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ISSUES IN GROWTH MONITORING AND PROMOTION

(SUMMARY)

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Developed from "Review of Growth Monitoring-Issues Paper" (DRAFT) September 16, 1986, by the same authors, in collaboration with D. Eckerson, AID/AFR/TR/HN; N. Pielemeier, AID/PPC/PDPR; K. Nurick, AID/ANE/TR/HPN; C. Teller, LTS/INU for the Nutrition Sector Council, AID/W.

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## EXECUTIVE SUMMARY

Growth Monitoring and Promotion (GMP) is the regular measurement, recording and interpretation of a child's growth change in order to counsel, act and follow up results.

This objective assessment/action strategy to improve both health and nutrition is available to health service providers and recipients. Satisfactory growth can reinforce positive efforts; unsatisfactory growth can focus attention on the at-risk child for action and follow up.

In its provision of regular productive contacts between the mother/child and health worker, GMP can serve as an entry point into the health care system and promote coverage maintenance.

For reasons of feasibility, resources (both material and inadequate human) and misunderstanding of its applications and implementation, GMP has not yet satisfied expectations consistently, especially in large-scale programs.

GMP should always include action/intervention and can entail a relatively large investment of human resources for implementation (for management, training, supervision and education) as well as equipment (scales, charts) and logistics. Added time by competent workers is required to ensure the mother's understanding and involvement, which is essential for her participation and motivation.

Such resources may be used inefficiently because of the confusion of GMP with surveillance; ignored or inadequate interpretation/action from results; lack of targeting of the potential managerial, educational and promotion/motivational uses of GMP to project requirements.

This paper:

1. Presents a basic model to show how GMP can improve child health and reduce mortality,
2. Indicates the relevance of GMP to A.I.D.'s nutrition objectives, and
3. Summarizes some of the stated benefits of GMP (including effect on nutritional status, costs) in seven selected projects from India, Tanzania, Indonesia, Dominican Republic, Ecuador and Thailand.

The most consistent uses of GMP were to help identify the at-risk child, to improve intervention efficiency, and to integrate nutrition with other health activities. Less often, GMP enhanced mother's participation in action, reinforced nutrition education, served as a major health record, or increased the coverage of other child survival activities.

4. Discusses some issues related to the efficient implementation of GMP. These include the following:

- a. resources and feasibility
- b. identifying relevant uses
- c. alternatives to weight and charting in GMP
- d. GMP and nutritional surveillance

5. Provides guidelines to help clarify selected GMP applications

6. Recommends that A.I.D., after review of existing GMP activities, consider the following:

- A. Technical assistance for the design, and resources to support implementation of, GMP components in specific A.I.D. projects. This would entail ongoing technical backstopping, including guidelines, with dissemination for training, supervision and monitoring/evaluation.
- B. Policy dialogue, along with UNICEF and WHO, to help develop national GMP programs, plans and strategies. Included should be clarification of the role of GMP in child survival and primary health care programs and establishing national standards and procedures.
- C. Practical, action-oriented studies to identify successful GMP activities as well as key problems. These might include national GMP program assessments and project-specific field (evaluation, case study, operational) research.

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## 1. PURPOSE OF PAPER

This paper is intended to update A.I.D. Missions in key issues regarding growth monitoring and promotion and make recommendations for action. Developed from a more detailed account for the A.I.D./Washington Nutrition Sector Council, the paper compliments a world-wide cable\* and selected materials sent to missions.

## 2. WHAT IS GMP?

Growth Monitoring and Promotion (GMP) is the regular measurement, recording and interpretation of a child's growth change in order to counsel, act and follow up results. Promotion has been added because monitoring alone emphasizes assessment rather than action. The terms growth monitoring or growth promotion are also being used to describe these activities.

## 3. A BASIC MODEL SHOWING GMP USES [Figure 1]

The entry point indicates the initial and repeated regular contacts between the recipients and providers of health services. The two phases of GMP: assessment (weigh, chart) and action (consequence of results) are linked by relevant interpretation.

When growth is "favorable", health reinforcement occurs. This vital positive aspect of GMP is often overlooked, where the mother is encouraged to continue her good efforts, either from her own initiation (e.g. breast feeding, weaning practices) and/or a result of services provided.

When growth is "unfavorable", attention can be focused on the specific reasons for this and actions taken. Actions may be directly linked with growth change (e.g. continued feeding during and after diarrhea) or indirectly (e.g. "routine" immunization). All actions enhanced by GMP should lead to improved child health and reduced mortality.

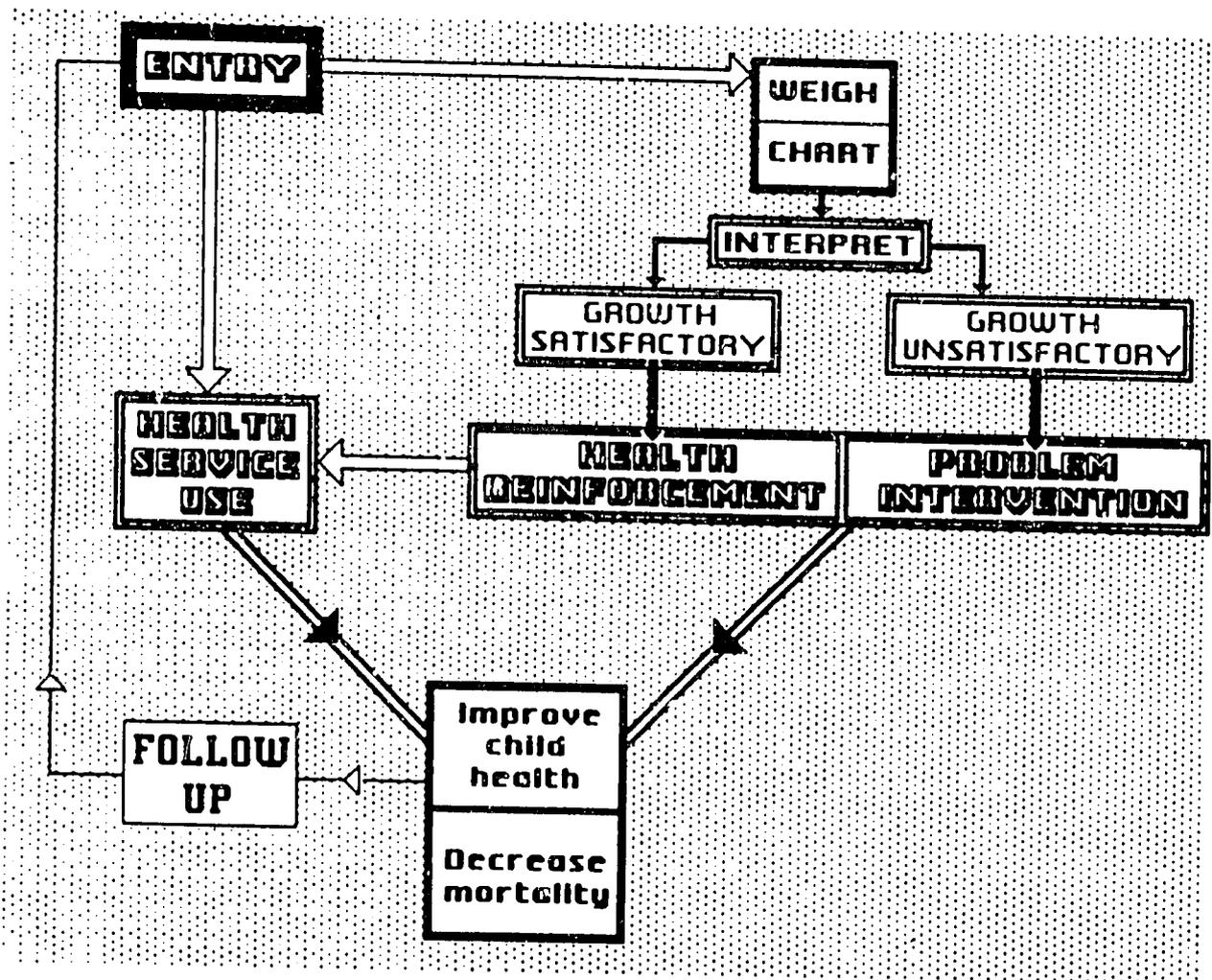
The feedback for repeat assessment is vital to help indicate the consequence of actions and the need for further support or intervention.

Health service promotion uses GMP to improve coverage (and where possible, selective coverage for those at risk) for health services. The onset of promotion is independent of growth interpretation, but its maintenance and targetting is dependent on the appropriateness and availability of GMP-related actions.

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\* State 100716, April 4, 1987

Figure 1.  
WHAT GMP IS EXPECTED TO DO  
AND HOW (A MODEL)



#### 4. GMP AND A.I.D.'S NUTRITION OBJECTIVES

Hunger and young child morbidity/mortality are two key development problems identified by A.I.D. The Office of Nutrition (Nutrition strategies and policies, 1986) plans to help:

- a. reduce hunger by improving food consumption of the poor through the food and agriculture sector, and
- b. reduce morbidity/mortality in young children through health sector activities.

GMP is a key assessment/action strategy to help target individual, community and program resources to at-risk children. Most young child malnutrition in developing countries is associated with poverty, compounded by repeated diarrhea and illness. The resulting weight loss or lack of weight gain (growth faltering) can best be detected at an early phase, through GMP. Action, particularly when it involves the mother, can then be taken immediately to restore weight gain and adequate growth. In addition, GMP can be used to help maintain health and normal growth. GMP strategy becomes much more effective if the mother understands the relationship between her child's growth and action.

GMP can offer a way of uniting nutrition activities (support of breast feeding, improved weaning practices and feeding during diarrhea) with health actions (EPI, ORT) into a synergistic whole to bring about a revolution in survival, child development and growth.

#### 5. REVIEW OF EXPERIENCE WITH SELECTED PROJECTS USING GMP

Seven projects (from India, Indonesia, Thailand, Tanzania, Dominican Republic and Ecuador) were reviewed\*. They provided essential, although incomplete, information about the extent, purpose and application of growth monitoring and promotion. Projects reviewed were:

- a. Tamil Nadu Integrated Nutrition Project, INDIA
- b. Integrated Child Development Services, INDIA
- c. WHO/UNICEF Joint Nutrition Support Project, Iringa, TANZANIA
- d. Indonesian Family Nutrition Improvement Program (UPGK) and the Nutrition Communication and Behavior Change Component (NCBC), INDONESIA
- e. Applied Nutrition Education Project (ANEP), CARITAS/CRS, DOMINICAN REPUBLIC
- f. Evaluation and Monitoring Project - MCH/PL480 Food Assistance Program (PEM-PAAMI), ECUADOR
- g. Rural Primary Health Care Expansion, THAILAND.

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\* Please consult references for sources, all have received A.I.D. assistance at some time.

## Information sought

The review focused on evidence that GMP as practised, improves the efficiency and impact of health and nutrition interventions. Information sought included:

- a. Project objectives and content
- b. Target population
- c. Extent of coverage
- d. General benefits of growth monitoring
- e. Management, education and promotion/motivation uses
- f. Overall effect on nutritional status, and effect on nutritional status of those receiving interventions
- g. Cost of program, its relationship to benefits, and amount of time spent on growth monitoring activities

## Findings

### a. Project objectives and content

Project objectives depended on the type and location (clinic, community) of health/nutrition service. Some projects (especially PHC) integrated provision of health services with nutrition activities (education, food distribution). Community-level projects often relied on a referral system for most health care.

### b. Target population

Usually children under 6 years of age were measured. Some projects (e.g. Tamil Nadu) served younger, more vulnerable age groups. Mothers and caretakers, and sometimes, community groups, were the targets for health and nutrition education.

### c. Extent of coverage

Coverage was usually defined as the percentage of target children weighed for each session. Information was often unclear or incomplete, particularly with regards to the target population. Coverage ranged from over 90% in the Tamil Nadu (India) project to 30% in the UPGK, Indonesia community-based program, where the denominator numbered 15-20 million.

Table 1. BENEFITS OF GMP BY PROJECT REVIEWED

Project location .....	PROJECT/PROGRAM						
	Tamil Nadu INDIA	ICDS, INDIA	PAAMI, INDIA	UP6K, ECUADOR	JNSP, INDONESIA	MIN.HLTH; TANZANIA	ANEP THAILAND; DOM.REP.
Type of service.....	MCH/FOOD	MCH/FOOD	MCH/PL480	MCH/FPLAN	PHC	PHC	INT.EDUCN
Clinic or community based .....	COMMUNITY	COMMUNITY	CLINIC	COMMUNITY	CLINIC	COMMUNITY	COMMUNITY
----Benefits for individuals----							
Identifies children at risk	X	X	X	(X)	(X)	X	X
Improves intervention efficiency (e.g. food supplements)	(X)	X	(X)	X	X	X	X
Enhances mother's participation in action				X	X		X
Reinforces nutrition education			X	X			X
Increases coverage of other CS/Health activities (eg EPI)**	X			X			
Integrates nutrition with other health activities **	(X)	(X)	X	(X)	(X)	(X)	
Major health record	(X)			X	X		
-----Benefits for groups** -----							
Identifies groups at risk			X		X	X	X
Improves intervention efficiency (e.g. target resources)					X	X	
Reinforces group education				X			X
Enhances group participation in action, monitoring, evaluation				X			
Helps promote group mobilization				X	X	X	X

\* Only those benefits stated or implied in the reports are listed.

X Stated benefit (X) Implied benefit

\*\* Also applicable to programs.

**d. General benefits**

These are summarised in Table 1. A key benefit of GMP is targeting, particularly to at-risk children. Another is the regular contact that develops between mothers and health workers. The resulting information exchange about growth and relevant actions provides a basis for mutual support and motivation to promote adequate child health.

**e. Management, educational and promotive/motivational uses**

The wide range of reported uses of GMP are simplified into three major broad groups:

- i. managerial
- ii. educational
- iii. promotional/motivational

Each or all of these uses can affect individuals, communities or programs [see Annex, Guideline D]. Although the major purpose of GMP is for individual attention, data can be summarized and used for groups.

**i. GMP for management**

Several reports highlighted using GMP to identify need and action (such as selective feeding) as well as support and encouragement when growth was satisfactory. Less information was found on how GMP summary data assisted in the analysis of causes of growth change and how such data was used for resource allocation in programs.

**ii. GMP for education**

Reports in which the mother understood about her child's growth and its relationship with health/nutrition and was adequately supported by the health system, emphasised the vital importance of GMP for educational purposes. GMP provided an entry point for health/nutrition education and timely delivery of messages.

**iii. GMP for promotion/motivation**

Where appropriate action (health/nutrition, including referral) was integrated with assessment, GMP assisted coverage, both initially as an entry point into programs and continuing contacts. GMP with appropriate targetting improved the selective coverage of those at-risk.

f. Effect on nutritional status [Table 2]

In general, the prevalence of malnutrition (usually defined as a weight-for-age under 75% of reference) was reduced over time. However, adequate baseline controls were usually lacking, making results difficult to interpret.

Table 2: CHANGES IN PREVALENCE OF MALNUTRITION

Project	Criteria		
	Grade II/III		Other
Tamil Nadu, India	BEFORE	AFTER	
	10/80	3/84	
	Project	20.4%	15.0%
	Control	15.7%	17.8%
JNSP Iringa, Tanzania		BEFORE	AFTER
		Q2 84	Q3 85
	<60% WA	6.1%	2.7%
	<80% WA	56.0%	41.3%
		N= 30850	38370
PHC Project, Thailand	BEFORE	AFTER	
	1982	1983	1984
	12.7%	9.0%	6.0%
	N= 41646	45700	46608
ANEP, Dominican Republic	BEFORE	AFTER	
	Project	9/84	9/86
		12.0%	6.7%
	N =	2804	4245
	Control	11.1%	
	N =	542	
NCBC, Indonesia	1981: 1 year later children (N=523) aged 0-24 months in project areas had higher mean weights than children (N=360) in non-project areas.		

g. Cost and time spent [Table 3]

There appears to be no standard way of estimating cost; in some cases, the cost data reflects gross estimates per beneficiary, while others have attempted to separate out the cost for interventions. Cost per child annually ranged from about \$2 (Indonesia) for a basic package which includes measurement and nutrition education but no food supplements to an estimated \$10 to \$20 (Dominican Republic) for similar activities conducted with greater intensity.

As with the cost data, the time spent alone on GMP cannot be separated out. Time spent on GMP or nutrition activities ranged up to 3 days per month (as with ANEP).

Table 3: COSTS PER CHILD AND TIME SPENT \*

Project	Annual cost	Time spent
Tamil Nadu, India	\$3 per child (includes food)	CNW spends 3 days per month
ICDS, India	not available	not available
JNSP, Iringa Tanzania	not available	not available
UPGK, Indonesia	\$2 per child for basic package (GM, education, first aid). \$11 when food added.	not available
NCBC, Indonesia	\$10 per child with improved nutritional status. \$4 per beneficiary	Up to 5 hours per month on GM alone; 14 hours monthly for nutrition activities
ANEP, Dominican Republic	\$10-\$20 per child	3 to 5 days per months in homes
PEM-PAAMI, Ecuador	not possible to estimate	1 day a month at a clinic
PHC Project, Thailand	not available	1 day every 3 months plus 1 day visiting mal-nourished children at home.

\* Annual costs for each targeted child expressed in U.S. dollars (rounded to the nearest dollar)

## 6. EFFICIENT IMPLEMENTATION OF GMP

### Resources and feasibility

A primary issue at the UNICEF conference in Delhi (1986) was that "Growth monitoring isn't working because it hasn't been tried properly." Large-scale programs with an adequately functioning GMP component were rare, because of problems with scales or charts, plotting, interpretations and effective action, and lack of resources (including available time) and personnel. Training and supervision were often inadequate.

A clear distinction must be made between the resources used for monitoring growth (scales, charts, training, etc.) and those for resulting actions, such as counseling, reinforcement of positive practices, education and other interventions. GMP, like screening, may increase the demand for services. If this competes with other essential services (e.g. EPI) then the scope and application of GMP must be reconsidered.

Routine repeated visits at regular intervals are the essence of GMP. This imposes a great demand on both mothers and health workers time. Added costs should not only include equipment and materials, but also the time and demands for the complete procedure, training, supervision and logistic support. Often overlooked is the cost to the mother and child for the time and effort in travel to the weighing center and wait their turn to be measured, at times without any explanation nor appropriate intervention.

### Identifying relevant uses

There is a lack of understanding of what growth monitoring is meant to do in the specific situations.

Monitoring growth is a regular health assessment of a child, which is interpretable and action-linked. It is not an intervention per se, like ORT and immunization; it is a strategy to facilitate nutrition and health action. Program personnel and recipients can become disillusioned with GMP because no action occurs. Measurement without action is pointless. Thus if resources for action are not readily available, GMP is tantamount to measurement alone, and therefore a waste of time and effort.

The question whether GMP can be done efficiently through regular health services, even where resources are adequate for assessment and action, is yet to be resolved.

## **Alternatives to weighing and charting in GMP**

Weighing and growth charts which plot changes are the usual assessment tools for monitoring growth. Alternatives to using weight include other anthropometric measures such as arm circumference (Zerfas, 1975, SINAPS, 1982, Gopalan 1984, Morley 1986) or clinical signs such as thinness (Morley 1981). Mothers measure growth and health. They use anthropometric proxies (loose beads, clothes) and a wide array of signs (activity, general appearance) and symptoms, e.g. appetite, mood changes (Lovel et al., 1984).

Arm circumference has been used primarily as a screening tool to measure changes in broad categories, rather than for precise assessments. Although some studies have shown acceptable reliability of arm circumference measurement, this requires adequate training and standardization of techniques, often lacking in projects. Mothers' own observations have not yet been tried as a possible tool for basic growth assessment.

Such alternatives may not necessarily be competitive with GMP as defined in this paper. For example, they may be considered in a program area where weighing/charting is impractical or be used as a first-line community/household tool in screening for local action or referral.

Thus a feasible and desirable "mix" of approaches should be tailored to specific program requirements. For example, a crude but useful tool may be applied regularly and frequently when weighing/charting could not be done as often as desired.

Whatever the measure and method (providing it is objective, relevant and accurate for the situation) it must be sensitive and specific enough to detect change in growth and be linked with appropriate interpretation and action.

## **GMP and Nutritional Surveillance**

GMP is not necessarily required for nutritional surveillance as surveillance can be based on repeated surveys, screening or available population data. However, if GMP is implemented for individual action, its results may be summarized on a selective basis to promote community or government action. The summary of GMP data provides a profile of the nutrition situation which can be used to guide resource allocation to priority areas, monitor program or project effects for management and/or evaluation purposes. This summary GMP data can also be fed into famine and early warning systems.

## 7. CONCLUSIONS ON THE MAIN POINTS

1. Through interpretation and relevant action, GMP can help support the mother whose child is growing adequately and assist her when faltering occurs.

2. GMP can provide regular productive contacts between the child (especially when at-risk) and health worker.

3. Important uses of GMP include identifying children at-risk for targeting interventions, especially for food and diarrheal therapy, and to guide and reinforce nutrition/health education. It may serve as an entry point into the health care system and assist continuing coverage.

4. When the mother participates in nutrition/health care, she must fully understand the importance and meaning of her child's growth, both for initial and continuing action. This feedback is an essential component of "interactive" GMP.

5. GMP should always include action/intervention and entails a relatively large investment of human resources for implementation, training and supervision, as well as equipment (scales, charts) and logistics. Added time by competent workers is required to ensure the mother's involvement.

Such resources may be used inefficiently because of the confusion of GMP with surveillance; ignored or inadequate interpretation/action from the assessment; or lack of targeting the potential managerial, educational and promotion/educational uses of GMP to project requirements.

6. Where resources are limited, alternative or complementary methods in growth assessment (e.g. arm circumference, mother's perception) should be explored. An example is frequent screening in communities to support GMP in clinics.

7. When, and only when GMP is instituted for individual care, the resulting data can be summarised for community and program purposes, such as the use for nutritional surveillance.

8. A brief summary of seven selected projects in India, Tanzania, Indonesia, Dominican Republic, Ecuador and Thailand, indicated the multiple stated benefits of GMP. These can be broadly grouped as managerial, educational and promotion/motivational, both for individuals, and via surveillance for groups and projects/programs.

The most consistent uses of GMP were to help identify the at-risk child to improve intervention efficiency and integrate nutrition with other health activities. Less often, GMP enhanced mother's participation in action, reinforced nutrition education, was used as a major health record or increased the coverage of other child survival activities.

9. However, there is a need to more clearly define the costs and expected benefits of GMP according to its role and applications in programs/projects, particularly those pertaining to Primary Health Care and Child Survival.

10. Indeed, the question whether GMP can be done efficiently and effectively through the regular health services, even when resources are adequate for assessment and action, is yet to be resolved.

## 8. RECOMMENDATIONS FOR A.I.D. CONSIDERATION

A.I.D. should review existing GMP activities within A.I.D.-supported programs and projects at country levels to determine the resources required and expected benefits. A start has already been made with the worldwide cable recently sent to missions.

Key questions include:

- Do the uses of GMP match project objectives?
- Are each clearly defined?
- Are the infrastructure and resources adequate for effective implementation of GMP? If not, what additions are required and warranted?
- How are GMP activities being monitored and evaluated? What criteria is used to measure "effect".
- Can the project be maintained when A.I.D. support ends?

A.I.D. should then consider supporting the following action:

A. Practical focused field studies based on needs identified by Countries/Missions. This might include aspects relating to measurement, charting, interpretation, action and follow-up on an individual or group basis.

In selected projects, the following questions may be needed to answer whether the addition of GMP:

- Enhances the coverage of the program that it is a part of (e.g child survival, PL 480, primary health care, maternal and child health, etc.).
- Enhances the effectiveness of immunization and ORT.
- Helps mothers and health workers make a better analysis of the health and nutrition situation of the child, identify potential problems at an early stage and take appropriate actions.

B. Policy dialogue, along with UNICEF and WHO, to help develop national GMP programs, plans and strategies. Included should be clarification of the role of GMP in child survival and primary health care programs and establishing national standards and procedures.

C. Practical, action-oriented studies to identify successful GMP activities as well as key problems. These might include national GMP program assessments and project-specific field (evaluation, case study, operational) research.

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## **ANNEX**

### **SOME GUIDELINES TO CLARIFY GMP APPLICATIONS**

Four key procedures to help identify the uses and resources required for GMP are presented. They are as follows:

- A. Distinguishing between GMP and surveillance
- B. Identify "interactive" GMP and whether it is required
- C. The essential steps and resources required
- D. Managerial, educational and promotion/motivation uses.

These are intended as guidelines in assessing the purpose of and requirements for GMP.

## A. DISTINGUISHING BETWEEN GMP AND SURVEILLANCE

### GMP and Surveillance - Some features

	<u>GMP</u>	<u>Surveillance</u>
1. Action focus	Child	Group
2. Action based on	Weight change	Nutritional Status (Often cross-sectional)
3. Who interprets Who acts	Mother/HW*	HW/Others**
4. Weighing frequency	1-2 months	3+ months

\* HW Health worker (Community or clinic-based)

\*\* eg. at Provincial or National HQ.

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In GMP, action is focused on the individual, is usually based on weight change, ideally should involve the mother's understanding. Regular, relatively frequent contacts occur.

In surveillance, action is focused on the group (e.g. community, service attenders), is usually based on anthropometric nutritional status grading (often cross-sectional) and does not directly involve the mother. Contacts are relatively infrequent.

It is important to recognise the distinction in order to direct resources efficiently for the major purposes of a program and complimentary GMP uses. Thus information primarily for groups requires less intense input, different strategies (e.g. use of summary health service records, surveys, etc) and reporting. Examples of uses are program planning, monitoring, evaluation, targetting to at-risk populations for local, regional or national action.

It is only when program purposes are directly related to the individual for GMP use, that surveillance information may be used as a "byproduct", providing there is a commitment and the means to act.

Where GMP and surveillance occur concurrently in programs, the purpose, structure and function of each must be clearly defined to ensure their precise applications.

B. IDENTIFY "INTERACTIVE" GMP AND WHETHER IT IS REQUIRED

Interactive GMP - some features

1. Mother
    - Keeps card
    - Interprets growth
    - Acts on results
  2. Interpretation/Action
    - Based on weight change
  3. Frequency of weighing
    - At least 1 to 2 monthly, as feasible, depending on age and at-risk status
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"Interactive" GMP emphasizes that the recipient (e.g. mother) has control over GMP and related actions. Such control may in part be independent from health services, such as mother's groups or community representatives responsible for weighing and interpretation, or more usually during "interaction" with the health worker.

Some absolute necessities for "interactive" GMP are listed above.

Mothers must control the card as a passport for contacts with a variety of health personnel and ideally for her own reference purposes.

Weight change must be used to interpret growth. Anthropometric nutritional status based on malnutrition grading is too imprecise and artificial for her interpretation and feedback and too static when used as a cross-sectional assessment.

The frequency of weighing must complement her child's rapid health changes, especially during the first two years of life. A timely indicator of need (arising from infections, diarrheas) and feedback from response (e.g. catch-up growth) is required.

"Interactive" GMP is indicated for example in health/nutrition education (e.g. for improving coverage of ORT and EPI, dietary management of diarrhea, weaning practices) and where health services require targeting.

C. DETERMINE THE ESSENTIAL STEPS AND RESOURCES REQUIRED IN GMP

Many programs with GMP may implement the registration to assessment phase adequately. The interpretation, action, follow-up and health/nutrition integration are often weak. This involves extra time as well as efficient matching the available (or referral) resources to need.

In particular, with "interactive" GMP (e.g. 5 and 6 in the table), added human resources are needed for involving the mother. This may not be required at each visit. Initial investment in training the mother or key mother's representatives may help ensure a cumulative understanding and reorient responsibilities from provider to recipient.

Summary information is required for individual attention, local service and program management.

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Some essential steps and resources required in GMP

	<u>Step</u>	<u>Resource</u>	<u>Summary Information</u>
1.	Register	Form/Book	x
2.	Weigh	Scale	
3.	Estimate age		
4.	Plot on chart	Chart	
	Join plot for curve		
*5.	Assess		
*6.	Interpret/Act		x
*6a.	Demonstrate curve to mother	Added time,	
*6b.	Ensure her understanding	training,	
*6c.	Get her response	supervision	
*6d.	Discuss result		
*6e.	Plan with mother course of action		
(*7.	Attend to health matters (Immunization, diarrhea, infections)	Medicines, ORT, etc.	x
(*8.	Attend to feeding - Supplementary provided	Food	
(*	- Education	Time	
(*9.	Refer as required	Available center	x
(*10.	Make appointment	Record/arrange	
(*11.	Follow-up	Repeat sequence	

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 \* The unique added inputs required for "interactive" GMP is that which involves the mothers understanding of growth change and the appropriate actions by her and/or the health system.

(\*Mother's understanding of the growth curve will reinforce these actions. Extra time may be needed for her input and compliance.

D. IDENTIFY THE MANAGERIAL, EDUCATIONAL AND PROMOTION/MOTIVATION USES OF GMP

The table matrix attempts to summarize GMP uses, realizing there is overlap. For individuals, the need for encouragement, action and its timing relate to early warning indicated by growth interpretation. The educational aspects emphasize the role of "interactive" GMP. In practice, promotion/motivation affects health service coverage, both general and selective for those at most risk.

Community and program uses of GMP require summary information. This type of surveillance, based on GMP, has advantages over that derived from other sources. Group information can be integrated with those for individuals. An example is the community growth chart, where each child's result can be compared with the total. Information control and use is more oriented to recipients (eg. in the community and program) and thus an essential component of participation and responsibility.

USES OF GMP IN VARIOUS CONTEXTS

CONTEXT

	MANAGERIAL	EDUCATIONAL	PROMOTIONAL/MOTIVATIONAL
INDIVIDUAL	<ul style="list-style-type: none"> <li>- Target interventions</li> <li>- Predict risk</li> <li>- Health record</li> </ul>	<ul style="list-style-type: none"> <li>- Messages tailored to needs</li> <li>- Mother understands reasons</li> <li>- Feedback reinforces results</li> </ul>	<p>COVERAGE</p> <ul style="list-style-type: none"> <li>- INITIAL : Entry point into health programs (e.g. PHC)</li> <li>- CONTINUING : Regular contact between mother and health</li> </ul>
COMMUNITY	<ul style="list-style-type: none"> <li>- Problem identification</li> <li>- Planning</li> <li>- Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>- Increases community knowledge and awareness for education</li> <li>- Community monitoring, control as to relevance of education</li> </ul>	<ul style="list-style-type: none"> <li>- Encourages community participation and self-help</li> <li>- Helps mobilize women to act as a group and share information</li> </ul>
PROGRAM PROJECT	<ul style="list-style-type: none"> <li>- Need-based resource allocation</li> <li>- Early warning</li> <li>- Built-in monitoring and evaluation</li> </ul>	<ul style="list-style-type: none"> <li>- Identify targetting, timing and need for education</li> <li>- Monitor results to modify KAP messages</li> </ul>	<ul style="list-style-type: none"> <li>- Enhances an integrated approach to PHC and child survival at local and national levels</li> </ul>

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