QUALITY

ASSURANCE

PROJECT

The Quality of Supervisor-Provider Interactions in Zimbabwe

Center for Human Services • 7200 Wisconsin Avenue, Suite 600 • Bethesda, MD 20814-4811 • USA

QUALITY
ASSURANCE
PROJECT

TEL (301) 654-8338
FAX (301) 941-8427
www.qaproject.org

The Quality Assurance Project (QAP) is funded by the U.S. Agency for International Development, under Contract Number HRN-C-00-96-90013. QAP serves countries eligible for USAID assistance, USAID Missions and Bureaus, and other agencies and nongovernmental organizations that cooperate with USAID. The QAP team, which consists of prime contractor Center for Human Services (CHS), Joint Commission International (JCI), Johns Hopkins University School of Hygiene and Public Health (JHSPH), Johns Hopkins University Center for Communication Programs (JHU/CCP), and the Johns Hopkins Program for International Education in Reproductive Health (JHPIEGO), provides comprehensive, leading-edge technical expertise in the design, management, and implementation of quality assurance programs in developing countries. Center for Human Services, the nonprofit affiliate of University Research Co., LLC, provides technical assistance in the research, design, management, improvement, and monitoring of health systems and service delivery in over 30 countries.

OPERATIONS RESEARCH RESULTS

The Quality of Supervisor-Provider Interactions in Zimbabwe

Abstract

Measuring performance is the first step on the road to improving it. This report presents the results of a formative study sponsored by the Quality Assurance Project to describe and quantify the quality of supervisor-provider interactions in Zimbabwe in 1999. Using a participatory approach, the research team—composed of both supervisors and researchers—developed a set of instruments for structured observations of supervisors, audiotaping of supervisor-provider interactions, recording of all supervisory activities, and interviews with supervisors and supervisees. Sixteen district-level government, municipality, and Zimbabwe National Family Planning Council supervisors from four provinces participated in the study. The study found that the supervisors' main strengths were in giving feedback on technical standards, discussing and analyzing data, and developing rapport with the providers. They were most deficient in making suggestions, seeking client input, problem solving with the providers, and building on previous (and future) supervisory visits. None of the observed supervisors achieved the threshold set in advance by the team for exemplary performance. The study concludes with recommendations to the Ministry of Health and Child Welfare on how the quality of supervision in Zimbabwe could be improved. The appendix provides the instrument used to observe supervisors and rate their supervisory behaviors.

Table of Contents

ABBREVIATIONS 1

I. INTRODUCTION
- A. Rationale 1
- B. Study Objectives 2

II. STUDY DESIGN AND METHODOLOGY
- A. Study Locations and Participants 2
- B. Development of Data Collection Instruments 2
- C. Data Collection 3
- D. Data Analysis and Interpretation 4
- E. Methodological Limitations 4

III. FINDINGS
- A. Time Spent on Supervision Activities 4
- B. Supervisors' Strengths and Weaknesses 5
- C. Feedback and Education between Supervisors and Providers 7
- D. Continuity and Support for Improvement through Supervision 7
- E. Assessment of Supervisory Checklists 8

IV. CONCLUSIONS 8

V. RECOMMENDATIONS 9

APPENDIX: Observation Guide 11

Acknowledgements

This paper was written by Young Mi Kim (JHU/CCP), Paula Tavrow and Lynette Malianga (QAP), and Sithokozile Simba, Alford Phiri, and Perpetua Gumbo (ZNFPC). The Zimbabwe Ministry of Health and Child Welfare's (MOHCW) Family and Child Health Department; the City Health Departments of Mutare and Bulawayo; the Municipal Health Department of Masvingo; and the Provincial Medical Directorates for Mashonaland East, Manicaland, Masvingo and Matabeleland North greatly supported and participated in the study.

The Zimbabwe National Family Planning Council's (ZNFPC) directorate, Head Office, and the provincial staff, including Godfrey Tinarwo, Caroline Marangwanda, and Thandi Nhliziyo, assured the coherent and successful execution of the study. Roxana Rogers, USAID/Zimbabwe, also greatly facilitated the completion of the study.

Margaret Nyandoro and Dr. L. K. Shodu of the Family and Child Health Department, MOHCW, provided important guidance and assistance to the research team. The District Nursing Officers, Sisters-In-Charge Community, Nursing Officers, and service providers constituted the study respondents and provided valuable assistance to the research team in interpreting the initial findings.

Gary Lewis and Carol Brancich from the Johns Hopkins University Center for Communication Programs (JHU/CCP) and Paul Richardson from QAP provided extensive technical input.

While we acknowledge the valuable contributions of the parties mentioned above, all errors of omission and/or interpretation remain the sole responsibility of the authors.

Recommended citation

Kim, Y. M., P. Tavrow, L. Malianga, S. Simba, A. Phiri, and P. Gumbo. 2000. The quality of supervisor-provider interactions in Zimbabwe. *Operations Research Results* 1(5). Published for the United States Agency for International Development (USAID) by the Quality Assurance Project (QAP): Bethesda, Maryland.

About this series

The *Operations Research Results* series presents the results of QAP country or area research to encourage discussion and comment within the international development community. If you would like to obtain the full research report of this study containing all relevant data collection instruments, please contact qapdissem@urc-chs.com.

The Quality of Supervisor-Provider Interactions in Zimbabwe

Young Mi Kim, Paula Tavrow, Lynette Malianga, Sithokozile Simba, Alford Phiri, and Perpetua Gumbo

Abbreviations

CPI	Client-Provider Interaction
DNO	District Nursing Officer
FCH	Family and Child Health
JHU/PCS	Johns Hopkins University Population Communication Services
MOHCW	Ministry of Health and Child Welfare
OJT	On-the-job Training
QAP	Quality Assurance Project
SDC	Service Delivery Coordinator
SICC	Sisters-In-Charge Community
STI	Sexually Transmitted Infection
ZNFPC	Zimbabwe National Family Planning Council

I. Introduction

A. Rationale

The quality of patient care depends on how well service providers perform clinical procedures, make diagnoses, and communicate with patients. While the initial training given to providers is critical to the quality of care, so are the continuing support of supervisors and providers' own efforts to maintain standards.

In Zimbabwe, as in most developing and industrialized countries, there has been little investigation of supervisor-provider interactions and the effectiveness of supervisors in maintaining and improving the quality of patient care. In fact, the present study is the first of its kind to be conducted in Zimbabwe. Lack of data may have limited the ability of the Ministry of Health and Child Welfare (MOHCW) and the Zimbabwe National Family Planning Council (ZNFPC) to design concrete interventions to improve supervision, even though both organizations are interested in strengthening supervisors' skills and the effectiveness of regularly scheduled supervisory visits to health facilities. For this study, both institutions were engaged throughout all planning and implementation stages to ensure that the essential aspects of supervisor-provider interactions during the provision of health services were captured.

This research responds to interest in improving supervision of health services, as expressed by the MOHCW, the ZNFPC, various municipal health services, and the USAID/Zimbabwe Mission. For many years, the ZNFPC had been responsible for supervising the provision of family planning services, either at ZNFPC or government facilities. In 1997, in a move to integrate fully the various health services, the government assumed responsibility for all supervision. However, there is some concern that supervision is not achieving its main objective: quality of health workers' performance in their dealings with clients.

This study was designed to understand how supervisors currently interact with providers. The data collected will provide the basis for designing interventions to strengthen the effectiveness of supervision and improve the quality of health services. The premise of this research is that to improve patient care, providers need to work together with their supervisors to:

- Assess their own strengths and weaknesses and identify specific skills that need improvement
- Accept the need to improve their skills and appreciate the benefits that will result
- Set priorities and develop specific, concrete goals for behavior change
- Make an effort to achieve set goals

B. Study Objectives

This study focused on supervisors' conduct during regularly scheduled supervisory visits to health facilities and how their interaction with providers contributes to quality of care. Its main goals were to gain better understanding of supervisory practices and make recommendations on how to improve supervision interactions.

The study's specific objectives were to:

- Identify how supervisors spend their time during their visits to facilities
- Assess supervisors' strengths and weaknesses in partnership and problem solving with providers during supervision
- Study mechanisms of giving and receiving feedback and continuing education process between supervisors and providers
- Explore continuity and support for continuous quality improvement through supervision visits
- Review the checklists that supervisors use, analyzing client-provider interaction improvement

II. Study Design and Methodology

A. Study Locations and Participants

The study was conducted in four provinces of Zimbabwe: Masvingo, Manicaland, Matebeleland North, and Bulawayo.[1] The study instruments had been pretested in a fifth province: Mashonaland East. Altogether, 11 districts were included in the study: three randomly selected from Masvingo, Manicaland, and Matebeleland, and one from Bulawayo. In addition, one district in the pretest province, Mashonaland East, was included in the analysis. A total of 16 supervisors working in these districts participated in the study. Upon arriving at the district, researchers accompanied whichever district and/or municipal supervisor was conducting supervisory visits that day. The supervisors' schedules dictated which facilities were included in the study. The researchers requested that the supervisors conduct their visits as they normally would. The 16 facilities visited consisted of four MOHCW health centers, three Mission hospitals, three Rural District Council health centers, four municipality clinics, and two ZNFPC mobile clinics. Rural District Council centers and Mission Hospitals are visited by supervisors from the MOHCW.

All 16 supervisors were registered general nurses, and all but one were women. Their job titles varied: seven were District Nursing Officers (DNOs), six were Sisters-In-Charge Community (SICCs), two were Nursing Officers, and one was a Service Delivery Coordinator (SDC). They had worked as supervisors for five years, on average, with a range of less than one year to 18 years. Their average age was 47 years, with a range of 34 to 61 years. Two supervisors were stationed in the facilities in which they were observed; the remainder traveled to the facilities where they were observed.

At the conclusion of each supervisory visit to a facility, researchers interviewed the principal one or two providers supervised that day. By the study's end, 24 providers (20 women and four men) had participated: 10 matrons/sisters in charge, 11 nurses/sisters, two nurse aides, and one environmental health technician.

B. Development of Data Collection Instruments

A group of supervisors and researchers from the ZNFPC and MOHCW, with assistance from the Quality Assurance Project (QAP), determined what constituted desirable supervisory behavior from district-level MOHCW, municipality, and ZNFPC supervisors. Based on their firsthand experience and understanding of providers' needs, the group developed 11 categories of key supervision practices to assess: developing rapport, discussing the previous visit, promoting participation of supervisees, identifying problems, problem solving, giving feedback, educating or training the provider, discussing and interpreting data, making suggestions, seeking client input, and discussing the next visit.

Developing concrete examples of what a supervisor could be observed doing or saying—both positive and negative—that would help the

[1] Bulawayo is a city with provincial status.

observers to arrive at a score for the supervisor in that category required some creativity. For instance, in the category of "Promotes Participation of Supervisees," some positive examples were: "asks supervisees' opinions" and "uses 'we' to discuss issues." Some negative examples were: "does most or all of the talking" and "doesn't show interest in what the supervisee says." The group devised a 10-point scale to rate the supervisors on each of the 11 categories and developed a short description for each score—from "greatly exceeds expectations" to "unacceptable." Scores of 7–10 were considered good to excellent; 4–6 inadequate, needs improvement; and 1–3 poor, greatly needs improvement. (See Observation Guide in Appendix.)

The group also developed a time log for recording all the tasks that a supervisor performed, so that the amount of time supervisors were spending on various activities could be quantified. Lastly, the team prepared questionnaires for supervisors and supervisees. After a week of developing instruments, pretesting, and standardizing observer ratings, a team of two people drawn from the group—a senior researcher and a research assistant—conducted the assessment, with oversight from MOHCW, ZNFPC, or QAP during the fieldwork.

C. Data Collection

Data collection followed a similar pattern each day. The team arrived at the supervisor's office early in the morning. (All supervisors had been notified in advance of the team's visit.) The team then spent an entire day with the supervisor, accompanying him/her on all supervisory visits to health facilities. The senior researcher observed the supervisor, while the research assistant maintained the log and tape-recorded the supervisor. Afterwards, the senior researcher interviewed the supervisor, and the research assistant interviewed one or two providers. In the evening, the researchers reviewed their findings and scored the supervisor on each of the 11 categories. A MOHCW, ZNFPC, or QAP representative was usually present and monitored the data collection and sometimes gave input to the team in determining the ratings.

Six methods were used to collect data:

1. Structured observations. The senior researcher observed all supervisory visits and rated the supervisor's performance in the 11 categories using the Observation Guide. The supervisors were rated on a 10-point scale in each category. Where applicable, the researcher also marked specific positive and negative behaviors observed within each of the 11 areas and made observation notes to further explain the rating.

2. Tape recordings. The research assistant audiotaped each supervision visit in its entirety, from the moment the supervisor arrived at a facility until the end of the visit. Throughout the day, the assistant alternatively held the recorder or placed it on a table near the supervisor. The tape recorders were battery operated and made little noise.

3. Log of all supervision activities. The research assistant kept a detailed, minute-by-minute log of the supervisor's activities during the supervisory visit. The duration, in minutes, of each activity was calculated and recorded. Examples of these activities were: talking with a provider, reviewing the register, checking stocks of drugs, talking with clients, etc.

4. Interviews with supervisors. At the end of the visit, the senior researcher interviewed each supervisor, using a structured questionnaire prepared specifically for this study. The questionnaire consisted of 24 closed and 30 open-ended questions about the supervisors' experiences during visits to facilities over the previous six months.

5. Interviews with providers. At the end of the visit, the research assistant interviewed one or two of the providers with whom the observed supervisor had interacted. A structured questionnaire designed for this study was used. It included 24 closed-ended and 16 open-ended questions about the providers' experiences during that day's session with the supervisor and during supervision visits over the previous six months.

6. Collection of supervision checklists. The researchers collected any checklists the supervisors said that they used as part of their normal functions, even if the checklists were not used during the observed visits.

All interviews, observations, and tape recordings were conducted with the permission of everyone involved, including the supervisors, providers, and clients with whom providers/supervisors interacted. To maintain confidentiality, names and any other information that might identify these individuals were eliminated from the data, including the transcriptions of the audiotapes. The audiotapes were stored in a locked place at ZNFPC headquarters.

Data collection was well controlled and consistently carried out, because only one senior researcher and one research assistant (both of them specially trained) collected all the data. On occasion, a ZNFPC headquarters

program manager (research) or service delivery manager, a MOHCW senior officer, and/or a QAP senior advisor accompanied the research team during the course of the fieldwork. Their presence ranged from two to five days.

Using multiple data collection methods to understand supervision interactions has several strengths. It provides researchers with both qualitative and quantitative data, and it allows them to view the same interaction from the perspective of the provider, the supervisor, an observer, or the client. Audiotaped sessions can be re-analyzed repeatedly to investigate different aspects of the interaction. Open-ended questions garner the context and insights needed to interpret answers to closed questions about providers' and supervisors' perceptions of their performance.

D. Data Analysis and Interpretation

Data from the closed-ended questions in the observations and interviews were processed quantitatively. Answers to open-ended questions and the descriptions of supervision activities were processed qualitatively during the preliminary analysis. Afterwards, they were coded and processed quantitatively. Frequencies and cross-tabulations were done using SPSS statistical software.

The sessions were in English, Shona, and Ndebele: 40 hours of audiotaped sessions were translated into English and transcribed. Only a small portion of the tapes was unintelligible; the rest was clearly understandable. The transcribed interactions were coded using the QSR NUD*IST software program and analyzed.

After the study was completed, the research team conducted three meetings with selected supervisors, providers, and program officers from MOHCW, ZNFPC, and the municipalities in order to enrich the interpretation of the findings and to develop intervention strategies for improving the supervision process. The meetings also served to disseminate the research findings.

E. Methodological Limitations

The small sample size of this study imposes some methodological limitations on the findings. The research team observed each supervisor for only one day, due largely to resource and time constraints. Comparisons of data among subgroups, such as organization types, should be interpreted with caution due to the extremely small numbers in each subgroup and different operational systems. Because of the small sample size, most findings are reported as approximate fractions (e.g., one-third or one-half) rather than as exact percentages. Also, the findings cannot be generalized beyond the provinces where the study occurred.

The extent to which the study captured typical supervision interactions needs to be examined and considered in interpreting the data. The supervisors and providers who participated in this study may have performed differently than usual, due to the presence of the observers and their awareness of the audiotaping. Although the senior researcher emphasized that supervisors and providers should conduct their supervision as usual, it is human nature to be concerned about being observed and taped. Also, because some visits were conducted outside the normal schedule, they may have been shorter than usual. Finally, as is typical for some facilities, some supervisors provided services to patients when the providers were very busy with other patients. This report treats all sessions as supervision visits and does not exclude any from data analysis.

While working from translations and transcriptions can sometimes make it difficult to interpret the meaning of what was said, the investigators were able to refer back to the audiotapes to resolve ambiguities. Complementary data from client interviews and observations of provider-client interactions might have enhanced the study, but this was precluded by time and resource constraints.

III. Findings

A. Time Spent on Supervision Activities

On average, supervision visits lasted 2.5 hours, but ranged widely: from six minutes to eight hours. (This does not include travel time to and from the facility.) The briefest of these visits was made to check on some specific issue rather than to review general operations at a facility. The duration of the average supervision visit was 30 minutes in municipality clinics, two hours in Mission hospitals, three hours in ZNFPC facilities and Rural District Council clinics, and four hours in MOHCW facilities. Supervisors at ZNFPC mobile clinics in rural areas spent a great deal of their time providing services as well as supervising.

Direct supervision activities can be divided into two categories: overseeing patient care (e.g., observing clinical procedures) and monitoring

facility-level care (e.g., checking records and supplies). As shown in Table 1, the logs show that, on average, supervisors spent more time on facility-level care (about 71 minutes) than on patient care (45 minutes). Within the category of patient care, supervisors spent far more time on observing clinical procedures than on observing client-provider communication (14 minutes versus five minutes). As for facility-level care, supervisors spent the most time reviewing records (25 minutes), followed by checking supplies and equipment (14 minutes) and checking the infrastructure (eight minutes).

B. Supervisors' Strengths and Weaknesses

The senior researcher rated each supervisor's skills on a 10-point scale as part of their observation. The results are presented in Table 2. While this discussion focuses on supervisors' average skill levels, it is important to note how widely their skills vary. Some supervisors performed well, scoring seven through nine, while others performed extremely poorly, scoring as low as one or two.

Building rapport with providers was one of the supervisors' relative strengths and was rated as 5.5, on average. In the majority of supervision sessions, interactions between supervisors and providers were observed to be cordial, friendly, relaxed, and cooperative. Supervisors usually allowed providers to attend to clients first and seldom demanded that providers interrupt what they were doing in order to attend to them. Occasionally, providers were specifically encouraged to focus on their clients. For example, one supervisor said, "Please go on and attend to your client; we can wait." Supervisors never

Table 1.
Average Amount of Time Supervisors Spent on Various Activities

Activity	Minutes	Percentage
Supervising patient care	**45**	**29**
Interacting with clients	(17)	(11)
Observing clinical procedures	(14)	(9)
Observing client-provider communication	(5)	(3)
Interacting with providers on patient care issues	(9)	(6)
Supervising facility-level care	**71**	**46**
Interacting with providers on facility-level issues	(25)	(16)
Checking registers, records, and data	(25)	(16)
Checking supplies and equipment	(14)	(9)
Checking infrastructure	(8)	(5)
Documentation and writing notes/comments	**17**	**11**
Other (tea break, lunch, etc.)	**22**	**14**
TOTAL	**155**	**100**

Note: n = 16 supervision visits

Table 2.
Ratings of Supervisors' Skills by Trained Observers

Skill Area	Average Rating*	Range of Ratings
Giving feedback	6.3	2 – 9
Discussing and interpreting data	5.6	1 – 9
Developing rapport	5.5	1 – 8
Education	5.4	1 – 8
Promoting participation of supervisees	4.4	1 – 8
Identifying problems with supervisees	4.1	1 – 7
Problem solving with supervisees	3.6	1 – 7
Discussing the previous visit	3.4	1 – 7
Seeking client input	3.1	1 – 8
Making suggestions	2.9	1 – 5
Discussing the next visit	2.9	1 – 7

Notes: n = 16 supervision visits

* Skills were rated on the following 10-point scale: 10 – greatly exceeds expectations; 9 – outstanding; 8 – performing very well; 7 – performing properly, meets expectations; 6 – average, could do better; 5 – doing something, not adequately; 4 – doing something, minimally; 3 – disappointing, poor; 2 – extremely poor, doing nothing; 1 – unacceptable.

made rude remarks to providers. Most supervisors reported that providers were usually cooperative. Providers did not seem to be afraid of speaking or responding to supervisors' questions.

Despite the good rapport between providers and supervisors, there was little partnership or teamwork exhibited. Supervisors were rated as 4.4 on promoting the participation of supervisees. Only about one-half of supervisors asked the provider's opinion, and just one-fifth used "we" in their language.[2] Two-thirds of supervisors did not promote discussion with providers; one-third did not ask any probing questions; and one-third did most of the talking. Supervisors who did encourage providers to participate used questions like, "Do you have anything else today?" and "How do you see infection control measures?"

Although most supervisors were very articulate in pointing out problems, especially in record keeping, supplies, equipment, and clinical procedures, they rarely explored problems from the provider's point of view. Less than half of supervisors encouraged providers to identify problems or raise issues; half did not give providers time to reflect on their problems; a third never asked providers what problems they had; and none of the supervisors asked providers whether clients had complaints about services. Providers sometimes raised issues or problems, but this behavior was sporadic rather than systematic. This lack of partnership limited the supervisors' ability to identify problems, which was rated as 4.1, on average.

Although they did not encourage joint problem identification or reflection on the causes of problems, many supervisors did invite providers to identify problems at some point during the visit. They typically used an open-ended question, such as, "What are the problems you have?" (at the beginning of a session) and "Any other issues?" (at the end of a session). These questions were cursory and rarely elicited much provider participation.

Problem solving was one of the weakest areas in the supervision process, rated as 3.6, on average. Most of the time, supervisors tried to resolve problems quickly by unilaterally making a recommendation, correcting a mistake, or teaching the provider on the spot. Some examples of this kind of immediate feedback are:

> *So, patients do not have face cloths; perhaps we could tear a big cloth into four pieces.*
>
> *You are safer suspecting someone with diarrhea rather than making the wrong decision.*
>
> *You forgot to tell her [the client] that you want to determine blood pressure levels. You should have explained that to her.*

Supervisors typically did not take a longer or more comprehensive view of the problems identified, nor did they try to engage providers in analyzing problems. Supervisors rarely explored the cause of a problem, weighed alternative solutions, developed an action plan to solve a problem over the longer term, prioritized problems, or engaged in systematic on-the-job training (OJT: systematic training effort in a pre-determined area). One-fourth of supervisors imposed solutions on the providers.

A few supervisors did try to work together with providers to identify and solve problems. Some examples that demonstrate good communication skills by supervisors who are trying to work together with providers are:

> *Do you think the way you are recording STI cases is effective? What do you think?*
>
> *Most of them won't come, so what do you think we should do? Should we continue using it [the antenatal care register] or have you got other ideas?*

Problem identification and quality improvement may also have been weakened by the lack of discussion of service standards. During the visits observed, supervisors seldom discussed criteria for good services and rarely shared or encouraged providers to share their visions of quality.[3] In interviews, however, nearly all supervisors reported sharing their vision of quality with providers as part of the process of giving feedback. Some supervisors had a very limited vision of quality, such as reducing waiting time, ensuring that providers had basic qualifications, or increasing the number of staff members.

---

[2] Using the word "we" indicates that the supervisor and supervisee are working in partnership and taking joint responsibility for problems.

[3] A vision of quality is more encompassing than standards of quality. When supervisors convey a vision of quality, they impart to providers an overall sense of how clients should experience services if standards are followed, the client is a partner in his/her health care, providers work collaboratively with each other, and facility-level problems are identified and resolved expeditiously.

C. Feedback and Education between Supervisors and Providers

Giving feedback was the supervisors' strongest skill area, rating 6.3 on average. Feedback was the supervisors' main mechanism for solving problems in patient care, along with correcting clinical procedures on the spot and focused education. Feedback on facility-level issues generally consisted of recommendations and education. Only a few of the supervisors' suggestions contained new and innovative ideas.

All supervisors reported praising providers, but only two-thirds of providers reported being praised. The transcripts indicate that most supervisors did offer praise once or twice during a visit, but it was often very brief and sometimes vague, for example: "I am happy about your emergency tray; it is in order" or "Your ward is looking nice." Half of the praise reported by supervisors ended with the phrase: "Keep up the good work!" Sometimes supervisors did not describe the specific task they were praising the provider for. For the most part, praise reported by supervisors and providers was related to facility-level issues rather than patient care.

Supervisors seldom criticized providers or publicly shamed them. Most of the remarks made to correct a provider were diplomatic and tactful. All supervisors reported criticizing providers, but only one-third of providers reported being criticized. Those providers reported that supervisors' criticism was "constructive" and said they did not mind it. Supervisors confirmed that most providers accepted criticism without denial or anger.

Some weaknesses were observed in giving feedback. A third of the supervisors did not observe sufficiently before giving feedback, and a half gave excessive feedback with too much information. It is possible that having observers present led some supervisors to give more feedback than they would normally. A fourth of supervisors did not ensure that their feedback was recorded for future reference and use.

Education, which grows out of feedback, was another strong area for supervisors; it received an average rating of 5.4. Supervisors provided accurate information and clear explanations when they instructed providers about gaps in their knowledge and skills, and they made sure providers understood what they taught. Half of the supervisors demonstrated skills to providers, and one-third gave concrete examples when teaching. Despite the supervisors' focus on education, however, observers rarely saw them using job aids, referring to manuals or guidelines, or conducting true systematic training effort in a pre-determined area.

Discussing and interpreting records and other data is a natural extension of giving feedback. Supervisors performed relatively well in this area, earning an average rating of 5.6. Almost all supervisors discussed and educated their providers in thorough and accurate record keeping, and two-thirds helped providers use data to identify problems or improve service quality.

Supervision visits usually covered many areas, but two-thirds of the supervisors observed did not use any type of checklist. During interviews, however, almost all supervisors reported using at least portions of a checklist. When supervisors did use a checklist during the visits observed in this study, they seldom discussed the findings with the providers. The checklists they used varied widely. Not standardizing the checklists was a deliberate choice by the MOHCW to give supervisors greater flexibility and to accommodate the differing situations at various facilities. Overall, the checklists contained few items on client-provider communication. During the group meetings held to discuss the study findings, supervisors' reservations regarding the use of checklists were raised: According to participants, supervisors tend to think that checklists are tedious and should not be used with familiar areas of supervision.

D. Continuity and Support for Improvement through Supervision

There was a lack of continuity between supervision visits. Supervisors seldom referred to recommendations made during past visits, checked progress, made action plans for providers, or planned to review progress in future visits. Discussing the previous and next supervision visits received some of the lowest ratings: 3.4 and 2.9, respectively. This weakness is related to other deficiencies already noted: the lack of prioritization of problems; feedback going unrecorded; and the emphasis on limited, short-term solutions to problems.

However, some supervisors did follow up on past visits, saying for example:

> *Remember the last time I came; the sheets for waiting mothers were not clean.*

> *We were going to revisit the issue of the catchment area map. We had agreed that you were going to work on it.*

Apart from their job descriptions, we had agreed that to make life easier, we should at least have schedules which reflect what they do from morning until they have off everyday. Was that discussed and worked upon?

During interviews, most supervisors were able to point out areas that had been improved or allowed to worsen. However, they rarely mentioned these observations to providers during supervision sessions. Also, the supervisors lacked monitoring records or other evidence to support the progress or deterioration they observed.

Mechanisms for continuous quality improvement were not institutionalized, and lack of continuity hampered efforts to improve the quality of patient care. Less than half of supervisors discussed with providers what needed to be done before the next visit, as in, "So, from the recommendations which I put down, can you formulate the right education plan, try to make a schedule." Only a few told providers what actions they, the supervisors, would take to help resolve any problems, such as, "I'll take this issue to the council," and "I have taken the two thermometers so that we can get them repaired." The date of the next visit was seldom mentioned. One-fifth of supervisors mentioned what the focus of the next visit would be, e.g., "Next time when I come, we will discuss the checklist, the issue of keeping statistics."

Occasionally, supervisors addressed broader quality-of-care issues, such as dealing with staff conflicts, seeking refresher training for providers, or requesting additional staff members. Supervisors also received requests for materials, equipment, supplies, and repair and maintenance.

During both interpretation and dissemination group meetings that discussed the study findings, supervisors agreed that continuity and follow-up over successive supervisory visits needed improvement. However, they felt setting objectives for and focusing on specific issues during each supervision visit was impractical because of the large number of problems, especially unexpected problems, they encountered during visits.

Supervisors were aware of their difficulties in managing time effectively and balancing different tasks during a supervision visit. They reported that they could not do everything they wanted during the observed visit, and three-fourths attributed this to lack of time. In general, supervisors spent a considerable portion of their time on problem identification and giving feedback, but devoted almost no time to helping providers determine causes, explore alternative solutions, or develop an action plan to address shortcomings. Lack of continuity between visits meant that little attention was given to long-term or endemic problems.

E. Assessment of Supervisory Checklists

While only about a third of the supervisors were observed using a checklist during any part of the supervisory visits, most reported using a checklist when asked. The researchers collected 14 checklists: 10 from MOHCW, two from the municipalities, and two from ZNFPC. Their formats varied from site to site and provider to provider. Four checklists had blank lines that enabled the supervisor to document responses and findings directly. Four other checklists contained listed items that served as reminders to supervisors of what to cover during the interactions. Three were just lists of items that were marked with a check when appropriate. Finally, two checklists were in a Yes/No format with an additional section for writing comments.

Different checklists covered different topics, although some had common items. Most checklists reminded the supervisor to check the physical appearance of the provider (cleanliness, state of uniform, etc.), the physical structure and surroundings (cleanliness, state of repair, windows, etc.), the records, the state and availability of equipment and supplies, and staff development issues. Only three checklists actually provided items relevant to the observation of patient care.

A number of weaknesses were observed in the checklists. None adequately addressed issues of client-provider interactions or patient care. They did not provide guidance on how to relate the current visit with previous and/or follow-up visits. They were not flexible enough to allow visit objectives to be tailored to different findings and facility needs. Finally, they were generally seen by supervisors as inventory tools and therefore were rarely used.

IV. Conclusions

The multifaceted, participatory approach used by the research team elicited important insights into the strengths and weaknesses of district-level and municipal nurse supervisors in selected provinces of Zimbabwe. Chief among the strengths are supervisors' technical competence, their ability to interpret and analyze data, their ability to rapidly identify errors and problems at the facility, and their reference to standards manuals

at the facilities. On the other hand, the supervisors generally failed to involve providers in problem identification and solving, were rarely innovative, infrequently used checklists, did not espouse a vision of quality, and rarely referred to past or future supervisory visits. Little attention was paid to client-provider interactions at the clinics. The checklists collected were of varying quality and none had a comprehensive section on monitoring client-provider interactions. Although supervisors often chatted with clients, they rarely sought their input into the quality of services or checked to see if they understood what the provider had told them. On the structured observation of their practices, none of the supervisors scored 77 or higher overall, which was the research team's threshold for exemplary performance in the 11 categories combined.

Clearly, there is considerable room for improvement of supervision in Zimbabwe. On a promising note, virtually all the supervisors observed were very interested in the study and appreciated feedback from the research team. Many supervisors told the team that they had never been closely observed before in their supervisory practices. Apparently, when provincial supervisors do spot-checking at facilities, they supervise the facilities directly rather than monitor how district supervisors handle their supervisory duties.

V. Recommendations

During three meetings on the study findings, participants made many suggestions for improving the supervision process. All agreed that any interventions should build on the strengths identified by the study. The general consensus was to move away from the current hierarchical, top-down approach to supervision towards a team-based approach in which providers and supervisors share responsibilities and work synergistically as partners. This requires giving responsibility to providers as well as to supervisors and creating opportunities for providers to participate actively in problem identification and solution.

In addition, participants agreed that improving supervision skills requires more than a single training workshop. It is important to build continuing support mechanisms for supervisors, including self-improvement mechanisms. The following recommendations reflect these lines of thought.

1. Initial training for supervisors should focus on the three most critically needed skills: partnership building, coaching on the quality of provider-client interaction, and monitoring and self-assessment skills.

- Provide training to improve supervisory skills in problem identification, problem solving, and time management. Include a section on the interpersonal communication skills needed to encourage provider participation
- Include strategies that supervisors could give to providers to reinforce their communication skills as a partner in the supervision process. Also include approaches for supervisors to give appropriate feedback on the quality of care given to clients
- Teach supervisors monitoring skills to strengthen the continuity of supervision. Instruct them in how to monitor the progress on action plans, plan for continuous improvement over time, and use self-assessment to rate their own performance

2. Simple, concrete activities to reinforce supervision skills must occur continuously after the initial intensive training to ensure performance improvement.

- Regularly encourage provincial supervisors to monitor key district-level supervision activities, including managing time, spending time in critical areas (such as client-provider interaction), problem solving, and developing an action plan
- Develop a self-assessment system so that supervisors can monitor their own performance in key behaviors, such as the use of partnership language and encouraging providers to develop alternative solutions
- Encourage supervisors to self-learn by reviewing audiotaped sessions of themselves in supervision, using reference materials, and keeping a log of concrete behavioral objectives and progress
- Develop a mentoring system for supervisors, so that trainers continue to help supervisors strengthen their skills
- Hold quarterly support group meetings of supervisors together with trainers or mentors

3. Activities and materials directed to both providers and supervisors should encourage partnership between them.

- Develop client-provider interaction guides for providers to refer to during on-the-job training
- Create a self-assessment and self-learning system for providers that

incorporates supervisor discussion, feedback, and support

- Develop group problem-solving mechanisms in each facility that will bring the supervisor and staff members together in planning for continuous quality improvement
- Incorporate reporting of facility-level problems and solutions attempted into the regular monthly reports, so that providers have a routine process for registering problems and progress made on resolving them
- Add the topic of partnership to all upcoming courses for supervisors
- Put the issue of partnership on the agenda of any regular meeting attended by supervisors

4. Strengthening supervision will require a variety of new job aids, including:

- A training curriculum and reference manual for supervisors on the main components of effective supervision
- Supervisor self-assessment guides that are interesting and user-friendly
- A mentoring guide for trainers of supervisors
- A supervisor guide for processing audiotaped sessions
- Parallel supervisors and provider guides on Client-Provider Interaction (CPI) so that providers and supervisors can share the same vision and standards of quality care

Appendix: Observation Guide

Zimbabwe Formative Study on Supervision – 1999

Observation Guide for Principal Investigator

Name of Supervisor: _____

Designation of Supervisor: _____

Observer: _____

Time began: _____

Time ended: _____

Date: _____

Province: _____

District: _____

City: _____

Facility: _____

Rating Scale for the Observation

Description	Score
Greatly exceeds expectations (10) Outstanding (9)	9 – 10
Performing very well (8) Performing properly, meets expectations (7)	7 – 8
Average, could do better (6) Doing something, not adequately (5)	5 – 6
Doing something, minimally (4) Disappointing, poor (3)	3 – 4
Extremely poor, doing nothing (2) Unacceptable (1)	1 – 2

1. Develops Rapport with Supervisees[4]

Score: _____ (1-10)

Positive Examples (circle all observed)	Negative Examples (circle all observed)
P1. Greets by name	N1. Frowns mostly
P2. Light-hearted conversation on nonwork-related subjects, jokes	N2. Makes rude remarks, gossips
P3. Is relaxed	N3. Is tense
P4. Is friendly, but professional	N4. Shouts at supervisees
P5. Shows interest in supervisees	N5. Doesn't show interest in supervisees
P6. Encourages supervisees to attend to clients first	N6. Belittles
P7. Offers sympathy	N7. Thinks everything else should stop

Comments on examples:

2. Discusses Previous Visit

Score: _____ (1-10)

Positive Examples (circle all observed)	Negative Examples (circle all observed)
P1. Discusses recommendations from a previous visit	N1. Never refers to a previous visit; no continuity from the past
P2. Checks progress on work plan developed on an earlier visit	N2. Doesn't check the work plan
P3. Tells facility staff what s/he was able to do for them	N3. Doesn't tell facility staff what s/he tried to do for them since the last visit
P4. Checks on skills s/he educated them on in an earlier visit	N4. Doesn't check on any new skills of supervisees

Comments on examples:

3. Promotes Participation of Supervisees

Score: _____ (1-10)

Positive Examples (circle all observed)	Negative Examples (circle all observed)
P1. Gets supervisees to ask questions	N1. Does most or all of the talking
P2. Asks open-ended questions	N2. Doesn't ask them any probing questions
P3. Uses "we" to discuss issues	N3. Sarcastic
P4. Asks supervisees' opinions	N4. Cuts them off; doesn't give them enough time to respond
P5. Gets supervisees to discuss their shared vision of quality	N5. Doesn't listen to them or show interest in what they say
P6. Promotes a discussion with supervisees on services	

Comments on examples:

[4] In the study on the quality of supervisor-provider interactions in Zimbabwe, each performance category (e.g., Develops Rapport with Supervisees, Discusses Previous Visit) was on a separate page, leaving researchers ample space for comments.

4. Problem Identification with Supervisees

Score: _____ (1-10)

Positive Examples (circle all observed)	Negative Examples (circle all observed)
P1. Asks what problems there are here	N1. Fails to probe about any problems here
P2. Asks if they are meeting their targets	N2. Zooms in and out; just "tours" facility
P3. Uses a checklist to identify problems	N3. Does not use a checklist for problem identification
P4. Encourages staff to identify their own problems	N4. Doesn't give staff time to reflect on their own problems
P5. Asks supervisees if clients have any complaints about services	N5. Exaggerates the magnitude of small problems
P6. Helps facility recognize its problems	N6. Ignores or misses obvious problems, like client flow

Comments on examples:

5. Problem Solving with Supervisees

Score: _____ (1-10)

Positive Examples (circle all observed)	Negative Examples (circle all observed)
P1. Discusses possible causes of problem	N1. Assumes s/he knows cause of problem
P2. Discusses alternative solutions	N2. Doesn't consider alternative solutions
P3. Develops job aids to address problems	N3. Imposes a solution
P4. Demonstrates new skills to solve problems	N4. Makes unrealistic suggestions
P5. Helps them prioritize their problems	N5. Doesn't help them to prioritize
P6. Helps them see what they can do	N6. Doesn't encourage supervisees to come up with possible solutions
P7. Develops work plan to address problems	N7. Doesn't develop or review work plan

Comments on examples:

6. Gives Feedback to Supervisees and Facility

Score: _____ (1-10)

Positive Examples (circle all observed)	Negative Examples (circle all observed)
P1. Observes performance of supervisees for sufficient time	N1. Fails to observe performance or to give feedback on critical issues, like safety
P2. Praises when appropriate	N2. Only or mostly finds fault
P3. Diplomatic and tactful correction	N3. Just gives instructions without explaining
P4. Doesn't criticize or shame in public	N4. Dictates; gives orders
P5. Doesn't shout at supervisee	N5. Gets unreasonably angry or hysterical
P6. Records findings in facility's book	N6. Fails to record any findings at facility
P7. Gives only as much feedback as the supervisee can handle	N7. Gives excessive feedback

Comments on examples:

7. Gives Education or On-Job Training

Score: _____ (1-10)

Positive Examples (circle all observed)	Negative Examples (circle all observed)
P1. Identifies gaps in skills/knowledge	N1. Gives no OJT, even where clear need exists
P2. Demonstrates new or improved skills	N2. Dictates new skills, rather than educates
P3. Gives full explanations	N3. Gives erroneous information
P4. Gives concrete examples	N4. Uses language that is too technical
P5. Ensures the supervisee understood	N5. Assumes supervisee has understood
P6. Provides teaching aids or job aids	N6. Threatens loss of jobs if they don't do it

Comments on examples:

8. Discusses Data – Its Meaning and Use

Score: _____ (1-10)

Positive Examples (circle all observed)	Negative Examples (circle all observed)
P1. Reviews records and reports	N1. Fails to review records or reports
P2. Discusses what is in records/reports	N2. Misinterprets data
P3. Comments on and encourages graphs	N3. Doesn't refer to data or graphs
P4. Explains meaning of data	N4. Shows no interest in facility's data
P5. Helps facility use data for identifying problems and improving quality	N5. Doesn't encourage use of data

Comments on examples:

9. Makes Suggestions, Is Proactive

Score: _____ (1-10)

Positive Examples (circle all observed)	Negative Examples (circle all observed)
P1. Makes innovative suggestions	N1. Is not very enthusiastic or innovative
P2. Improvises when needed	N2. Expresses pessimism about facility
P3. Implements new, innovative ideas	N3. Doesn't try to introduce anything new
P4. Provokes thinking	N4. Doesn't encourage facility to have a vision
P5. Uses data in unique ways	N5. Wastes a lot of time at the facility
	N6. Doesn't use time effectively

Comments on examples:

10. Seeks Client Input

Score: _____ (1-10)

Positive Examples (circle all observed)	Negative Examples (circle all observed)
P1. Talks to exiting clients about the services	N1. Makes no effort to talk to clients
P2. Checks and reads notes in the suggestion box	N2. Doesn't ask clients if they have any complaints or problems with services
P3. Asks clients if they understood	N3. Doesn't respect what a client says
P4. Talks to waiting clients or relatives about the services	N4. Makes fun of clients' remarks in a way that belittles them
P5. Seeks input from local communities	N5. Is not systematic about getting client input

Comments on examples:

11. Discusses Next Visit

Score: _____ (1-10)

Positive Examples (circle all observed)	Negative Examples (circle all observed)
P1. Discusses what needs to be done before next visit	N1. Doesn't recap what needs to be done
P2. Tells what s/he will do before next visit	N2. Doesn't tell facility what s/he will try organize for them at district level
P3. Gives them an idea of what her/his objectives will be on the next visit	N3. Doesn't mention any subsequent visit

Comments on examples: