Technical Report 1: Diagnostic Assessment of the Performance Potential of Front Line Health Workers for CBD Supervision in Bazega Province, Burkina Faso

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List of Acronyms

AA	Auxiliary Birth Attendant
AIS	Itinerant Health worker
ALK	Average Level of Knowledge
ALP	Average Level of Performance
ASC	Community Health Workers
CBD	Community Based Distribution
CBDW	Community Based Distribution Workers
CM	Medical Center
CMA	Medical Center with Surgical Unit
CSPS	Health and Social Promotion Centers
DAPP	Diagnostic Assessment of Performance and Potential
DSF	Family Health Directorate
DPS	Provincial Health Directorate
ENSP	National Public Health School
EPI	Expanded Program of Immunization
FGD	Focus Group Discussion
FOSA	Health Unit
FP	Family Planning
IB	Certified Nurse
IDE	State Graduate Nurses
IEC	Information Education Communication
IUD	Intra Uterine Device
LAM	Lactational Amenorrhea Method
M	Maieuticians
MAT	Matron
MC	Medical Center
MCH	Maternal and Child Health
MCW	Medical Center workers
MOH	Ministry of Health
MW	Midwife

List of Acronyms (continued)

ORS	Oral Rehydration Salt
PROF	Professionals
PHY	Physicians
RH	Reproductive Health
SUP	Supervision
TBA	Traditional Birth Attendant
TNA	Training Needs Assessment
UNFPA	United Nations Funds for Population Activities
UNICEF	United Nations International Children's Emergency Fund
VSC	Voluntary Surgical Contraception
WHO	World Health Organization

I. INTRODUCTION

1) Background of the Study

Since 1979 when the Ministry of Health in Burkina Faso adopted a primary health care strategy, great efforts have been made to improve the health of the population, especially of mothers and children. International organizations including UNICEF, WHO, and UNFPA, as well as French and American agencies (USAID) were partners in these health development initiatives. While there have been improvements as a result of these efforts, health indicators are still unsatisfactory. For example, infant mortality remains relatively high, with a national rate of 94 per 1,000 live births, and a rural rate of 113[1]. Similarly, the maternal mortality rate is also high at 566 deaths per 100,000 live births. Demographic measures indicate that the annual growth rate of the population is 2.3 percent and the fertility rate is 6.9 with large disparities between urban and rural areas. Although the fertility rate is slowly declining, and the level of contraception knowledge is relatively high, the contraceptive prevalence rate remains low, about 20 percent in urban areas (the capital, Ouagadougou) and less than 2 percent in rural areas

In light of Burkina's continuing health needs the Ministry of Health recently initiated a national health reform program to improve the quality and accessibility of health services. This reform, which integrates the basic principles of the Bamako Initiative and emphasizes the decentralization of resources and decision-making power, makes the district the key unit for service delivery and decision-making. The Ministry of Health is simultaneously assessing the efficacy of different service delivery strategies.

As part of this larger effort the Directorate of Family Health, with the technical assistance of Population Council, has initiated a project of community-based distribution (CBD) of selected family planning and child survival services in the province of Bazega. The purpose of this Bazega project is to test two MCH/FP service reinforcement approaches to expand availability and accessibility of these services in rural areas. The first approach consists of: 1) reinforcing MCH/FP services offered in peripheral health centers; 2) improving the skills of the personnel of these centers; 3) rehabilitating structures; as well as 4) making sure that a more varied range of contraceptive methods are offered to clients. In addition to these elements, the second approach includes the assignment of CBD workers (CBDWs) to the villages which are covered by each health unit. Each approach will be applied to five health units, the first approach in the Kombissiri district, and the second one in the Saponé district.

The first stage of the CBD project was to develop a training plan for the CBD workers, the health personnel and the supervisors of the province of the Bazega. During the health personnel training needs assessment (TNA), special attention was paid to the capacity of the personnel of the Health and Social Promotion Centers (CSPSs) to properly supervise the CBDW. The purpose of the present report is to document the methodology used for this component of the TNA and provide a summary of the results obtained. Data included in this document were extracted from the TNA technical report [2].

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1 *Institut National de la Statistique et de la Démographie, Enquête Démographique et de Santé du Burkina Faso, 1993, Rapport de Synthèse, p. 9*

2 *Direction de la Santé de la Famille/Program for International Training in Health, Training Needs Assessment in Burkina Faso, October 1995*

2) Organization of the Health Care System in Burkina Faso

Burkina Faso's public health care system may be visualized as a four-level pyramid. The health and social promotion centers (CSPS) are the basic and most numerous health units at the pyramid's ground level. CSPSs are managed by state or certified nurses (IDE, IB) assisted by auxiliary birth attendants (AA) and itinerant health agents (AIS). About half of the CSPSs deliver some FP services. The next level of the pyramid is the medical center (CM) or the medical center with surgical facilities (CMA). These facilities are managed by a physician (PHY) assisted by midwives (MW), state and certified nurses, auxiliary birth attendants, matrons, and itinerant health agents. Medical centers cover about eight CSPSs on average and serve as a referral center for them. The regional hospital is at the third level of the pyramid and is a referral center for CMs, CMAs and CSPSs at the region level. At the top of the pyramid are the two national hospitals in Ouagadougou and Bobo Dioulasso.

The medical centers and the health and social promotion centers are supervised by the Provincial Directorates of Health and Social Action (DPSs) which are responsible for the assignment of material and human resources in their respective geographic areas. The provincial MCH/FP managers supervise CMs and provide support for the supervision of CSPSs. They are in turn assisted and supervised by staff at the central level in the Directorate of Family Health (DSF) of the Ministry of Health and Social Action.

Besides these health facilities there are also a limited number of separate maternal and child health centers, maternity centers and dispensaries which provide a range of preventive and curative care and are generally located in urban areas. All of the maternal and child health centers and maternity centers offer FP services in addition to their other MCH services. The dispensaries provide only curative care. The Ministry of Health and Social Action has started to upgrade some of these facilities to the level of the health and social promotion centersFinally, in addition to these other health facilities, primary health posts (PSPs) have been established in villages all over the country to implement the government's "one village, one primary health post" policy. These health facilities are built at the village level by the community and generally consist of a small examination room and a delivery room. They are managed by a village health agent (ASV) and a village birth attendant (AV) selected by the community and provide primary health care services including curative care, deliveries, some basic prenatal care, and some basic health education and sanitation. Ministry of Health support of PSPs is limited to training of the personnel and the initial provision of a "first aid " kit, leaving the community responsible for the replenishment of the kit and for paying the "salaries" (generally in-kind) of the health workers. Because of this limited government support PSPs are not considered part of the country's formal health pyramid

Government supported public health facilities and personnel in the province of the Bazéga include the following:

Health facilities:

• CMAs	Medical centers with surgical facilities	2
• CM	Medical center without surgical facilities	1
• CSPSs	Health and social promotion centers	32

Health care personnel:

• Physicians	3
• Midwives/Maieuticians	6
• State Nurses	10

- Certified Nurses 32
- Auxiliary Birth Attendants 27
- Matrons 12
- Itinerant Health Agents 91

3) Study Objectives

One important objective of the training needs assessment concerned the capability of health post chief nurses to supervise CBD workers as laid out in the project document[3]. In conformity with MOH policy, the nurse assumes the duties of chief of the health post, which include management of the health unit, supervision, and the provision of health care services at the level of the dispensary. Maternal and child health, family planning, and birth delivery services are supposed to be provided by auxiliary personnel, generally the auxiliary birth attendant (AA), who has two years training at the National Public Health school. However, because of a chronic lack of personnel, these MCH/FP duties are sometimes carried out by matrons (MATs) trained on the job or by itinerant health workers (AIS). Thus, although the post chief nurses have supervisory responsibilities, they themselves are not MCH/FP service providers. On the other hand, the auxiliary birth attendants do provide MCH/FP services, but they have no supervisory responsibilities. Given that each of these groups had some of the desired qualifications but neither had all of them, it was decided to assess whether the health post nurses or the auxiliary birth attendants were better positioned to supervise the CBDWs.

Thus, one purpose of the TNA study was to assess the supervisory potential of the front line personnel at the CSPS level, and to provide useful information for formulating a training strategy. More specifically, the objectives of this assessment were to:

1. Identify personal and professional characteristics of the front line personnel;

2. Assess their current work environment;

3. Assess their levels of knowledge, levels of performance and their training needs in areas of MCH/FP and supervision;

4. Assess their supervisory experience and their potential to supervise CBD workers;

5. Identify and assess other factors (environmental and social) which might positively or negatively influence their supervision CBD workers.

6. Describe their proposed roles and responsibilities.

[3] *Directorate of Family Health, Testing a village level family planning and health service delivery project in Bazega, Burkina Faso, 1995, p. 9*

II. METHODOLOGY

1) Conceptual Framework[4]

To assess the potential of the health post's chief nurse and the auxiliary personnel to perform supervisory tasks in the CBD Project, the training needs assessment team used the Diagnostic Assessment of Performance and Potential (DAPP[5]) approach developed by INTRAH. This approach utilizes an array of instruments to obtain data on professional, contextual and environmental factors for the purpose of assessing the performance and potential of a given category of personnel.

The DAPP approach is characterized by its capacity to:

a. Describe and answer some questions or concerns, and help evaluate an identified category of service providers;

b. Assess the potential to add new skills to those already existing in order to extend FP/RH programs;

c. Assess the potential of a category of personnel to provide specific services;

d. Assess the work environment of a category of personnel, assess their effectiveness on the work site, and determine their acceptability by potential clients and the community;

e. Contribute to the development of human resources of the host country by providing scientifically valuable information that facilitates the expansion of human resource development in the country.

2) Survey Sites and Samples[6]

In view of the more general expectations of the TNA, and of the limited resources available, the team decided to conduct the study in all health units covered by the CBD project as well as in all medical centers (with or without surgical facilities) that were referral sites for the staff of the CSPSs. Thus, 13 out of the 36 health units located in the Bazega province were surveyed, distributed as follows:

- Five health units involved in the CBD project in the zone of Kombissiri;
- Five health units involved in the CBD project in the zone of Tanghin Dassouri;
- Three medical centers, including one with surgical facilities.

Thirty-five of the 37 service providers working in those identified health units participated in the study, including those who were potential supervisors of CBDWs (Table 1). Supervisors of the intermediary level (district, province, MCW) were also surveyed to assess their perceptions of the potential supervisors of CBDWs. Not all of the service providers in the study were surveyed on all of the instruments. Two workers were absent from their post on the day of the site visit and therefore

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4 *Fatu Yumkella, An Assessment of the Potential of Health Attendants for Family Planning and Reproductive Health Expansion in Tanzania, INTRAH, 74 pp. (draft)*

5 *Diagnostic Assessment of Performance and Potential*

6 *Extracted from the technical report of the TNA*

were not tested. Three other workers who were evaluated on their clinical performance refused to undergo the FP knowledge test maintaining that they had not been trained in FP. The performance evaluation in supervision was given only to the workers who had some experience in supervision. Six persons did not take the ORS performance test because ORS preparation was not included among their usual tasks.

Table 1: Number of subjects from whom data collection was completed by category

Topic of the study	Total number expected	Total interviewed by category*					Total number interviewed	Percent
		PROF	IB	AA	MAT	AIS		
Performance in FP	37	7	6	13	4	5	35	95 %
Knowledge in MCH/FP	37	6	7	10	1	6	30	81 %
Performance in Supervision	21	2	6	7	0	1	16	76 %
Performance in ORS	37	5	6	13	0	5	29	78 %
Potential supervisors' profile	25	2	9	9	3	2	25	100 %
Perceptions of potential supervisors	11	0	0	0	0	0	11	78 %

**PROF: Professionals; IB: Certified nurse; AA: Auxiliary birth attendant; MAT: Matron ; AIS: Itinerant health worker*

3) Instruments[7]

A. Instrument development

After defining the types of information to be collected and the subjects to be surveyed, the TNA team reviewed national documents (MCH/FP Service Policy and Standards, Supervision Guide, Supervision Training Guide), to identify existing instruments which might be adapted for the study's purposes. Other instruments would need to be designed from scratch. Each instrument, its intended audience, and its mode of administration is described below and summarized in Table 2

i) Instruments to assess MCH/FP service delivery and supervisory tasks (objectives 2 and 3)

Instruments #1, 2, 3, 4, 5, 6, and 9, assess the knowledge and skill levels of personnel delivering the services, and the adequacy of their working conditions and environment. These instruments, except for instrument #5, were adapted from already existing instruments. Considering the referral and follow-up role that service providers of the CSPS will have to play as regards the CBD workers responsible for the ORS promotion, instrument #5 was developed to assess the performance of service providers in oral rehydration solution (ORS) preparation.

ii) Instruments to assess the capacity to train and supervise (objective 3)

Instrument #7 helps to assess conditions and available resources for organizing training in MCH/FP and for supervision in the province of Bazega. This instrument is adapted from a data collection form for training decentralization.

iii) Instruments to assess characteristics of potential supervisors of CBD workers and their perceptions (objectives 1, 4, 5, and 6)

Instruments 8 and 10 provide information on first line personnel's characteristics and perception of CBD workers and their supervisors. Their current performance in MCH/FP service delivery tasks and supervision tasks was assessed using instrument #9 described above. Instruments 8 and 10 were adapted from needs assessment instruments used in Tanzania in 1995[8].

B. Organization of the survey

This diagnostic analysis of performance and potential in supervision of health personnel at the CSPS level was integrated into the more general CBD program training needs assessment in the Bazega Province. That integration enabled the study to be completed in a relatively short time.

Preparation of the survey instruments and data collection each lasted one week. Team members first received an orientation to the conceptual framework of DAPP. The team was then divided into

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7 *Extracted from the technical report of the TNA*

8 *Fatu Yumkella, An Assessment of the Potential of Health Attendants for Family Planning and Reproductive Health Expansion in Tanzania, INTRAH, 74 pp.*

Table 2: Instruments, subjects, mode of data administration or collection

Instrument # and description	Subjects	Mode of administration/collection
#1: Evaluation instruments for FP clinical performance (IUD insertion)	Physician, midwife, state nurse	Simultaneous observation by two evaluators
#2: Evaluation instruments for FP clinical performance (no IUD insertion)	Certified nurse, birth attendant, matron, health worker,	Simultaneous observation by two evaluators
#3: MCH/FP knowledge evaluation instrument	Physician, midwife, state nurse	Self-administered (individually or in group)
#4: MCH/FP knowledge evaluation instrument	Certified nurse, birth attendant	Self-administered (individually or in group)
#5: ORS demonstration	- Nurse, post chief of the CSPS - Birth attendant at the level of the CSPS	Observation (simulated or real)
#6: Evaluation instrument for material working conditions at the MC/CMA et CSPS	Officer or collaborator (certain aspects required individual contacts with MD, IDE, IB...)	Site visits, discussion, Pop Council data analysis of the SAS[9]
#7: Competence in organizing training sessions	- DPS (officer, regional training supervisor) - District training staff	- Discussion - Site visits
#8: Instruments describing personal characteristics of potential supervisors of CBDWs	CSPS worker, post chief and birth attendant	- Directed interview - Self-administrated (in group or individually)
#9: Supervision performance evaluation check-list	CSPS personnel who perform supervision	- Documentary analysis - Description of a real supervision experience
	Supervisor (DPS, District, CM/CMA, CSPS post chief, AA or matron at the CSPS	- Discussion - self-administrated

[9] *SAS: Situation Analysis Study*

work groups to identify, revise or develop the data collection instruments. The calibration of the instruments was done in common. For field work, the assessment team was divided into two groups, each including two clinicians and an evaluator. The data collection activity was conducted according to a calendar established by the team after discussion with the Provincial Health Directorate (DPS). The other two members of the assessment team were specifically responsible for the coordination and logistics of the field work and for additional data collection necessary to the study.

C. Data compilation and analysis

Data compilation and analysis were done both manually and by computer. Quantitative analysis was performed using Lotus 123, Epi Info, and Excel. For the purpose of the analysis, physicians, midwives, and state nurses were grouped into one category entitled "Professionals". The other categories of service providers were individually preserved to better assess their special, individual characteristics. The levels of knowledge and performance of service providers were graded and compared to an acceptable level of knowledge (ALK) set at 63 percent, and an acceptable level of performance (ALP) set at 70 percent.

4) Limitations of the Study

The needs assessment team was confronted with certain difficulties during the study. First, the DAPP was designed to evaluate service providers' potential, particularly in the area of clinical service delivery. This approach had never been used for other, non-clinical categories of duties. For the present study, the personnel surveyed were selected based on their actual or potential supervisory responsibilities. Consequently, when the instruments were developed, the needs assessment team had to identify specific indicators for performance evaluation in supervision and perceptions regarding potential supervisors. These instruments must thus be considered as prototypes, pre-tested during the study, but still with identified shortcomings and insufficiencies.

Second, there were some problems associated with the data analysis. Generally in these TNA studies, data compilation and analysis are done manually as soon as data are collected. For the study in Burkina, the team decided to analyze the data on computer because of the unusual volume and variety of data to be processed. However, because the computer technicians who had to process the data had not been associated with the development of the instruments, this decision resulted in some time delays and not having sufficient time to complete all the analyses desired. Also, because the technicians had difficulties designing certain data entry screens, especially for instruments including qualitative data with many open-ended questions or multiple choice questions, certain instruments were processed manually contrary to the original plans. The needs assessment team has tried to take these problems into account in their interpretation of the data.

III. RESULTS AND CONCLUSIONS[10]

1) Results

A. Characteristics of the personnel and working conditions

i) FP personnel in the Bazega region

The vast majority (89%) of the 36 health units surveyed in Bazega offer hormonal methods of family planning methods, mainly pills. Within these health units FP services are delivered by a total of 61 service providers, including 2 physicians, 5 midwives and maieuticians, 5 State graduate nurses, 12 certified nurses, 25 auxiliary birth attendants, 8 matrons, and 5 itinerant health workers (Table 3).

Table 3: FP training status of personnel of the Bazega health units by type of providers

Indicator	Phys-icians	Mid-wives	Grad. nurses	Cert. nurses	Birth attend-ants	Ma-trons	Itinerant health workers	totals
Service providers trained in FP (in-service training)	1	2	0	0	5	0	0	8
Untrained service providers or trained at the ENSP without FP complement	1	3	5	12	20	8	5	54
Personnel trained but not service providers	0	0	0	1	0	0	0	1
Personnel not trained and not providing services	1	0	5	20	2	4	15	47
totals	3	5	0	33	27	12	20	110

[10] *Summary of the Technical Report on the TNA*

Among those 61 FP service providers, only 8 (13%) have had formal, in-service FP training. Service providers who received their basic training after FP was introduced in the National Public Health School (ENSP) curricula, and who did not receive any in-service training in FP, included 12 certified nurses and 1 registered nurse.

B. Characteristics of potential supervisors

The majority (76%) of the health providers surveyed included auxiliary birth attendants, itinerant health workers, certified nurses, and matrons who were working at the level of the health center (Table 4). Other providers working at Medical Centers who could fulfill the role of CBD worker

Table 4: General characteristics of potential supervisors of CBDWs (N=25)

Variable	Birth attendant	Health worker	Cert. nurse	Matron	Prof-essional	totals	percent
Type of facility:[11]							
Med. Center	5	0	0	0	1	6	24%
Health Center	4	2	9	3	1	19	76%
Sex:							
Female	9	0	0	3	1	13	52%
Male	0	2	9	0	1	12	48%
Religion:							
Catholic	7	0	6	2	2	17	68%
Muslim	2	0	3	1	0	6	24%
Others	0	1	1	0	0	2	8%
Marital status:							
Married	9	0	4	3	1	17	68%
Single	0	2	5	0	1	8	32%
Divorced	0	0	0	0	0	0	0
Language spoken:							
Mooré	9	2	9	3	1	24	96%
French	9	2	9	3	2	25	100%
Others	4	0	5	1	1	11	44%
Basics in supervision:							
Yes	4	1	2	2	2	11	55%
No	3	0	5	1	0	9	45%

[11] *FOSA: Health Unit*

supervisor through their existing position or duties were also surveyed in this study. About half of all the agents interviewed were female, a large majority were Catholic; and most were married. Almost all agents interviewed spoke both French and Mooré (local language).

C. Working conditions

Working conditions were examined to assess the availability of materials, reference documents, and work guides which would help supervisors perform their duties. A total of sixteen health units were visited for this evaluation.

In general, working conditions to support supervisory activities were substantially lacking. For instance, while each health center has a motorbike, their operating condition varied considerably, limiting supervisory transportation. In addition, personnel reported that gas is often lacking and there is no per-diem to support travel. In terms of material support, supervisory guides or forms did not exist in the health centers. Further, in the majority of cases, there were not even planning or synthesis forms, which are recommended in the supervision guides of the Ministry of Health.

Finally, none of the personnel health center personnel surveyed ever had any formal training to improve their supervision skills. Supervision by direct superiors is limited and when it does occur it is characterized by an absence of technical inputs in both MCH/FP and supervision.

2) Level of MCH/FP Knowledge

Levels of MCH/FP knowledge were found to be globally poor for the auxiliary personnel. Only 39 percent of subjects achieved a level superior or equal to the average level of knowledge (ALK) which was a score of 63 percent (Figure 1). As might have been expected, all of the individuals in the professional group scored above the ALK. On the other hand only 50 percent of matrons and health workers, 40 percent of birth attendants and 29 percent of the certified nurses achieved a score superior to the ALK (Table 5).

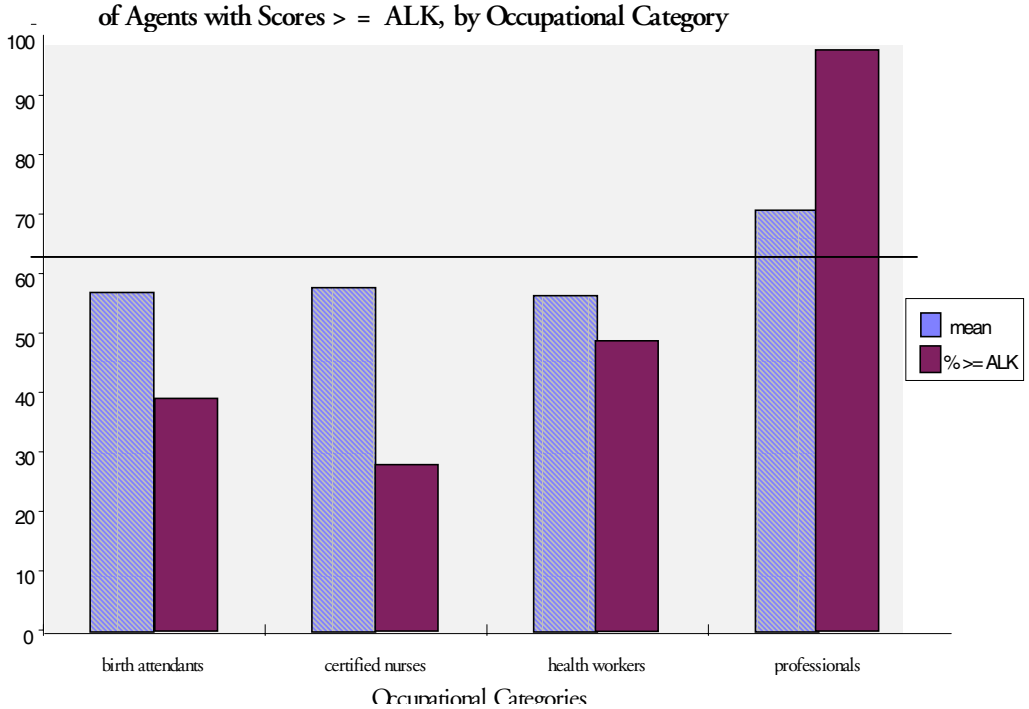
Knowledge of anatomy and physiology, eligibility criteria, infection prevention, and causerie, was low among birth attendants who were involved in FP services at the level of the CSPS, as well as among certified nurses, health workers, and matrons.All provider types had sufficient knowledge about the FP policy in Burkina Faso, and management of side effects. The level of knowledge about malaria was also satisfactory for all categories of providers except birth attendants and health workers.

3) Level of Performance in MCH/FP

A. Performance in family planning

Globally, 15 of the 34 (44%) service providers observed had a level of performance superior to the ALP set at 70 percent. Eighty percent of the matrons and 54 percent of the birth attendants met or exceeded the standard while only 43 percent of the professionals and 17 percent of the certified nurses scored as well (Figure 2, Table 6).

Figure 1: Average Level of FP Knowledge and Percentage of Agents with Scores > = ALK, by Occupational Category



The average level of performance also varied between provider categories. It was much higher for the matrons, birth attendants and professionals and was very poor for certified nurses and health workers. The average scores for all tasks were 68 percent for birth attendants and professionals, 64 percent for matrons, 50 percent for certified nurses, and 39 percent for health workers. The higher performance of birth attendants and matrons may be explained by the fact that they provide FP services on a daily basis, and in some health units they are monitored by professionals (Figure 2, Table 6). Certain tasks, especially IUD insertion and certain consultations, were observed in simulation for lack of real cases. It is possible that this approach negatively affected the level of performance of certain subjects.

Some specific findings concerning the level of performance by type of service providers should be emphasized (Table 6):

Auxiliary Birth Attendants

- Tasks such as welcoming, interviewing, gynecological and physical examinations, and decision making were performed satisfactorily (score =>70%) by the vast majority of the birth attendants.

- Inadequacies were observed in the following tasks: methods presentation (omission of advantages, disadvantages, contraindications, side effects, how each method works), breast examination, speculum examination, prescription of the pill and injectable contraceptive.In addition, the birth attendants did not present any information on the IUD (available at the MC/A) and on the other methods such as the LAM to the patient.

Table 5: Average Level of Knowledge by Field and Occupational Category

Field	Occupational Categories			
	Birth attendants	**Certified nurses**	**Health workers & matrons**	**Professionals**
FP policy	70.0%	85.7%	80.0%	94.3%
Anatomy and physiology	50.1%	48.9%	46.8%	63.5%
Eligibility criteria[12]	36.3%	48.9%	58.8%	60.0%
Management of side effects	67.1%	66.7%	66.7%	73.8%
Prevention of infection	35.0%	35.0%	25.0%	40.0%
STD/AIDS	56.4%	68.6%	62.9%	72.9%
Management	72.5%	35.0%	45.0%	75.0%
IEC	40.0%	40.0%	30.0%	100%
Malaria	47.5%	60.0%	55.0%	80.0%
Average score per category	57.1%	57.9%	56.6%	70.9%
Percentage scoring >=ALK (63%)	40%	28.6%	50%	100%

Certified Nurses:

- Only one participant achieved an average score superior to the ALP. Inadequate scores were noted in all tasks, as shown in Table 6.

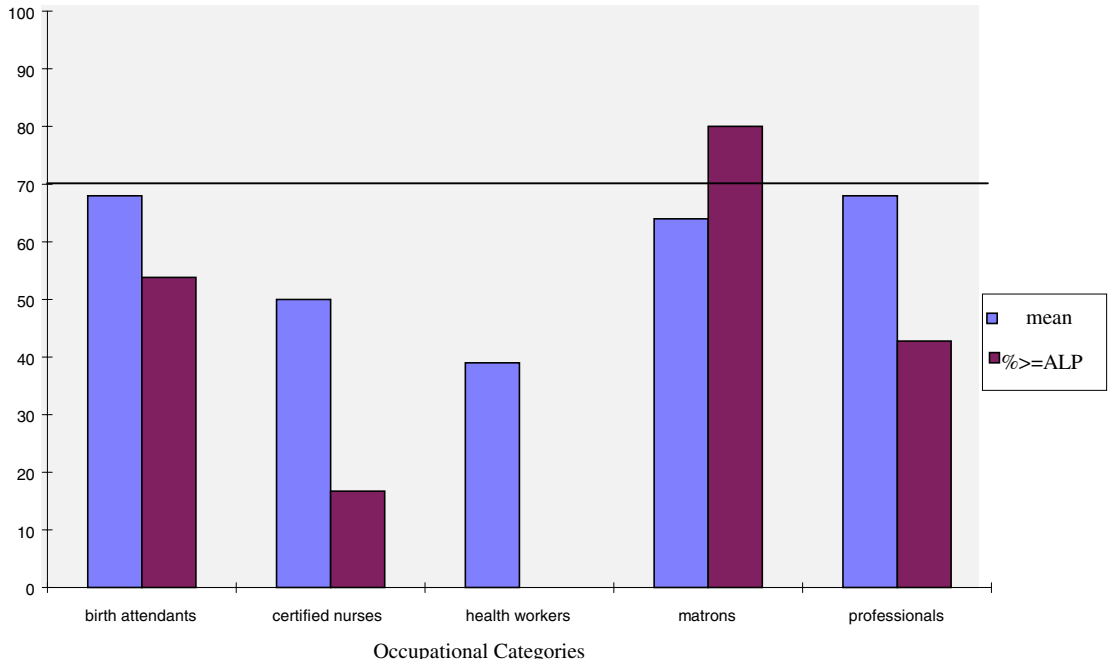
Matrons:

- In spite of the fact that they were not allowed to perform all FP tasks, (see FP protocols), two of five matrons performed the welcoming, methods presentation, interview, and pills prescription in a satisfactory way. However, their performance in physical examination was below average and for breast examination was extremely poor.

- Three matrons mentioned that their only FP task was to follow-up users. This can be explained by the fact that these matrons were assigned to health units where other FP tasks were performed by professionals.

[12] *Critères d'éligibilité de l'OMS pour les Méthodes Contraceptives Modernes*

Figure 2: Average Level of Performance in FP and Percentage of Agents with a level >= ALP



Itinerant Health Workers:

- This category is generally weak in the performance of all tasks (see Figure 2, Table 6). In only two of the nine tasks (welcoming and interviewing) did itinerant health workers achieve above the ALP.

Professionals: (Physicians, Midwives, State Graduate Nurses, Maïeuticians)

- Within this category only those who received FP training as part of their in-service training by the DSF reached the ALP. Those who received basic training at the National School of Public Health and University had a poor level of performance but a high level of knowledge. Inadequacies were seen in the some of the same tasks as for the other categories but also for the task "give information on IUD".

For all the health providers as a group there were serious inadequacies in information given to the client. Either the information (side effects, advantages,and instruction for use.) was not as well communicated on available methods as on unavailable methods at the health units (Norplant, LAM, VSC, IUD, Natural Methods), or they were marred by errors.

Inadequacies related to certain techniques such as breast examination techniques, and gynecological examination, (especially speculum use), injectable methods administration (injection site massage), IUD insertion and removal, were also observed. Methods such as the Norplant, LAM, and VSC were not observed because they were not available at the health units visited.

Table 6 : Average Level of Performance by Category and Tasks

Tasks	Provider Categories					Total scores[13]	Mean percent
	Birth attend-ants	Certified nurses	Health workers	Matrons	Profess-ionals		
Welcome	89%	60%	83%	100%	89%	353/442	80%
Presentation of the methods	54%	51%	38%	76%	60%	284/528	54%
Interview	95%	62%	78%	100%	86%	304/352	86%
Physical examination	69%	54%	32%	64%	68%	423/704	60%
Breast examination	38%	30%	16%	5%	23%	103/317	32%
Gynecological examination	70%	56%	40%	58%	90%	268/416	67%
Decision-making	85%	45%	18%	100%	54%	85/137	62%
Prescription of pills	67%	44%	51%	76%	70%	267/544	49%
Prescription of injectables	63%	28%	19%	41%	52%	106/217	49%
Info. on IUD	NA[14]	NA	NA	NA	35%	17/48	35%
IUD insertion	NA	NA	NA	NA	73%	100/138	73%
IUD removal	NA	NA	NA	NA	75%	36/49	73%
Client follow-up	68%	55%	31%	63%	75%	134/207	65%
Average score per category	68%	50%	39%	64%	68%	2480/4099	61%
%>ALP (70%)	54%	17%	0%	80%	43%		

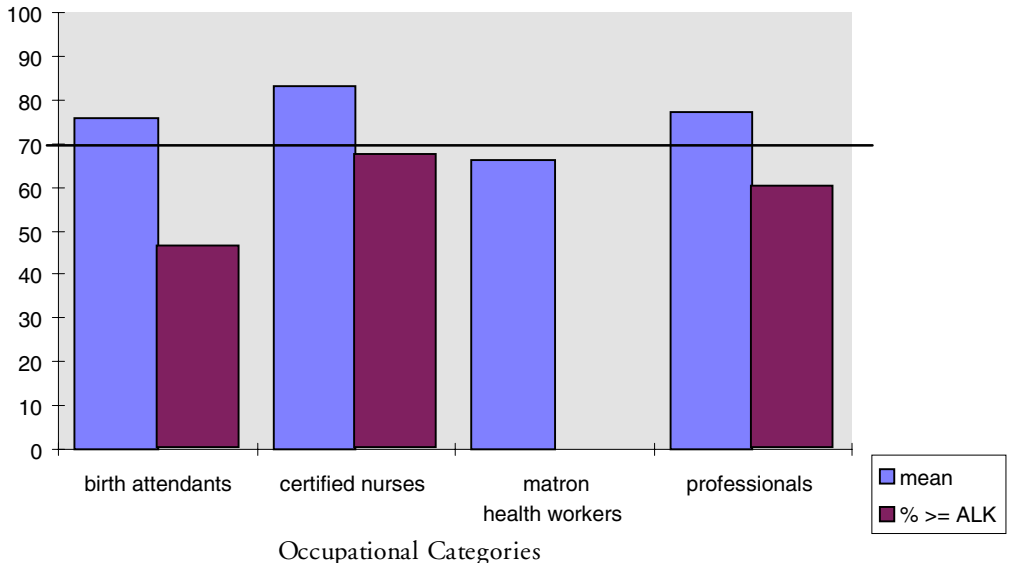
[13] *Total score attained for all observed providers by task.*

[14] *Non Applicable*

B. Performance in ORS

Because it is expected that CBD workers educate their clients about treatment for diarrhea, a performance evaluation of CSPS providers demonstrating ORS was also selected as an indicator.

Figure 3: Average Level of Performance in ORS Demonstration by category and percentage of providers with a level > = ALP



Of the 29 service providers observed demonstrating preparation of oral rehydration solution, one-half reached or exceeded the average level of performance set at 70 percent. Among certified nurses 67 percent had a score superior to the ALP, while 60 percent of the professionals reached a similar passing level (Figure 3). On the other hand only 46 percent of birth attendants achieved scores superior to the ALP. The relatively high performance among the nurses was due to the fact that the activity was principally conducted in dispensaries where materials were available and where the majority of nurses' activities were conducted.

Among all the health care providers inadequate scores were most common in the following critical behaviors:

- washing hands with soap before demonstration;
- identifying measurement instruments available at the patient's domicile through questions;
- inviting clients to repeat the demonstration;
- asking patient to return for a health status assessment visit.

Several of these tasks were primarily observed in a simulation because of the absence of real cases, which may have adversely influenced the provider's performance.

4) Level of Performance in Supervision

A. CSPS providers' experience in supervision

Twenty health and social promotion center providers were interviewed about their supervisory experience. A little more than half of those surveyed (55%) said that they had received training in supervision, including 44 percent of the birth attendants and 22 percent of the certified nurses. For the most part however, this training was a basic knowledge in supervision session received during a recent management training course organized as part of the Bamako Initiative launching program.

Most service providers (80%) working at the health center level were already performing or had already performed supervisory visits (see Table 7). Birth attendants and matrons supervise village birth attendants, and the certified nurses supervise a range of providers.

In terms of specific supervisory tasks the vast majority (93%) of birth attendants and certified nurses declared that they at least "sometimes" scheduled their supervisory visits according to a calendar. This supervisory calendar was generally the same one used for the Expanded Program of Immunization (EPI), in which the supervisory schedule of other health activities is integrated. The reason put forward for using this calendar was that EPI visits were required through special orders from the Ministry, and this program was the only one able to provide resources for supervision.

The calendar was established by the CSPS officer in consultation with the other members of the health center team. The average frequency of the visits ranged from once per month to once per trimester. The vast majority (93%) of health attendants and nurses were usually informed of the visits beforehand.

During these supervisory visits, providers from the health center declared that they felt very much at ease with the workers they were supervising and gave them technical assistance on causeries, prenatal consultation activities, birth deliveries, umbilical and dressing of other wounds, malaria treatment, and diarrhea.

B. Performance in supervision

A questionnaire and directed interview guide was used to collect data on supervisory performance. Providers were invited to give a detailed description of their activities during a supervisory visit; and the interviewer identified critical tasks as they were mentioned by the subjects. Because the subjects could not be observed in an actual supervisory situation, the information collected reflects the interviewer's assessment of the subject's degree of familiarity with the different supervisory tasks.

Of all supervisory tasks the least frequently mentioned were those linked with preparation of the visit (particularly supervisory objectives formulation, supervision instruments development/

adaptation, and utilization), supervision planning, supervision reports utilization, and feedback to direct superior (see Table 8). Variations in task execution did not seem related to any identifiable personal characteristics of the supervisors, however, not surprisingly, those who had received basic training in supervision did appear to perform better.

Table 7: Supervisory experience of potential supervisors of the CSPS, by type of providers.

Supervisory experience	Birth attendants		Certified nurses		Matrons		total # of yes
	yes	no	yes	no	yes	no	
Is performing (or has performed) supervisory visits	7	2	7	1	2	1	16
Category of agents supervised:							
. Village health worker	1	2	4	0	1	0	6
. Village birth attendant	7	0	3	0	2	0	12
. Both	2	0	1	3	0	1	3
. Others	4	2	5	3	1	2	10
Schedule visits by calendar:							
. Always	1	0	0	0	0	0	1
. Sometimes	6	0	5	0	2	0	13
. Never	0	0	1	0	0	0	1
EPI calendar established by:							
. Supervision worker	5	0	2	0	10	0	17
. His supervisor	1	0	3	0	0	0	4
. Others	1	0	1	0	1	0	3
Frequency of the visits:							
. 1/month	4	0	2	0	0	0	6
. 1/trimester	2	0	3	0	1	0	7
. Others	1	0	1	0	1	0	3
Notice of the visit:							
. Always	7	0	6	0	1	0	14
. Sometimes	0	0	1	0	1	0	2
. Never	0	0	0	0	0	0	0
Well at ease with supervised worker	7	0	6	0	2	0	15
Technical benefit to supervised workers	5	2	5	1	2	0	12

Table 8: Number of providers performing supervisory tasks by provider type

Supervisory Indicators	Occupational categories				Totals	
	Health attendants	Health workers	Nurses	Matrons	# of yes/total	%
Are you performing or did you perform supervision visits?	6/13	1/5	5/6	1/1	13/25	52%
PLANNING						
° Established a supervision calendar	4/6	0/1	3/5	1/1	8/13	62%
° Sent calendar to supervised workers	6/6	0/1	4/5	1/1	11/13	85%
° Verified if supervised agent had received the calendar	1/6	0/1	1/5	1/1	3/13	23%
VISIT PREPARATION						
° Formulated objectives of the visit	1/6	1/1	0/5	1/1	2/13	15%
° Identified/developed supervision instrument	5/6	0/1	0/5	0/1	6/13	46%
° Verified availability of other resources for visit accomplishment	3/6	0/1	0/5	1/1	4/13	31%
DURING THE VISIT						
° Used the appropriate instrument and technique	3/6	0/1	0/5	1/1	4/13	31%
° Wrote down information on an appropriate tool	5/6	0/1	0/5	1/1	6/13	46%
° Gave feedback	3/6	1/1	3/5	1/1	9/13	69%
RESULTS UTILIZATION						
° Wrote a report according to the appropriate format	0/6	0/1	1/5	1/1	2/13	15%
° Shared results with colleagues (meetings, basic knowledge)	3/6	0/1	5/5	1/1	9/13	69%
° Shared results with direct superior (report, basic knowledge)	3/6	0/1	1/5	1/1	5/13	38%

Analysis of documents related to supervision that existed at the health units enriched the information collected during the directed interview. This analysis mainly concerned supervision plans, calendars, and supervision reports for 13 supervisors. In all cases 15 percent or fewer of the supervisor's documents examined showed evidence of desirable tasks having been completed (Table 9). Generally, it seemed that even if supervision was one of the responsibilities fulfilled by CSPS providers, they rarely used supervision plans, calendars and reports. If there was a report, it rarely underscored positive or negative elements noticed during the visit and did not contain recommendations.

Table 9: Results of the analysis of supervision documents for 13 supervisors

	Birth attendants yes/total	Health workers yes/total	Certified nurses yes/total	Matrons yes/total	totals yes/total	percent-ages yes/total
Supervision plan reflected:						
* Supervision objectives	1/6	0/1	0/5	1/1	2/13	15%
* Methodology	1/6	0/1	0/5	1/1	2/13	15%
Calendar reflected:						
* Date of the visit	1/6	0/1	1/5	0/1	2/13	15%
* Place of the visit	1/6	0/1	1/5	0/1	2/13	15%
* Target of the visit	1/6	0/1	0/5	0/1	2/13	15%
The report reflected:						
* Positive aspects	1/6	0/1	0/5	1/1	2/13	15%
* Problems/aspects to improve	1/6	0/1	0/5	1/1	2/13	15%
* Recommendations	0/6	0/1	0/5	1/1	1/13	8%

In comparing the results of the documentary analysis with those of the directed interview, it appears that even if supervisors had some training and experience in supervision, and declared that they performed certain supervisory tasks, the documents did not evidence proper supervisory planning. Moreover, supervisors did not appear to be aware of the importance of supervisory reports.

C. Perceptions about potential supervisors

During the directed interview, providers were asked to state their own perceptions of a supervisor of the CBD workers. Perceptions of the members of the supervision team of the DPS were also assessed. The responses concerned qualities and skills, as well as the most appropriate person for supervising the CBD workers from the peripheral health units or CSPSs.

Most profiles mentioned by the surveyed providers included qualifications emphasizing the interpersonal relationship that should exist between the supervisor and the CBD worker (the supervisor should be understanding, patient, available, allow the supervisee to feel at ease, courteous, polite, realistic and encouraging). Other elements linked to skills in MCH/FP and communication skills in order to provide support and help to the supervised providers were also emphasized.

For technical supervision of the CBD workers, a majority of the eleven agents surveyed identified birth attendants or a paired birth attendant/ nurse team as the preferred providers for this task (Table 10). The argument generally put forward as to why the birth attendant would be the best provider type to technically supervise the CBD worker was that she was the MCH/FP service provider and was generally responsible for "maternity" activities. Moreover, she was judged to be more available in terms of time than the other CSPS provider types.

On the other hand, the use of an health attendant/nurse team was justified by the fact that both of these health care providers have contacts with women and carry out MCH/FP activities and they often do work as a team. The nurse, as administrative chief of the health unit is also responsible for planning, supervision and report writing, and is supposed to have MCH/FP skills, allowing him to supervise the health attendants and substitute for her when she is absent. Hence they do often work closely together and could readily assume joint supervisory responsibilities.

2) Findings and Conclusions

Analysis of the data obtained from this study resulted in the following major findings:

- Human resources are available for the supervision of CBD workers at the level of the CSPS. There does exist a working team composed of the nurse, the auxiliary birth attendant (or matron) and often the itinerant health worker all of whom speak the local language and have supervisory experience at the community level.

- Even though the FP skill performance was generally rather poor, birth attendants and matrons, who are the most common FP service providers, had individual levels of FP knowledge and performance clearly superior to that of the nurses.

- Regarding supervisory skills, it was learned that a larger proportion of birth attendants had received basic knowledge in supervision, and that they were more familiar with supervisory tasks than were certified nurses. This was true even though there were proportionately fewer birth attendants than nurses currently carrying out supervisory activities.

- It was found that there were working conditions that do not favor regular and quality supervisory performance. Logistic support (motorbike, gas, cost payment), supervisory instruments and support from the provincial level were far from being sufficient to maintain a regular, high quality supervisory relationship with health care providers in the health units. In addition, providers surveyed also expressed dissatisfaction with their own working conditions.

Table 10: Preferences for CBD worker supervisors, by health care provider type

Preferred Supervisor of CBD Workers	Health care position of interviewees				
	Birth attendant	**Certified nurse**	**Matron**	**SUP/DPS team**	**total**
Auxiliary birth attendant	1	2	1	1	5
Certified nurse	0	0	0	1	1
Nurse/birth attendant team	3	1	0	1	5
total	4	3	1	3	11

- Interrogated as to their own preferences for a supervisor, the CSPS personnel agreed that the birth attendant was the most appropriate person to supervise the CBD worker, both because of the duties she was already carrying out and her greater time availability. They were joined in this opinion by their direct supervisors. Birth attendants were the primary advocates for a birth attendant/nurse team.

- In conclusion, the birth attendants appear to have more of the appropriate skills and knowledge, and to be better positioned for supervising CBD workers than the post chief nurses who had been recommended for this responsibility.

IV. RECOMMENDATIONS

Based on this study's findings and conclusions, specific recommendations regarding supervision at the local CSPS level have been formulated and are presented below:

1) Supervisory Organization at the Level of the CSPSs

- Supervision at the level of the CSPS should be organized with a team of supervisors/trainers with specific and well defined responsibilities for each member of the health team. In addition, these health workers need supporting resources (training, materials, supervision instruments...) to build and maintain an effective supervisory team and effective supervisory relationships with the CBD workers.

- Because the birth attendants and matrons are responsible for most of the maternity, MCH, and FP services at the level of the CSPS, and have experience in supervision of village birth attendants, whose tasks are linked to MCH/FP, they are also prime candidates to provide technical supervision of the future CBD workers. The officer responsible for the CSPS, generally the certified nurse, should primarily assume programmatic responsibilities in supervision and technical preceptorship of the providers whose duty would be to supervise CBD workers.

- The itinerant health worker, being a member of the CSPS health team, also represents a resource capable of assuming supervisory tasks and should also be considered as a potential supervisor. However, if given this responsibility he needs solid reinforcement of the skills required for fulfilling the CBD worker supervisory tasks.

2) FP and Supervisory Training

- Training in technical supervision of the personnel of the CSPS should include skills in facilitation and transcription in Mooré to help them perform tasks during work sessions and basic/refresher training classes.

- All personnel assigned to CBD worker training and supervision should be trained to use the guides and other reference materials developed for that purpose.

- The Family Health directorate (DSF) in collaboration with the Provincial Health Directorate (DPS) should organize and design the training of health workers employed in the health unit of the province, taking into account their level of professional training, knowledge and performance in MCH/FP as observed during the TNA. The objective of this training should be to improve access and quality of FP/MCH services at the level of the health units.

- Basic/refresher MCH/FP training sessions should cover as comprehensively as possible all essential skills for managing referred cases from the peripheral level. Training of the CSPS providers should also cover skills of the future CBD workers they would have to monitor.

- Birth attendants, matrons, and itinerant health workers should be trained in clinical FP and in ORS because of their very important role in the delivery of these services in the health units to which they are assigned. The training should address the inadequacies in knowledge and performance found in this TNA.

- Professionals and certified nurses who have received basic training in MCH/FP should receive a theoretical and practical refresher training in FP and ORS demonstration.

- Professionals and birth attendants who have received in-service FP training should receive an update, especially in recent MCH/FP information (such as eligibility criteria, CAT, infection prevention, LAM, etc.) and new practices in FP related to contraceptive methods.

3) Working Conditions of Supervisors

- To ensure that adequate working conditions for an effective technical supervision of the CBD workers by the CSPS team are fulfilled, logistical necessities such as gas and per diem to cover expenses incurred during supervisory visits must be made available.

- Boards of managers and village health units should be involved in the follow-up of CBD worker supervision activities as conducted by CSPS providers.

4) Reinforcement of Supervision at the Provincial Level

- The Directorate of Family Health should, as part of the CBD project, develop and provide supervisory instruments adapted to the different levels and easily usable by first line health workers. MCH/FP service delivery guides should be developed, reproduced and available to supervisors, community health worker trainers and CBD workers. It is desirable that the guides be both in French and Mooré.

- Given the role of referral that the medical centers would play in quality service delivery and supervision of CBD supervisors, supervision activities should be reactivated through the CBD project. Moreover, skills and positive working conditions of supervisors at the level of the Provincial Directorate of Health of the Bazega should be reinforced.

5) Supervisory Training Needs

Based on recommendations provided in this section, the TNA team identified the following training needs in supervision, facilitation and transcription in Mooré (Table 11).

6) Training Plan

- The following training plan is provided to assist the Family Health Directorate in implementing the recommendations made above (Table 12).

Table 11: Basic/Refresher training needs in supervision, facilitation, and transcription in Mooré

Health Units	Number of Persons	Profile of Persons
Saponé CM/district	3	- District Chief Physician - The matron to be also trained in FP - The maïeutician who is already trained in supervision
Tanghin Dassouri	3	- The IDE responsible for the CM to be also refreshed in FP - The midwife responsible for the MCH/maternity to be also refreshed in FP - One AA to be also trained in FP
Kossilci	2	-The IB to be also refreshed in FP
Basoulé	2	-The IB to be also refreshed in FP -The matron to be also trained in FP
Kayao	2	-The IDE to be also refreshed in FP -The AA to be also trained in FP
Dondoulma	2	-The IB to be also refreshed in FP -The AA to be also trained in FP
Lugsi	2	-The IB to be also refreshed in FP -The AA to be also trained in FP
TOTAL	16	

Table 12: MCH/FP and Supervision Training Plan for Providers in Bazega Province

Activity	Participants	Facilitators
1. Assessment of inadequacies in the service and training guides and guidelines and gaps in the performances	15 DSF National trainers	DSF INTRAH
2. MHC/FP knowledge and skills update for trained service providers, trainers and supervisors of the Bazega and preceptors of Ouaga	2 Physicians 4 Midwives 5 AAs 12 Preceptors from Ouaga	2 national trainers
3. MCH/FP refresher training for Physicians, Midwives, IDEs	8 Physicians, Midwives, IDEs (Others?)	2 provincial trainers 1 national trainer
4. MCH/FP refresher training for IBs	23 IBs	2 provincial trainers 1 national trainer
5. Basic/refresher training in facilitation and orientation to the use of the curricula of CBD workers for district supervisors and CBD workers supervisor trainers	16 district supervisors and CBD workers supervisor trainers	DSF INTRAH
6. Basic/refresher training in supervision for district supervisors and CBD workers supervisors trainers	16 district supervisors and CBD workers supervisor trainers	DSF INTRAH
7. Training in transcription in Mooré for district supervisors and CBD workers supervisors trainers	16 district supervisors and CBD workers supervisor trainers	Mooré teacher trainers
8. MCH/FP training for AAs, Matrons, AISs	27 AAs, Matrons, AISs	Trainers

APPENDICES

1. **Data collection personnel and locations**
2. **Status of trainers, perceptors and supervisors in Bazega province**
3. **References**

Appendix 1

Data collection personnel and locations

TEAMS	NAMES	DISTRICTS	HEALTH UNITS
A	Mr. Kaboré Joanny Mme Perle Combary Mr. Dabire Ernest Mr. Ane Gabriel	SAPONE	- Tanghin - Kayao - Lugsi - Doundoulma - Bakoulé - Ilyala - Kocilcy
Focus Groups	Mme Ouedraogo Clarisse Mme Ouedraogo Sanata Mme Vimbamba Clémentine Mme Nyameogo Jeanne Mr. Hema Aboubacar Mr. Ouedraogo Alassane	SAPONE	Kocilcy
B	Mme Belem Justine Mr. Zongo Abdoulaye Dr. Alexandre Muhawenimana. Mr. Bongwélé Onanga	KOMBISSIRI	- Toudou - Guirgo - Kombissiri - Sapone - K - Sapone M - Koubri

Appendix 2

Status of trainers, preceptors and supervisors in Bazega province

Name	**Peofession**	Trained in preceptor skills	Supervisor trainied in supervision	Trainer trained in training of trainers	Trained in clinical FP	Not trained, but potential trainer, preceptor or supervisor
1.Dr.BIDIGA A. Aimé	Physician	-	+	+	+	
2.Dr.WARE Narcisse	"	-	+	+	+	
3.Dr.DADJOARY Moussa	"	-	+	+		
4.Dr.OUEDRAOGO Issa	"	-	-	+		
5.ZONGO Abdoulaye	Maïeutician	+	+	+	+	
6.ZOUNDI Omar	"	-	+	-(performance evaluation)	+	+
7.SOURWENA Boureima	Certified nurse	-	-	-	-	+
8.KOMI Amadé	State nurse	-	-	-	-	+
9.BAMBARA Laurentine	Midwife	-	-	+	+	
10.KABORE Richard	Certified nurse	-	-	-	-	+

Key: -No; +Yes

Appendix 3

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