



Updates From the Field TECHNICAL NOTES

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EXPANDING THE DELIVERY OF HEALTH SERVICES THROUGH A COMMUNITY-BASED MONITORING AND INFORMATION SYSTEM



min A is distributed twice a year during national campaigns, so coverage is generally high unless there is a supply or distribution problem. Although contraceptive prevalence has increased steadily over the past 30 years, use of modern contraceptive methods is relatively low, at 32 percent. A significant portion of women and children remain either unserved or underserved by essential public health services.

At present, a national health information system is used to determine targets for specific health services as a fixed proportion of a projected population. This system may be useful for allocating supplies,

but it is not a good basis for calculating rates of achievement. Moreover, the existing reporting system captures only those who actually go to government health facilities and, therefore, fails to give an accurate picture of coverage rates. Since Local Government Units (LGUs) very seldom, if ever, organize community outreach activities, many families, particularly those in economically depressed, hard-to-reach areas, lack information about or access to

basic health services. These people remain faceless and are neglected because there are no deliberate and sustained efforts to assess their needs and why they are not using services. The challenge, therefore, is twofold: (1) to routinely identify the women and children in *barangays* (villages) who are not using public health services, who have discontinued using the services, who are dissatisfied with the services, or who are no longer on schedule for services; and (2) to revise routine service delivery activities to give better access to all families in *barangays*.

What Is the Community-Based Monitoring and Information System?

In 1999, the Department of Health, with technical assistance from Management Sciences for Health (MSH) and the Population Council, introduced a community-based monitoring and information system (CBMIS) to all Local Government Units participating in its Matching Grant Program (MGP). The new CBMIS evolved from a system introduced in 1996 in the province of Pangasinan in the north and Iloilo City in the south. The earlier version focused on family planning, while the new one also covers child survival services: tetanus toxoid vaccinations for pregnant women to protect newborns from tetanus, immunization, and vitamin A

Background

The 1998 Philippines National Demographic and Health Survey indicates that coverage rates for childhood immunization, vitamin A supplementation, use of family planning, and protection from neonatal tetanus are still well below the desired levels. About 65 percent of children 12-23 months are fully immunized, and only half of the youngest children in families are protected from neonatal tetanus. Vita-



MATCHING GRANT PROGRAM
Department of Health

Community-Based Monitoring and Information System

CBMIS

Proportion of the population served by routine or existing health interventions



Proportion of the population missed by routine or existing health interventions

4. Maintain CBMIS

- Update CBMIS Form 1
- Update Midwives' copies of call cards
- Update FHSIS Target Client List

3. Plan & Implement Interventions

- Give call cards to all families with unmet needs (priority levels)
- Other interventions aside from the existing or routine services
For example, TTV during pre-marriage counseling or Voluntary Surgical Sterilization in cooperation with other GOs/NGOs



1. Identify All Target Clients

- Family enumeration by the BHWs using CBMIS Form 1
 - ✓ Systematizing work of BHWs

2. Summarize and Analyze Form 1

- Summarize Family Profiles using CBMIS Forms 2 & 3
 - ✓ Determine the number of clients with unmet needs
 - ✓ Data for planning interventions

supplementation. These are the program activities the MGP currently supports.

The CBMIS enables health service providers to systematically identify, categorize, and prioritize women and children for these services. It provides the basis for planning and implementing interventions that use available resources more effectively. Volunteers canvass households barangay by barangay to complete family profiles. Midwives complete tallies to create a picture of the health problems in barangays: children who have not received essential public health services, and married women of reproductive age (MWRA) who want to space births and are not using a contraceptive method or who are using a method but are dissatisfied with it. After completing a “spot map,” doctors, nurses, and midwives meet to develop plans to modify their service delivery activities to tackle the problems in a cost-effective way.

How Does the CBMIS Work?

The CBMIS consists of four steps: identifying women and children who need services, summarizing and analyzing family profiles, planning and implementing service delivery interventions, and maintaining the CBMIS.

☞ Identifying women and children who need services

Community health volunteers, known as Barangay Health Workers (BHWs), conduct a family enumeration to identify women and children. In some areas, other community volunteers, such as the Barangay Nutrition Scholars or Barangay Supply Point Officers, help with the household visits. Data on vaccinations against the six immunizable diseases are collected on children under 3 years of age, on vitamin A capsules given to children between 1 and 5 years of age during the past 6 months, on tetanus toxoid vaccinations given to MWRA, and on



A health worker completes a Family Profile during a home visit

the desire of MWRA to space births or stop having children. Before making household visits, field coordinators providing technical assistance to the Department of Health conduct a four-day training and planning workshop for LGU health personnel, including doctors, nurses, and midwives. This training focuses on conducting household visits, completing CBMIS forms, processing data, and interpreting and using these data to develop more effective service delivery activities. The midwives, in turn, orient and train their BHWs, particularly in collecting the data during household visits. During the workshop, participants visit nearby communities, accompanied by local health workers familiar to families in the communities, to practice interviewing women and collecting data.

Each BHW is assigned a number of households to survey. The number is limited, to allow the worker to finish the survey in a reasonable time, given population density and terrain. To ensure the quality of the data gathered, midwives usually accompany selected BHWs during their first few interviews until they are confident that the community health workers can do a good job.

BHWs use a two-page **Family Profile (Form 1)** during household visits—one form for each family. The form includes space to record (1) general information about the family; (2) a list of all children under 5 years old and the vaccinations and vitamin A capsules they have received; (3) a history of the tetanus toxoid vaccinations MWRA have received, including information on protection of the youngest child against neonatal tetanus; and (4) information on family planning practices. The BHWs keep this Family Profile and update it monthly as health services are provided.

☞ Summarizing and analyzing family profiles

As each interviewer completes her survey of assigned households and submits the completed Family Profiles, the midwife starts totaling the data on the **Barangay Tally Sheet (Form 2)**. The tally sheet summarizes the data gathered from the Family Profile by barangay. A tally sheet is completed for every barangay. It provides an overall picture of the magnitude of the unserved and underserved: children who have not been fully immunized or received vitamin A capsules; MWRA

FAMILY PROFILE
CBMIS Revised Form as of 02/2001

General Information

FORM 1, page 1

Address: _____ Respondent: _____ Father: _____ Birthday: ____/____/____ (mm/dd/yy) Age: _____ Mother: _____ Birthday: ____/____/____ (mm/dd/yy) Age: _____ Civil Status: () Single () Married () Widow () Separated	BHS/BHC: _____ RHU: _____ Mun/City: _____ Province: _____ NOTE: Please use pencil in completing the form to facilitate updating!	BHW: _____ RHM: _____ PHN: _____ Interviewer: _____ Date Surveyed: _____ Date of last update: _____
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Part I. Data of children 0 - 4 years old (0 - 59 months old, start from the eldest)

Name	Birthday			Age	Where does the child receive vaccinations? B = BHS/BHC R = RHU/MHC P = Private G = Gov't Hosp (See "A" below)	Does the child have any vaccination record? Y = Yes N = No (See "B" below)	Vaccinations Received <small>(For children 0-11 months old, write the date when vaccination was given) (For children 12-59 months old, put a Y if child was given vaccination or an N if not given)</small>						FIC <small>(For children 9 months to 4 years old)</small> Did the child receive all the preceding vaccinations before his/her first birthday? Y = Yes N = No	Vitamin A <small>(For children 1-4 years old only)</small> Was the child given Vitamin A capsule (200,000 iu) during the past 6 months? (e.g. Garantisadong Pambata Activities) Y = Yes N = No (See "E" below)		Remarks
							DPT			OPV				Measles	April	
	B	C	G				1st dose	2nd dose	3rd dose	1st dose	2nd dose	3rd dose			Year	

- | Actions to be taken |
|---|
| A. Follow-up the child's vaccination until completed. |
| B. Advise the mother to get a copy of the vaccination record from the health facility where the child received the vaccinations or ask the midwife of the nearest BHS to make another record. |
| C. Refer or accompany the mother and child to the midwife for <i>immediate vaccination.</i> |
| D. Advise the mother to consult the midwife for completion of the child's vaccinations. |
| E. Give vitamin A capsule at once, if available, or advise the mother to bring the child to the nearest health facility for the next scheduled Vitamin A supplementation. |

Part II.A. Tetanus Toxoid Vaccination (TTV) for Pregnant Women

Is the mother/wife pregnant? Yes No

Total number of TTV doses received Doses

If the woman is pregnant, inform her of the importance of prenatal care and tetanus toxoid vaccinations that are available at the nearest health facility.

Part II B. Protection at Birth (PAB) against neonatal tetanus: For women with children 0-2 years old only

Name of youngest child (0-2 years old only): _____ Age of youngest child: _____

Complete this table only if the age of the youngest living child is 0 to 2 years old (0-35 months old)

TTV Dose	When was each TTV dose received in reference to the youngest child?		Was the child protected at birth (PAB)? Check the appropriate box
	During the pregnancy with the youngest child	Prior to the pregnancy with the youngest child	
TTV 1	<input type="checkbox"/>	<input type="checkbox"/>	PAB is defined as any of the following: * 2 TTV doses during the pregnancy with the youngest child, or * 1 TTV dose during the pregnancy with the youngest child plus 2 doses prior to the pregnancy, or * 3 TTV doses prior to the pregnancy with the youngest child <input type="checkbox"/> Yes (Protected at Birth) <input type="checkbox"/> No (NOT Protected at Birth)
TTV 2	<input type="checkbox"/>	<input type="checkbox"/>	
TTV 3	<input type="checkbox"/>	<input type="checkbox"/>	
TTV 4	<input type="checkbox"/>	<input type="checkbox"/>	
TTV 5	<input type="checkbox"/>	<input type="checkbox"/>	

Part III. Family Planning Practice of Married Woman of Reproductive Age (MWRA) (Mother/Wife)

The following should not be interviewed for Part III:

- Widowed or separated women Menopausal women
 Women with ovaries and/or uterus and/or fallopian tubes surgically removed due to a medical condition (e.g. tumors, ectopic pregnancy)

1. Are you currently pregnant? (See response to Part II A)

No/Unsure Yes

2. Do you want to have additional child/children?

Yes, after 1 year Yes, within 1 year

3. Are you currently using any family planning method?

No

4. Are you satisfied with the FP method you are using?

Yes No

5. What method are you using?
 (✓) Check the appropriate box

Modern Methods	Traditional Methods
<input type="checkbox"/> P = Pills	<input type="checkbox"/> W = Withdrawal
<input type="checkbox"/> IUD = Intrauterine Device	<input type="checkbox"/> CAL = Calendar/Rhythm
<input type="checkbox"/> Inj = DMPA/Injectable	
<input type="checkbox"/> C = Condom	
<input type="checkbox"/> BTL = Bilateral Tubal Ligation	
<input type="checkbox"/> VAS = Vasectomy	
<input type="checkbox"/> NFP = Natural Family Planning	
<input type="checkbox"/> LAM = Lactational Amenorrhea Method	

Actions to be Taken

Remind her again of the need for prenatal care and tetanus toxoid vaccination.
-END OF INTERVIEW-

Inform her of the need for prenatal care when she gets pregnant and the available family planning services in the health center in case she changes her mind.
-END OF INTERVIEW-

MWRA not wanting another child or wants to space but not practicing family planning

She has an **UNMET NEED** for family planning. Inform her about family planning services and refer/accompany her to the midwife or to the health center.
-END OF INTERVIEW-

MWRA practicing family planning but not satisfied with the method she is using

She has an **UNMET NEED** for family planning. Refer or accompany her to the midwife or to the health center for counseling.
-Proceed to Question #5-

MWRA practicing family planning but using traditional methods

Inform her of the benefits of using modern family planning methods. Refer/accompany her to the midwife or to the health center for counseling.

A mother may be classified as using LAM if all 3 of the following are true:

1. She has a baby less than six months old,
2. She is *amenorrheic* (not menstruating), and
3. She is *breastfeeding* the baby day and night without supplementation.

If any of the above no longer applies, refer her to the midwife for counseling.

who either want to space births or stop having children but are not practicing family planning; or who use contraceptives but are dissatisfied with the method they are using.

After totaling data from the Family Profiles on tally sheets from each barangay, midwives compare tallies from each barangay on **Form 3 (Municipal Tally Sheet)**. The municipal tally sheet is a two-page form that records barangay totals and percentages so health personnel can compare the problems and accomplishments of different villages. For a midwife covering several barangays, as is mostly the case in the Philippines, the form is important in establishing which barangay(s) should be given priority.

CATCHMENT AREA CBMIS TALLY SHEET

SECTION	BARANGAY	TOTAL	BARANGAY		TOTAL	
			(N)	(%)	(N)	(%)
A. VACCINATION STATUS OF CHILDREN 0-5 MONTHS OLD	1. Children 0-5 months old (sample of 20 vaccination card all)	82	7	8.5%	1332	16.2%
	2. Children 0-5 months old (sample of 20 vaccination card all)	10	10.0%	7	70.0%	
	3. Children 0-5 months old with recommended vaccination schedule followed	7	70.0%	4	40.0%	
	4. Children 0-5 months old with recommended vaccination schedule not followed	3	30.0%	3	30.0%	
B. VACCINATION STATUS OF 1 YEAR OLD CHILDREN (12 MONTHS)	1. Children 12 months old (sample of 20 vaccination card all)	3	30.0%	2	66.7%	
	2. Children 12 months old with recommended vaccination schedule followed	2	66.7%	1	33.3%	
C. ITA SUPPLEMENTATION STATUS OF CHILDREN	1. Children 0-5 months old (sample of 20 vaccination card all)	3	30.0%	1	33.3%	
	2. Children 0-5 months old with recommended vaccination schedule followed	2	66.7%	1	33.3%	
D. TETANUS TOXOID VACCINATION STATUS OF WOMEN OF REPRODUCTIVE AGE (WRA)	1. Treated with 1st TTx with 11 only	74	42.5%	1	1.4%	
	2. Treated with 1st TTx	74	42.5%	1	1.4%	

Health worker highlights most significant health problems on tally sheet

Planning and implementing service delivery interventions

With the evidence about which families need health services, the midwife is ready to formulate an annual work plan with the help of her nurse supervisor and technical assistance from regional offices of the Department of Health. Planning involves making a spot map of communities with poor access to health services, underserved populations, or relatively high numbers of families in need of public health services. Barangays or *puroks* (communi-

ties within a barangay) are then prioritized, and service delivery practices are reviewed and revised to eliminate gaps in service utilization. The work plan specifies the person responsible for each activity, the due date, and the resources required to implement each activity. It is devised to be carried out with municipal funds, and financial support and technical assistance from the regional health office.

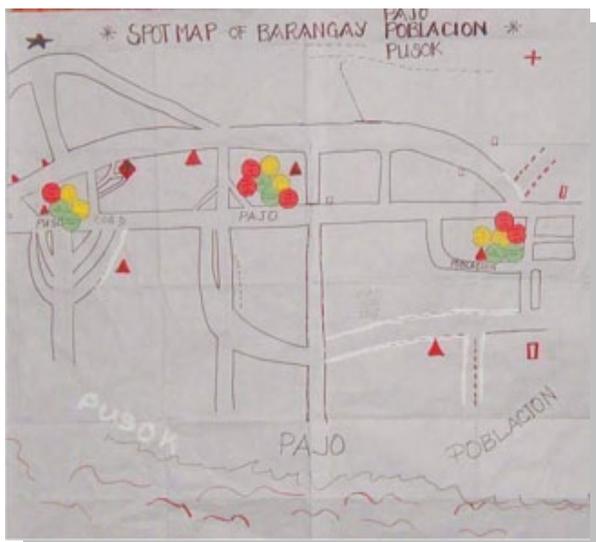
Midwives and their supervisors can repeat the problem-solving process described above at any time during the

year as data are routinely tallied from updated Family Profiles. Midwives usually issue “call cards” to families that need services. The call card specifies what services are needed and when and where to get them. When appointments are not kept, midwives have BHWs return to the home to investigate, provide the service, or make other arrangements.

Maintaining the CBMIS

It is essential to assess the effectiveness of the work plan. Specifically, it is necessary to determine the extent to which the needs of the priority clients have been met and the appropriateness of the service delivery interventions implemented. This assessment can be done only if the LGU maintains the CBMIS. CBMIS maintenance entails updating the Family Profiles either every month or every time health services are provided. It also requires quarterly updating of Forms 2 and 3 and analyzing the data they contain to identify and carry out more effective interventions.

The midwife’s duplicate copies of call cards also need to be updated as services are delivered. The call cards are removed from the files only after the target client list has been updated.



Tetanus Toxoid (TT) Vaccination for Pregnant Women

Name : _____ Age : _____

Services Needed	Date when TT vaccination will be given	Place where TT vaccination will be given	Date Given	Signature of Midwife
TT 1				
TT 2				
TT 3				
TT 4				
TT 5				

Matching Grant Program

CBMIS Call Card



Family Planning Service

Name : _____ Age : _____

FP Services Needed	Date when service will be provided	Place where service will be provided	Date Provided	Signature of Midwife

Sa Sentrong Sigla, Health Ang Una !

Vaccinations for children 0-11 months old

Name of child: _____ Age: _____

Vaccinations Needed	Date when vaccination will be given	Place where vaccination will be given	Date Given	Signature of Midwife
BCG				
DPT 1				
DPT 2				
DPT 3				
OPV 1				
OPV 2				
OPV 3				
Measles				

Dear _____,

Greetings from the staff of your local health center.

Recently, our local health department through our barangay health workers (BHWs) conducted a survey in your area to identify the health services needed by your family. This is our effort to reach out to each and everyone in your community. From the information you provided our BHWs, we found that the health service/services listed on the following tables is/are needed by one or more members of your family.

Please do not hesitate to avail of the free services to be given by our friendly health personnel on the scheduled date and place.

Sincerely,

Name of child: _____ Age: _____

Vaccinations Needed	Date when vaccination will be given	Place where vaccination will be given	Date Given	Signature of Midwife
BCG				
DPT 1				
DPT 2				
DPT 3				
OPV 1				
OPV 2				
OPV 3				
Measles				

Vitamin A Supplementation for children 1-4 years old

Name of Child	Age	Date when vitamin A will be given	Place where vitamin A will be given	Date Given	Signature of Midwife

This is one way of tracking whether priority clients have already been served, as reflected in the decreasing number of women and children with unmet needs. The CBMIS data may be used to complement the DOH's Field Health Service Information System target client list.

Status of CBMIS Implementation

The CBMIS has been introduced in more than 50 selected municipalities and component cities participating in the Matching Grant Program. Several regional and provincial health offices

have expressed interest in providing financial support to their municipalities and component cities to implement the CBMIS and conduct the training and planning workshop in their areas. It is expected that the CBMIS will be used in more than 200 municipalities and component cities by 2002.

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