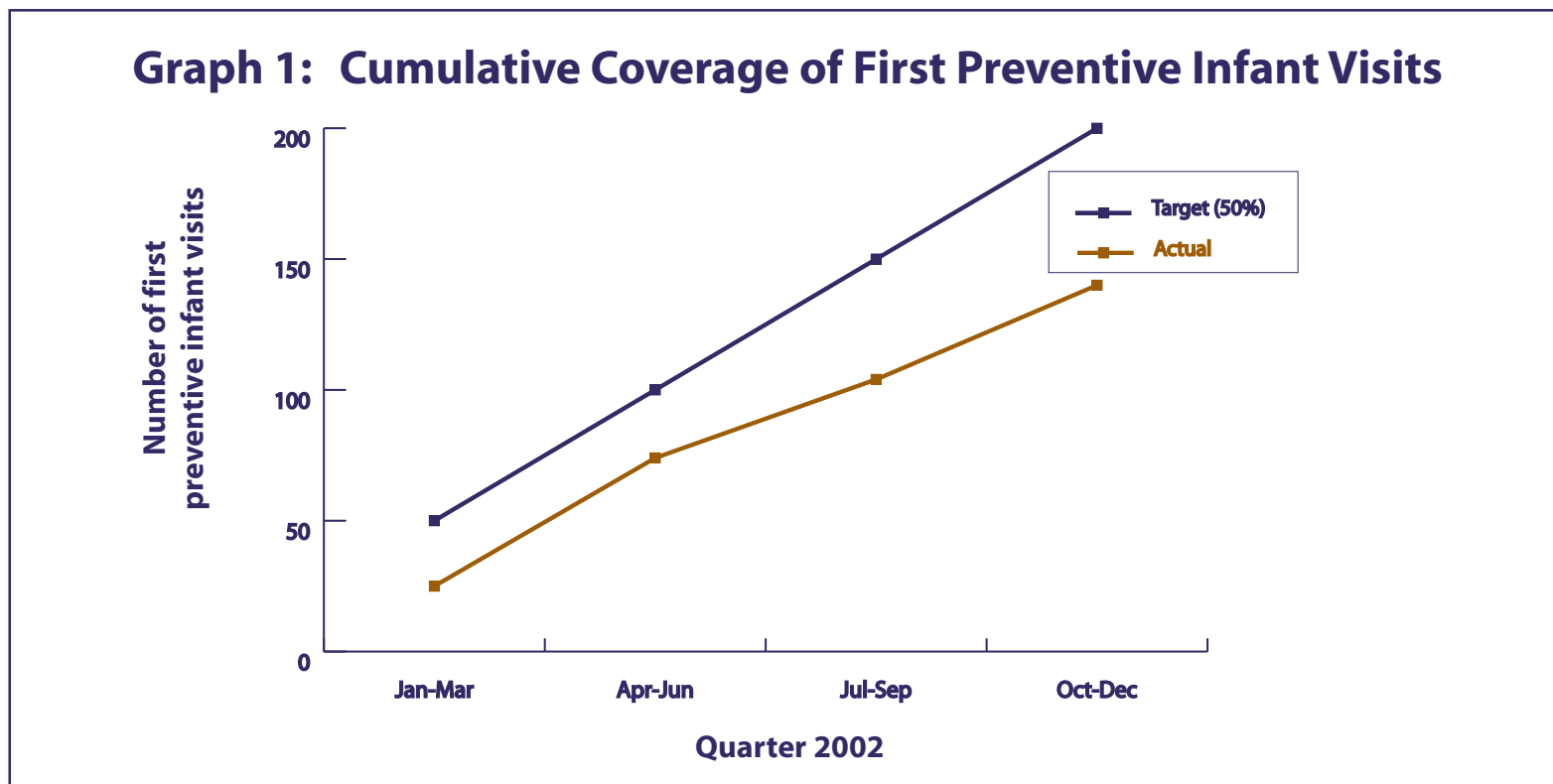


TABLE 1: Tally Sheet for First Preventive Infant VisitHealth center: KasemeniIndicator: First preventive infant visitYear: 2002

Village	Quarter 1 PIV visit at less than 8 weeks	Quarter 2 PIV visit at less than 8 weeks	Quarter 3 PIV visit at less than 8 weeks	Quarter 4 PIV visit at less than 8 weeks	Total
<i>Villages less than 5 km</i>					
1. Mwavumbo	II	III	IIII	III I	15
2. Mtaa	IIII	III	II	III	12
3. Mwabilla	I	IIII	I	III	11
4. Mwatete	I	III I	III	III	15
5. Kalalani	I	IIII	III	III	11
6. Mwamdudu	II	III	II	IIII	13
7. Bofu	I	III	I	III	8
8. Msambweni	III	II	III	II	10
Total <5 km	15	30	21	29	95
<i>Villages 5 km or more</i>					
1. Kenango	III	III I	II	II	13
2. Kafundi	III	III IIII	IIII	III	21
3. Mwashanga	I	I	I	I	4
4. Mgandini	I	III	II	I	7
Total >5 km	10	19	9	7	45
Total by period	25	49	30	36	140

TABLE 2: Coverage of First Preventive Infant Visit by Village

Health center: Kasemeni

Indicator: First preventive infant visit

Target: 50%

Year: 2002

Village	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Year Total coverage
	PIV	Children 0-11 months 1/4	Coverage rate	PIV	Children 0-11 months 1/4	Coverage rate	PIV	Children 0-11 months 1/4	Coverage rate	PIV	Children 0-11 months 1/4	Coverage rate	
<i>Villages less than 5 km</i>													
1. Mwavumbo	2	7	29	3	7	43	4	7	57	6	7	86	54
2. Mtaa	4	12	33	3	12	25	2	12	17	3	12	25	25
3. Mwabilla	1	8	13	4	8	50	1	8	13	5	8	63	34
4. Mwatete	1	9	11	6	9	67	5	9	56	3	9	33	42
5. Kalalani	1	7	14	4	7	57	3	7	43	3	7	43	39
6. Mwamdudu	2	11	18	5	11	45	2	11	18	4	11	36	30
7. Bofu	1	8	13	3	8	38	1	8	13	3	8	38	25
8. Msambweni	3	6	50	2	6	33	3	6	50	2	6	33	42
Total <5 km	15	68	22	30	68	44	21	68	31	29	68	43	35
<i>Villages 5 km or more</i>													
1. Kenango	3	8	38	6	8	75	2	8	25	2	8	25	41
2. Kafudni	5	16	31	9	16	56	4	16	25	3	16	19	33
3. Mwashanga	1	3	33	1	3	33	1	3	33	1	3	33	33
4. Mgandini	1	5	20	3	5	60	2	5	40	1	5	20	35
Total >5 km	10	32	31	19	32	59	9	32	28	7	32	22	35
Total per period	25	100	25	49	100	49	30	100	30	36	100	36	35

* Blank tables are located in Annex 2 at the end of the document.

STEP 3: Assess the Situation

Now use the indicator, the graph, and the table to **assess the situation and decide what to do.**

The **indicator** tells you the overall size of the problem at a specific time. Coverage of first preventive visits last quarter was 25%, and the annual target is 50%.

The **graph** tells you whether there have been improvements over time and how actual coverage compares to the target.

Table 2 tells you which areas have the lowest and highest coverage.

WHAT IF...

- ✓ If the level of overall coverage is acceptable (getting closer, equal to, or exceeding the target), then you may decide that you do not need to make any additional intervention. Make a commitment to maintaining coverage.
- ✓ If the indicator is too low, or improvements are not happening fast enough to meet your target by the end of the year, you should consider possible **causes and solutions.**

The **cause of low coverage of first preventive visits** may be found in the community, in the health center, or in both.

In the community, you might consider:

- ✓ The distance a family lives from the health center and the time it takes them to travel there;
- ✓ The lack of information or understanding about the importance of well-baby care;
- ✓ Cultural beliefs or practices related to new babies or newly delivered mothers; and
- ✓ The cost of preventive infant care in terms of fees or time lost by people who accompany the woman.

In the health center, you might consider:

- ✓ Whether women and children are treated kindly and given enough time to discuss problems;
- ✓ The way women perceive preventive infant care (Do they feel it is beneficial for children?); and
- ✓ The technical quality of preventive infant care. (Are basic equipment and supplies such as vaccines, scales, and drugs always available when needed?)

These are only some of the possible causes of low coverage of preventive infant care. What other causes might be relevant in your community?

To explore causes and find solutions, you should discuss the situation with other health workers, the health center management committee, your supervisor, district managers, and especially members of the community. Key sources of information in the community are village health workers, trained birth attendants, grandmothers, and religious leaders. When you meet with these people, use the data and graphs that you have prepared to illustrate and explain the problem. Then hold a discussion about possible solutions.

Depending on the cause(s) of low coverage, these are steps that you could take to improve coverage of the first preventive infant visit:

- ✓ Improve the technical quality of the service by ensuring that all supplies and equipment are available.

- ✓ Organize the service differently by combining first preventive infant visits with postnatal care.
- ✓ Improve the way women and children are treated at the health center. Allow enough time for questions. Encourage an exchange of information. Make women feel comfortable.
- ✓ Introduce education and information activities in villages with low coverage that explain the importance of early preventive infant care.
- ✓ Conduct outreach visits for preventive infant care.
- ✓ Ask for support from women's groups and village associations to encourage the use of early preventive infant care.

STEP 4: Finding a Solution

Organize a Meeting

To begin to address the problem, you may want to hold a meeting with other health workers or community members. These meetings should follow the steps indicated below.

Set Priorities

First, **decide what is the most important and easiest step to take.** Start with something that relates to your direct responsibilities in the health facility. Then move on to the community. For example,

1. *If you have run out of essential supplies:*
 - ✓ Order supplies immediately and, in the future, order them on a regular basis to ensure that they arrive before you need them.

2. *If you have learned from your discussions in the community or in the health center that more women are likely to take their children for early preventive infant care if the service were combined with curative clinic sessions:*
 - ☑ Change the way you provide preventive infant services and let people know about it!
3. *If women do not accept the importance of early preventive infant care:*
 - ☑ Find out why and learn more about local customs and beliefs; and
 - ☑ Speak to women who have used the service and ask them why other women may not want do the same.
4. *If the population does not have enough information about the importance of early preventive infant care and the services that are offered at the health center:*
 - ☑ Conduct information, education, and communication (IEC) activities in the villages with women's groups and associations, village representatives, and net works to increase local knowledge of the benefits of early care for infants.
5. *If some women cannot come to the health center because they live too far away or cannot find appropriate transportation:*
 - ☑ Form a network of local groups to provide services such as IEC and identify high risk newborns;
 - ☑ Supervise and support the networks; and
 - ☑ Conduct outreach services regularly in the villages.
6. *If cultural beliefs may be discouraging women from coming for early preventive infant care:*
 - ☑ Respect cultural differences, but find out more about them;
 - ☑ Choose health messages that reflect local beliefs;
 - ☑ Collaborate with local leaders to encourage them to accept the importance of early preventive infant care; and
 - ☑ Collaborate with women's groups and associations, and others.

Only you and the community together can decide the best steps to take to address the problem in your community.

Develop an Action Plan

Work with other health staff or community members to make a plan. A plan is an agreed set of activities that will be conducted to address a problem or achieve a result. This plan might include improving the health service, setting a coverage target for the next few quarters, or introducing new activities to encourage more women to come for early preventive infant care. The plan should list all the activities that will be done, when they should be completed, and who is responsible for completing them.