Child Health Situation Analysis in Ghana

A situation analysis for child health in Ghana was conducted between September 17 and 27, 2007. The situation analysis was first part of a process to review and revise child health policies and strategies – initiated and coordinated by the Reproductive and Child Health Unit of the Ghana Health Service. A child health steering committee was formed to oversee the review and revision of policies and strategies.

Overall conclusions of the Child Health Situation Analysis

Status of child health

1. Reductions in under-5 child mortality have stalled

Sustained reductions in under-five child mortality were seen between 1984 and 1998 (in 1998 under 5 mortality was estimated at 108/1000 live births). During the period 1999 - 2003 under 5 mortality increased slightly to 111/1000 live births. The most recent estimate of under five mortality for 2001- 2006 is 111/1000 live births (MICS 2006) – identical to that for the previous survey. Under-five child mortality estimates therefore show no change for the seven year period between 1999 and 2006.

2. Neonatal mortality has shown no decline and now represents at least 40% of all under-five mortality

The neonatal mortality rate in rate in 1999 - 2003 was 43/1000 live births – which is similar to that recorded a decade earlier. At least half of neonatal deaths occur at home. Neonatal mortality was not measured in the 2006 MICS survey – although the infant mortality rate measured by this survey increased to 71/1000 live births – the highest infant mortality rate recorded since 1988. It is not yet known what proportion of infant mortality for the period 2001-2006 is due to deaths in the newborn period. Infant mortality now represents 64% of all under-five child mortality.

Over time, neonatal mortality has represented an increasing proportion of all under-five child mortality – rising from 26% in 1984-1988 to 39% in 1999 – 2003.

3. Most newborn and child mortality is caused by conditions that are preventable and treatable by simple, low-cost interventions

The primary causes of older-child mortality are malaria, pneumonia, diarrhea and malnutrition or micronutrient deficiency (as a contributory factor to all causes). The primary cause of newborn deaths are infections, asphyxia, prematurity and low birth weight. All of these primary causes are preventable or treatable by simple low-cost interventions – provided they are delivered effectively, and at the right time. Available data from Ghana estimate that 40% of neonatal deaths occur in the first 24 hours and 75% in the first 7 days of life – therefore life saving interventions need to reach newborns in this period.

4. Rates of stunting and underweight remain high

The proportion of children who are stunted – a measure of chronic malnutrition - has fallen in the 2006 MICS survey - although 22% of children are still estimated to be stunted. 18% of children are estimated to be underweight. At the time of the 2006 survey, only 5% of children were estimated to be wasted, a measure of acute malnutrition; a figure that has improved over the last 10 years.

Stunting rates are highest in the northern regions and in rural areas. They are also higher in the children of less educated mothers. High rates of stunting suggest chronic shortages of food. Stunting is also associated with poor complementary feeding practices (both the quality foods given and their frequency) and with cultural patterns of feeding – children who are passively fed may have a lower caloric intake than those who are actively fed.

5. Rates of anemia in mothers and children remain high

The most recent data on anemia comes from the 2003 DHS survey – rates of anemia may have changed in the last 4 years. At the time of the last survey the prevalence of anemia in women and children was very high. Three quarters of children in Ghana were estimated to have some level of anemia (23 % were mildly anemic. 47% moderately anemic and 6% severely anemic). Forty-five percent of women of child bearing age are anemic, the majority mildly so. The most important causes of anemia are inadequate dietary consumption of iron, malaria and intestinal worm infection. Pregnant women are more likely to be anemic.

Associations with anemia include living in rural areas, less educated mothers, younger mothers, and living in a poorer households.

Coverage of child health interventions

6. Coverage of most child health interventions remains moderate to low in most areas.

Positive findings
Immunization coverage has generally been high and sustained over time, and coverage with vitamin A supplementation is also high, primarily because it has been linked with NIDs. Exclusive breastfeeding rates have improved substantially over the last decade – although half infants under 6 months still do not receive EB. In addition, recent improvements in use of ITNs, IPT and iodized salt in households have been observed. The trend for newborn interventions – early initiation of BF, exclusive BF in the newborn period, and post-natal care visits in the first 7 days of life – has been positive over the last decade, although coverage remains relatively low.

Less positive findings
Intervention coverage for antenatal, delivery, newborn and older childhood periods, remains relatively low. Antenatal visits tend to be made late and many women do not make 4 visits. Half of all deliveries are attended by an unskilled attendant. Half of newborns do not receive care; when it is received, visits are rarely made in the first 24-48 hours. There are a number of traditional practices around the newborn period that may be harmful. Complementary feeding rates have been slow to improve. For older children, coverage with ORT, antibiotics for pneumonia and an appropriate antimalarial for fever are still relatively low – malaria treatment has been complicated by the introduction of combination therapy. Mismanaged illness in childhood, particularly diarrhea, may be contributing to malnutrition.

7. Quality of services and counseling needs to be carefully examined.

There are a number of areas where quality of care is likely to be inadequate. Available data suggest that health staff do not apply technical standards in all cases. Possible reasons include: lack of staff training; lack of staff supervision; organization of work; availability of essential drugs, equipment and supplies; and problems referring severely ill women and children. Areas that may need particular attention include: ANC, neonatal resuscitation, and management of the sick newborn. Counseling is often missed, or done poorly. In general, it is assumed that training staff will result in improved practice – other strategies are likely to be needed to improve the quality of care more effectively.

Summary – child health status and coverage with child health interventions

- ✓ The lack of progress in reducing child health mortality warrants a careful re-evaluation of child health policies, strategies and approaches;
- ✓ Current strategies and delivery approaches are not making significant improvements in coverage of many effective child health interventions – and need to be re-examined;
- ✓ Neonatal deaths are now a substantial component of all child mortality. Efforts to improve neonatal health should be significantly scaled up;
- ✓ Improving the quality of care provided at key delivery points will be critical to reducing mortality – particularly in the antenatal and early neonatal periods;
- ✓ More data are needed to help review and revise strategies – particularly in the areas of stunting, and the early newborn period.

Improving the delivery of child health interventions: recommendations

1. Revise key child health-related policies

Policies and standards in most program areas are in place and consistent with international norms and standards. Interventions selected for delivery along the continuum of care for the mother and child, are also consistent with the minimum package of essential interventions recommended by WHO and others. Key areas where policy review and revision should be considered include:

- ✓ The addition of zinc and low osmolarity ORS for the management of diarrhea;
- ✓ The use of antibiotics by community-based agents for the management of pneumonia;
- ✓ The use of combination antimalarial drugs by community-based agents;
- ✓ The roles and responsibilities of CHOs – in the areas of delivery and early newborn care;
- ✓ Defining the role of TBAs and how they will be 'phased out';
- ✓ The national CHPS strategy. In principle this is a good way to reach communities. In practice it has proved difficult to achieve high community coverage. There are also a number of operational issues regarding how CHPS are run and supported that need to be better worked out. Further expansion of CHPS will require a substantial further investment;
- ✓ Monitoring of coverage for pregnant women, newborns and children through the national health insurance scheme;
- ✓ Staffing and organizational changes required to support greater emphasis on neonatal, community and IEC activities.

Recommendations – child health policy

- ✓ Review and revise child health-related policies. A team with expertise in all technical areas along the continuum of care is recommended, particularly with experience with TBAs, MWs, and CHPS. Clinical and essential drug program staff will be needed.

- ✓ Policies should be used to guide development of child health strategies and approaches to delivering interventions more effectively.

2. Establish a National Child Health Coordinating Body

The activities of a number of different units and divisions impact on child health – but currently there is no clear mechanism for ensuring that activities are coordinated. This means that resources are not shared or allocated according to areas with the greatest need – along the continuum of care for the mother and child. In general, activities tend to be driven by external funding. Currently child health is "program centered" not "child centered". Consequences of this include:

- ✓ Under-allocation of resources to key areas where much more attention is needed such as newborn health and IMCI;

- ✓ Lack of integration of key activities. For example, supervision is often not done collaboratively (sharing of vehicles, fuel and technical staff); and training tends to be verticalized by technical area (PMTCT of HIV training separate from updates on ANC, for example). Community-based volunteers are often trained in one technical area – CBGP, for example - when they could also be giving simple messages in other technical areas;

- ✓ Lack of sharing of tools and methods. Training and communication materials and methods developed by donor funding in certain districts are not always made available and used in other areas. Lack of standardization of materials and methods may also mean that national guidelines and standards are not followed.

- ✓ Duplication of effort. This is related to the above point. Lack of coordination means that donor driven activities tend to develop their own materials and methods rather than use or adapt those that already exist.

The role of a child health coordinating body would include:

- Taking a "child centered approach". Including: reviewing progress in increasing coverage of child health interventions; identifying areas that need attention; discussing delivery approaches to use, and where resources should be allocated;

- Assisting regions and districts to implement integrated child health plans, by agreeing on methods for allowing program-specific funding to be used for integrated activities – for example, by conducting joint trainings, by providing clear guidelines for how logistics support can be used across program areas, and by better integrating roles of community volunteers;

- Sharing materials and methods – those that have proved successful in project areas should be used more widely;

- Reviewing progress with HIRD – and improving district capacity to implement the HIRD approach. HIRD provides a good opportunity for such a coordinating body, since the HIRD approach will require long-term commitment from all partners.

Recommendations – organization, planning and management

- ✓ Establish a child health coordinating body under the Director of Public Health, comprised of program, donors and other stakeholders. The coordinating group for child health promotion week could be a model.

Responsibilities for a coordinating group would include:

- Oversight of the revision of child health strategies and approaches (as outlined in points 3-8);
- Joint planning;
- Better sharing of resources and integration of activities;
- Sharing of materials and methods;
- Reviewing the progress of HIRD, and using this to inform strategy.

3. Increase the focus on community

Community-level activities have been the most difficult to establish and sustain – and are critical to reaching mothers and children. Regional and district staff report that they often do not have the staff or resources to conduct intensive community-based activities as well as other routine duties. In the ACSD areas community-based volunteers have been used successfully, but require intensive effort which includes: 1) high quality training; 2) continuous monitoring and evaluation; 3) reliable resources to fund scale-up. Current issues with the development and implementation of community-level activities include:

- A review of roles and responsibilities of CHOs is needed;
- CHPS implementation has stalled – it is unclear how it will be further scaled-up;
- There are no clear national guidelines on roles and responsibilities for community volunteers, or standard training guidelines;
- Lack of integration of community level activities. A number of different categories of volunteers may be active in the same community – each focusing on different technical areas. Efficiencies would be gained if volunteer activities were better combined – so that one volunteer was responsible for more than one technical area.
- Lack of dedicated staff and resources for community-level training, monitoring and supervision. Government resources are rarely sufficient sustain on-going activities. There are no staff at any level dedicated to oversight, planning or management of community programs. Experience with World-Bank funded CBGP should provide valuable information on how to scale-up this activity.

Recommendations - community-based programming

A review of past experience with community-based activities, and re-design of community strategies is recommended, with all key stakeholders and partners. This review should aim to develop a revised strategy that can be implemented in collaboration with regions, districts, donors and other partners. The following issues will need to be addressed:

- ✓ Reviewing roles of CHOs and volunteers;
- ✓ Experience and lessons learned from areas that have implemented successful community-based programs;
- ✓ Organizational changes needed to give greater effort to community-programming – such as dedicated staff, or dedicated budget lines;
- ✓ The future of CHPS – and how to take this approach to scale, if this is desirable;
- ✓ How to better standardize available training methods and materials – for use in all areas. Including standard areas of technical focus and key messages for health education;
- ✓ How to better integrate the activities of community volunteers;
- ✓ Realistic approaches to implementation of community-based activities;
- ✓ A clear strategy for piloting community strategies in HIRD areas.

4. Improve the effectiveness and scope of IEC activities

At a national level, the health promotion unit receives very few government resources. IEC activities tend to be donor driven – and responsive to donor needs. It is difficult to plan communication activities systematically. At regions and districts health promotion officers are often not available to plan and manage communication activities. Key issues for IEC include:

- Health promotion activities are poorly linked with routine planning – due to a lack of dedicated staff. Therefore health promotion activities tend not to be incorporated systematically into implementation plans. Closer involvement of the health promotion unit with RCH planning could help bridge this gap;
- Lack of dedicated health promotion staff at lower levels;
- Central and peripheral budgets are rarely adequate to allow systematic approaches to health communication – therefore activities are donor driven.

- Lack of coordination of donor-driven IEC activities nationally and in regions and districts – in some cases, it may be possible to share resources and avoid duplication.

- Materials, methods and lessons learned in donor-specific projects are rarely used and made available outside of these localized areas – it would be more efficient and potentially effective to better share and disseminate these approaches, and develop approaches to scaling-up. The CHEST kit – developed in collaboration with the Johns Hopkins Center for Communication – containing integrated key messages and counseling materials for child health and nutrition - is not widely used;

- Regional and district staff would be helped by having a set of standardized communication materials and messages for different purposes (for example, community-based counseling, group counseling, health and non-health sectors, health workers, mass media channels). These would give clear guidelines on the technical content of their programs – and on potential channels to use.

Recommendations - IEC

A significant review of past experience with IEC activities and re-design of IEC strategies is recommended, with all key stakeholders and partners. This review should aim to develop a revised strategy that can be implemented in collaboration with regions, districts, donors and other partners. The following issues will need to be addressed:

- ✓ Staffing of IEC/health promotion at central, regional and district levels;

- ✓ How to incorporate IEC activities more systematically into plans – and then support implementation;

- ✓ Better sharing of materials, methods and lessons learned from donor IEC activities – and use of successful approaches more widely ('scaling up');

- ✓ Better national and local coordination of donor IEC activities in the same local areas – to avoid duplication and share resources;

- ✓ Development of a single set of communication materials and methods for use by low-level staff – for different channels;

5. Identify training gaps and develop in- and pre-service training strategies

Key issues the need to be addressed in the area of child health training, include:

- Training gaps. Areas where expanded training activities are needed include: 1) resuscitation of the newborn; 2) essential newborn care; 3) managing the sick newborn; 4) IMCI. IMCI training has stalled, and alternative approaches need to be considered. The newly revised version of the IMCI materials includes management of the sick newborn; 5) training of community-based volunteers.

- Need for in-service training strategies. In general regions and districts conduct training in areas where resources have been allocated by donors. The HIRD approach offers potential for training systematically based on program needs. Ideally training strategies should describe how on-going supervision will be managed – and what supervisory methods will be used; annual budgets should reflect annual supervision costs as well as the costs of training.

- National availability of facilitators. Shortages of training facilitators have been reported for community-based agent training (facilitators from KNUST). Expansion of IMCI, newborn resuscitation and ENC will also potentially require further investments in facilitators.

- Pre-service training for health workers. It is important that currently used training reflects national and international policies and guidelines; and currently used materials and methods. In some cases, more hands-on training and/or more time may need to be allocated.

Summary of issues - training

A significant review of training for child health is recommended, with all key stakeholders and partners. This review should aim to develop a revised strategy that can be implemented in collaboration with regions, districts, donors and other partners. The following issues will need to be addressed:

- ✓ Identifying key training gaps – where more attention is required;
- ✓ Developing a process for supporting regional and district training systematically – by encouraging the development of strategies and sitting with all donors. Consideration should be given to making supervision support a condition of training support;
- ✓ Availability of training facilitators and how they will be made available to all regions;
- ✓ Current status of pre-service training and approaches to improving training in key child health areas, particularly newborn resuscitation, management of the sick newborn, early post-natal care, IMCI.

6. Develop strategies for improving supervision and referral

Both improved supervision and referral are critical to improving quality of care provided at all levels. Key issues to be considered for child health include:

- Strategies for improving referrals. Options include:

✓ Produce a standard format referral slips for use in health facilities;

✓ Ensure health workers are trained using clinical guidelines that give clear criteria for referral – such as IMCI;

✓ Improve referral counseling by health workers – to help address possible barriers and encourage caretakers to go to the next level;

✓ Include transportation for referral in community planning. Strategies that have been used include: local ambulances; collaboration with private truck companies; community funds to pay for emergency transport.

✓ Improve quality of care at referral hospitals, including: a) Improved triage procedures for ensuring that sick children are seen quickly – training using the WHO course 'Emergency Triage and Treatment' for improving practice at referral hospitals (ETAT) has begun, although there is not funding for further training; b) quality of care reviews at hospitals and ensure that health workers apply international norms and standards (as outlined in the WHO guidelines on the management of severely ill children); c) collection of referral data at hospitals. Data on number of referrals and clinical outcomes could be used for planning and giving feedback to health workers;

- Strategies for improving quality of supervision. Barriers to visits include lack of appropriate staff, lack of transportation and per diems; and a tendency for supervision to be conducted vertically by program area. Supervision visits do not always include observations of clinical practice, feedback and problem solving. Alternative approaches need to be considered including; 1) in-facility supervision (at larger sites) – for which more experienced staff supervise less experienced staff; 2) simplified checklists for observations of practice; 3) linking training activities with post-training supervision – so that more donor resources are committed to the post-training period.

Recommendations – supervision and referral

A review of policies and approaches to supervision and referral is needed, involving all key stakeholders and partners. This review should aim to develop:

- ✓ Strategies for improving referral for pregnant women, newborns and children, including clinical criteria and pathways – which take into account barriers and field experience. Strategies could include: use of referral slips, improving quality of referral counseling at first-level facilities, improving the quality of care at hospitals (better triage, collection of referral data, and quality of clinical care);

- ✓ Strategies for improving regional and district supervisory practices: including staffing, checklists to be used, output measures collected, and how to address barriers. Linking supervision with regional and district training plans, and encouraging donor commitment will be important. Simplified supervision methods that allow quick clinical observation and feedback – including in-facility supervision, could be considered.

7. Strengthen collection and use of data for guiding implementation

Key issues identified, include:

- Neonatal mortality is not collected as a separate category. It is reported in <11 month category. It is therefore not possible to use existing routine data to track neonatal mortality, or to follow causes of neonatal death. In addition, no data are collected routinely on neonatal resuscitation, hypothermia, or referral of sick newborns.

- Data are not used for problem solving. Routine coverage data are not used to generate questions – and then identify solutions. There is a tendency to report coverage figures, but to take no action on the basis of these figures.

- Implementation of activities is not usually tracked. Instead program outcome measures from routine data – and some program inputs (such as the absolute numbers of staff trained, or the amount of budget allocated) – tend to be reported. Tracking program implementation requires the measurement of outputs – measures of how well activities have been implemented.

- Facility-based surveys of the quality of care at outpatient health facilities are not done regularly. HFS are useful for assessing health worker performance and barriers to improved quality of care – and for planning activities.

- Research is not well coordinated with program staff. Periodic review and dissemination meetings have been organized, but these are not thought to be adequate for proper coordination. As a consequence, key operational questions are not being brought to research staff. Similarly, some research tends to be academic and not relevant to implementation of child health programs;

- There is no mechanism for laying out a clear research agenda. This would allow key questions to be raised, staff identified to conduct research, and would help coordinate donor inputs. The "Ghana Dutch Collaboration" was mentioned as a system that worked relatively well. This was a regular meeting that brought together policy-makers, program staff and researchers – and allowed the development of a coordinated research agenda;

Recommendations - monitoring, evaluation and research

As a part of revising strategies for national, regional and district planning and management, include:

- ✓ Introducing the use of output measures for tracking program implementation – and using these data to make program decisions;
- ✓ Introducing hospital 'audits' of neonatal deaths and referrals of severely ill children;
- ✓ Developing approaches for monitoring community outputs using community-based surveillance or HH surveys more regularly, particularly in HIRD areas;
- ✓ More frequent measurement of quality of child care at outpatient facilities – by conducting health facility surveys more frequently, or by introducing a few simple clinical care measures – collected by observation – for routine reporting by supervisors:
- ✓ Establishing a mechanism for linking child health researchers with program and policy staff and donors. Develop a research agenda, based on public health priorities. Better use research to answer operational questions – and to give guidance on how to improve intervention coverage.

8. <u>Improve capacity of regions and districts to implement programs at the lowest level</u>

Although capacity of regions and districts to plan child health activities has improved with decentralization, it has proved harder to translate plans into action. Possible reasons include:

- *Output data not collected or used for making decisions*. These measures are useful for deciding on how well program activities have been implemented. If outputs are not measured, then managers have no data for deciding on the adequacy of implementation.
- *Staffing*. Including: 1) Lack of staff in key areas. Districts usually have disease control officers (EPI and communicable disease activities) and RCH officers. They often do not have nutrition or health promotion staff available. 2) Collaboration. In the regions the involvement of the Clinical Care Division in IMCI training is weak. In addition, vertical programs with resources for field visits do not always share resources with other programs

- *Weak Sub-district planning*. In general sub-districts do not appear to be very active in planning and implementing activities. In addition sub-district staff at health facilities report that they often have difficulties accessing internally generated funds, that are deposited into accounts at the district level.

- *Inadequate funding for regions and districts*. Government funds are inadequate for all required routine activities. In addition, government funds often arrive late – so that activities have to be delayed or postponed.

- *Relatively weak district planning and management skills for community-based programs.* An increasing emphasis on community-based activities will require new skills and approaches. District assemblies play an important role in engaging the non-health sector. Approaches to implementing low-level activities will need to be reviewed. The HIRD strategy provides a good opportunity for developing and testing new approaches to planning and managing child health programs at the lower levels, and should inform how this should be strengthened more widely.

Recommendations: closing the gap between planning and implementation

- Invest resources in HIRD areas to test methods for improving regional and district capacity to:

  - ✓ Track implementation using outputs;
  - ✓ Solve district staffing problems – particularly in the areas of nutrition, health communication and community-based activities;
  - ✓ Foster communication between clinical care staff and public health staff ;
  - ✓ Implement and manage community-level programs;
  - ✓ Establish better links between districts and sub-districts that will give sub-districts more autonomy to manage activities themselves.