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An Action Plan in Benin:

Strategies, Protocols and Training for Better Family Health

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Responding to an Acute Need

The West African nation of Benin is one of the smallest countries where the PRIME II Project works, similar to the state of Tennessee in land area. Taking advantage of that manageable scale and Benin's political stability over the past decade, PRIME is playing a leading role in a broad-based effort to improve primary-level family planning and reproductive health care. From the dusty market town of Malanville in the semiarid north to the bustling coastal cities of Porto-Novo and Cotonou, PRIME's technical assistance ranges from national policy-making to hands-on training of community-based providers in both rural and urban environments. PRIME's emphasis on building health care capacity at the primary level is ideal for Benin, where transportation and communications are frequently problematic and there are 28,000 residents for every physician.[1]

The need for better health care in Benin is acute. Life expectancy is 50 for Beninese, and an estimated 2.5% of the population aged 15 to 49 is infected with HIV/AIDS. The country's infant mortality rate stands at 94 deaths per 1,000 live births, and almost a quarter of deliveries occur in the home. Perhaps most telling, each woman's lifetime risk of dying from complications of childbirth is one in 12. Low usage of health centers, poor quality of services, insufficient availability of essential medicines, and inadequate management and training exacerbate Benin's health problems.[2]

The government of Benin demonstrated a strong commitment to improving the situation when the country became the first in its subregion of West Africa to institute a comprehensive action plan to reduce maternal and neonatal mortality. The plan has four cornerstones:

- Decentralizing health care training, logistics and management systems to the district level
- Establishing programs to improve maternal health and child survival
- Integrating family health services, including prevention of HIV/AIDS and other sexually transmitted infections
- Implementing national family health protocols.

Benin

Good food, a legacy of fine art, and widespread belief in the practice of voodoo are among the cultural hallmarks of Benin, a West African nation located between Nigeria and Togo and also bordering Burkina Faso and Niger. Fon, Adja, Yoruba and Bariba are the main ethnic groups in the country, the site of the powerful 17th- and 18th-century kingdom of Dahomey. Dahomey became a major center of the slave trade after European contact, exporting slaves—and voodooism—to the Caribbean and Brazil. Dahomey was ruled by France as a colony beginning in 1893, gained its independence in 1960, and became the Republic of Benin in 1975. After enduring a series of coups and 17 years as a Marxist state, Benin has functioned for more than a decade as a multiparty democracy. Although Porto-Novo is the official capital, most government offices are located in the larger city of Cotonou, the country's commercial center.

Of Benin's approximately six and a half million people, 37% are estimated to live below the poverty line, and the economy is largely dependent on subsistence agriculture, along with cotton production and regional trade. Corn, sorghum, cassava and yams are primary crops, and the major industries include textiles, cigarettes and beverages. From beautiful beaches on the hot and humid coastline along the Gulf of Guinea, Benin's landscape changes to wooded plateau and savannah in the central region, then to hills in the northwest and fertile plains in the northeast.

Strength in Partnership

Support from the government and the United States Agency for International Development (USAID) has enabled PRIME's work in Benin to evolve, producing a shining example of the Project's commitment to solicit and respond to opportunities for cost-sharing, joint planning and leveraging of resources with collaborating organizations. PRIME works closely with Benin's Ministry of Health on projects that complement PROSAF, a USAID-funded bilateral integrated family health program led by University Research Council (URC) in the rural northern departments of Borgou and Alibori. PRIME's role in Benin also involves partnerships with Population Services International (PSI), the World Health Organization (WHO), and PBA/SSP (*Projet Bénino-Allemand des Soins de Santé Primaires*), a project funded by the German international development corporation GTZ.

Putting Protocols into Practice

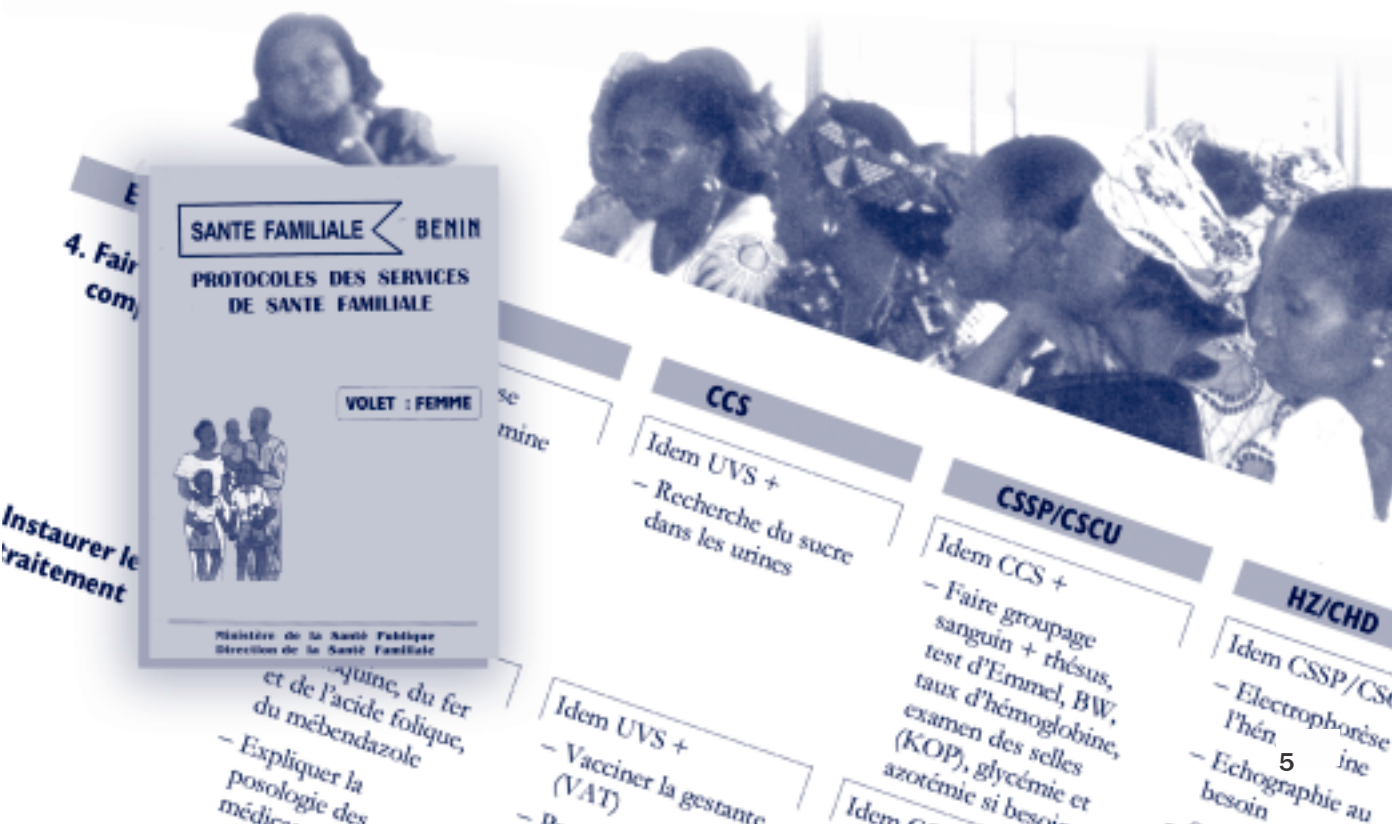
PRIME has been assisting the Ministry of Health in developing national family health protocols since 1999, offering extensive input on content and the creation of a user-friendly presentation of the material. Organized in three volumes covering women, common reproductive health services, and men, youth and children, the protocols are designed to assist providers at each level of Benin's service delivery system, from communal health centers and sub-district clinics to tertiary hospitals. PRIME is field-testing the protocols in selected health districts of Borgou

and Alibori (in conjunction with PROSAF), and the departments of Atlantique and Mono.

For the field-test of the protocols, PRIME assisted in the design of a three-week training program that generates a practical and replicable method of disseminating the protocols and making sure they are used effectively. Instead of asking providers to travel to a central location for traditional classroom sessions, the program follows PRIME's philosophy of minimizing disruptions in health care services by training providers at their own facilities through blended learning approaches. Training the providers at their workplaces also allows them to identify facility-specific problems—for example, inadequate infection prevention—and address them immediately using the protocols.

The three-week program combines a short classroom orientation with tutorials and self-directed learning. Specially trained tutors—selected by regional and district health management teams—assist and motivate learners, offering regular feedback. During the first week of training, a tutor visits a health facility and orients the providers to the protocols using case studies, role-plays and demonstrations. Since all of the providers from a facility are trained together, they become peers who reinforce and encourage each other in the learning experience.

In the second week, the providers rely on these peer relationships, conducting their own group study sessions using a package of self-directed learning materials that includes job aids, short readings with self-tests, and learning tasks involving role-plays, case studies and mock consultations. For the final week, the tutor returns to the health center to evaluate and review progress, continue coaching providers and prepare a report for supervisors. The course content is integrated into existing supervision structures to ensure continuity in support of the learners as they apply their new knowledge and skills on the job.

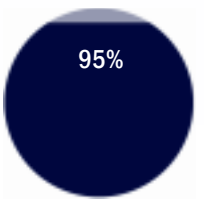


Encouraging Results from the Field

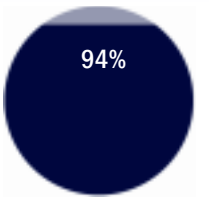
Implementing the training program to field-test the protocols in facilities across Borgou and Alibori involved several steps. After conducting a training needs assessment, PRIME and the Ministry of Health developed training guides, identified and trained six trainers and 13 tutors in supervision and tutorial approaches, and then selected 39 nurses and midwives from 14 health centers in three health districts for the initial field-test. The training of the providers took place in September 2001.

A follow-up study six months later evaluated 27 of the trained providers and 12 of the tutors using case studies, knowledge tests, interviews and service statistics. The protocols had been consulted by 95% of the providers subsequent to training, and more than half reported using them often; 88% affirmed that they found the protocols useful for diagnosis and case management. While some aspects of the training program still need attention, 94% of the providers were able to identify appropriate protocols and describe the process of care when given a case example. Not surprisingly, mean scores on knowledge tests administered during the follow-up study were not as high as those on tests given immediately after training but they still showed sustained improvement from pre-training test scores in the subject areas of STIs (81% vs. 45%), infant health (66% vs. 51%) and safe motherhood (74% vs. 59%). The study also suggested that promising changes in services may be taking place—the number of days RH services are offered had increased and higher numbers of pregnant women were attending prenatal consultations.

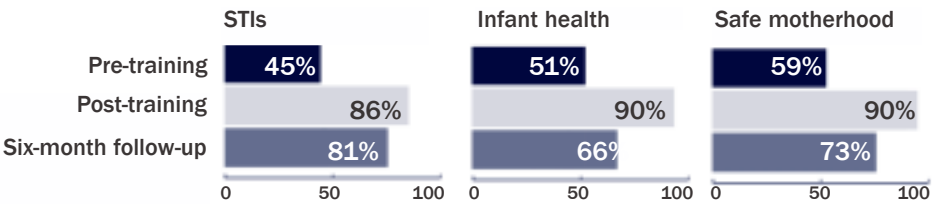
Consultation of the protocols subsequent to training n = 27



Identification of appropriate protocols and process of care n = 27



Mean scores on knowledge tests n = 39



A Performance Improvement Approach to Reducing Maternal and Neonatal Mortality

Complementing the new family health protocols, the Ministry of Health's Emergency Obstetric and Neonatal Care (EONC) strategy was finalized in 1999 in collaboration with the Regional Health and Development Center (CREDESA) and the National Midwives Association. Funding from USAID and technical assistance from PRIME were instrumental in completing the strategy, which focuses on training, logistics and community partnerships for birth preparedness. At the request of the MOH and PROSAF, and with the endorsement of USAID/Benin, PRIME is applying its expertise in the Performance Improvement (PI) approach, which helps organizations make strategic use of resources by identifying gaps in service delivery and selecting effective interventions to close those gaps.

Maternal deaths in Benin are caused most frequently by severe anemia, hemorrhaging and postpartum or postabortion infections. Poor sanitation and lack of appropriate medications contribute to these outcomes. To understand the situation in more depth, PRIME and the Ministry of Health met with project stakeholders to plan a Performance Needs Assessment (PNA) in Alibori's Malanville/Karimama health district. Stakeholders contributed their expertise to prepare tools for data collection and the Ministry of Health and PROSAF lent vehicles to transport the data collectors, who fanned out to gather information from community members and service providers, including midwives, nurses, midwife assistants, matrons and traditional birth attendants.

Completed in November 2000, the study found numerous factors contributing to high rates of maternal and neonatal mortality. Personnel were unqualified in nearly half of the district's maternity centers, where the causes of gaps between actual and desired performance included the lack of job descriptions, supervision systems, infection prevention measures, EONC knowledge and skills, training capability and transportation networks for referrals. Aggravating the dire situation in the health centers were logistical problems in maintaining adequate equipment and supplies.

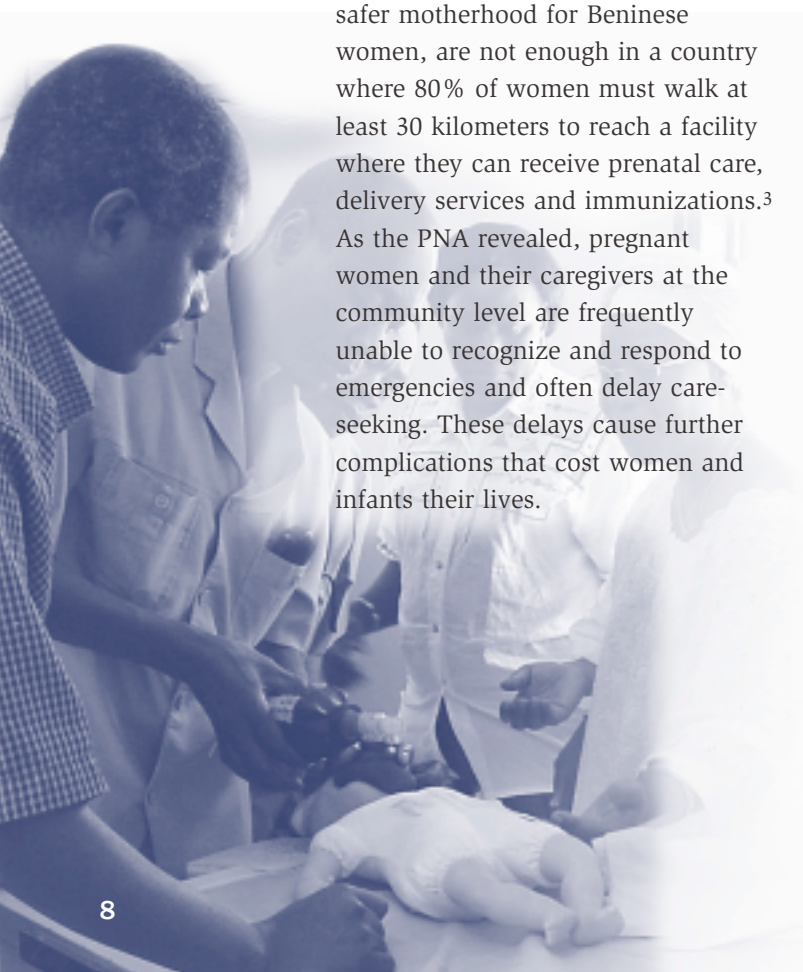
In response to the findings of the PNA, stakeholders met in January 2001 to plan interventions and define

partner roles in implementation. PRIME undertook a major responsibility for developing a national training curriculum for nurses, midwives and other primary providers of EONC services, which will enhance their ability to respond to complicated pregnancies and postpartum emergencies. Following the training of trainers and supervisors, a WHO-supported pilot program to implement the curriculum began in early 2002 in Malanville/Karimama and other selected health districts throughout Benin.

The wide scope of the EONC strategy also includes non-training PI interventions in such areas as job descriptions, systematic feedback, supervision, provider motivation and even motorbike management to meet transportation needs. PROSAF handles aspects of the program best suited to its mandate, among them logistics, reinforcing supervision systems, training trainers and supporting community partnerships. PBA/SSP has contributed the funding for training providers and works mainly in infection prevention, management and infrastructure, including the construction of health care facilities.

Community Partnerships for Birth Preparedness

Improving health system logistics and the knowledge and skills of primary providers, while essential steps to safer motherhood for Beninese women, are not enough in a country where 80% of women must walk at least 30 kilometers to reach a facility where they can receive prenatal care, delivery services and immunizations.[3] As the PNA revealed, pregnant women and their caregivers at the community level are frequently unable to recognize and respond to emergencies and often delay care-seeking. These delays cause further complications that cost women and infants their lives.



Drawing from experience in setting up community partnerships for safe motherhood in India and Guinea, PRIME has assisted PROSAF in establishing a pilot project in Malanville/Karimama health district to encourage pregnant women, their families and their communities to make practical plans detailing how they will respond to an obstetric or neonatal emergency, should one occur. These plans mobilize village health promoters, facilitate prepaid community health insurance arrangements, make provisions for emergency transportation to health centers and referral hospitals, and stress timely prenatal care to identify and prepare for potential complications. In March 2002, for example, PRIME conducted workshops in 11 villages of the Guene commune, during which village leaders came together and agreed on action plans for establishing EONC partnerships in their communities.

Family Planning Counseling and Services through Pharmacies

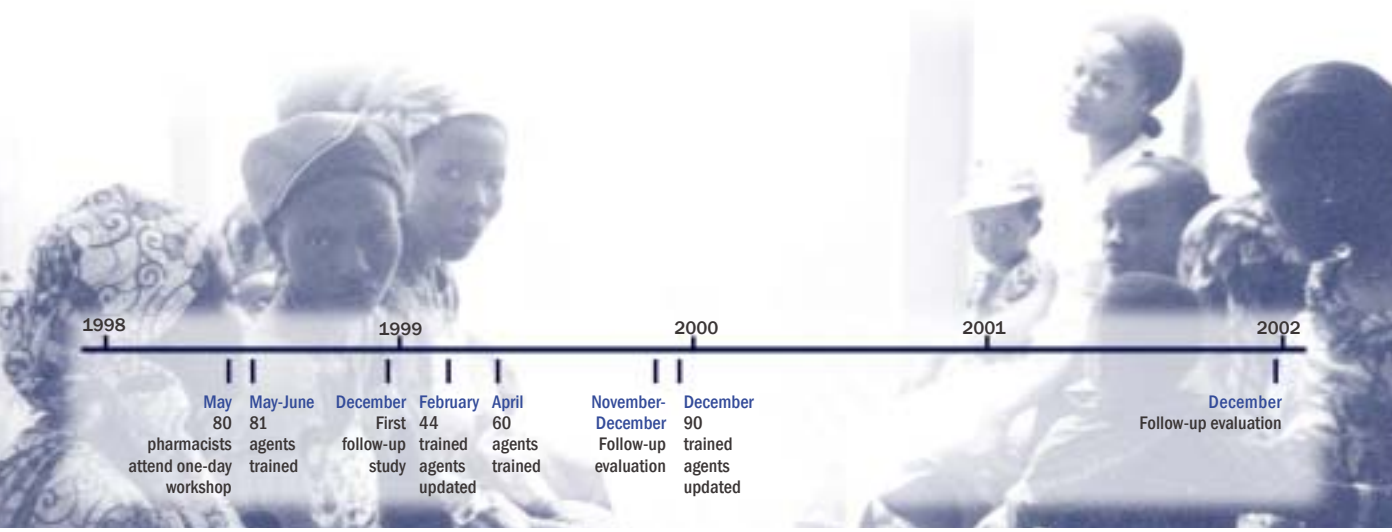
Pregnancies that are unwanted or unplanned only increase the odds of maternal mortality and morbidity. Unmet need for family planning is high in Benin, where the average woman bears six children and only 7% of married women aged 15 to 49 are using modern contraception.[4] PRIME's longest-running program in Benin, a collaborative venture with PSI, works to make private-sector pharmacies more effective in providing family planning counseling and services.

PSI has been working in Benin since 1990 to introduce a variety of health products using social marketing plans. In 1998, PSI requested PRIME's assistance in developing and implementing a training strategy that would enable private-sector pharmacies to responsibly sell *Harmonie*, a low-dose contraceptive pill. Working through the pharmacies presented some challenges. In Benin, pharmacists are businessmen who open and close their shops but do not always provide services themselves. Instead, their agents—or clerks—dispense pharmaceuticals, often without a prescription, even though it is illegal to do so. Typically, these agents have an eighth-grade education and no formal training in pharmacy.

Obtaining buy-in from the pharmacists became the essential first step in achieving PSI's goal of responsibly selling 15,000 packets of *Harmonie* in a year. PRIME and PSI approached Benin's 124 private-sector pharmacists through their professional organization and 80 agreed to attend a one-day workshop, the first of what would become annual meetings. After that initial session, 47 of the pharmacists decided to allow agents from their pharmacies to participate, and PRIME trained 81 agents between May and June 1998. The training design incorporated self-study materials as a prelude to three half-day classroom sessions emphasizing acquisition of skills. Subjects included reproductive health in Benin, quality of care and access to services in the pharmacy setting, strategies for offering family planning counseling and delivering methods, and technical knowledge about combined oral contraceptives, progestin-only pills and emergency contraception.

Trained Agents Providing Better Counseling and Method Delivery

In December 1998, PRIME conducted its first follow-up study of the program in the departments of Atlantique and Oueme, which include Porto-Novo and Cotonou. Using a combination of interviews and visits by "mystery clients," PRIME arrived at a summative score for measuring the quality of family planning services delivered by 21 trained agents, 21 untrained agents working alongside trained agents in participating pharmacies, and 21 untrained agents from non-participat-

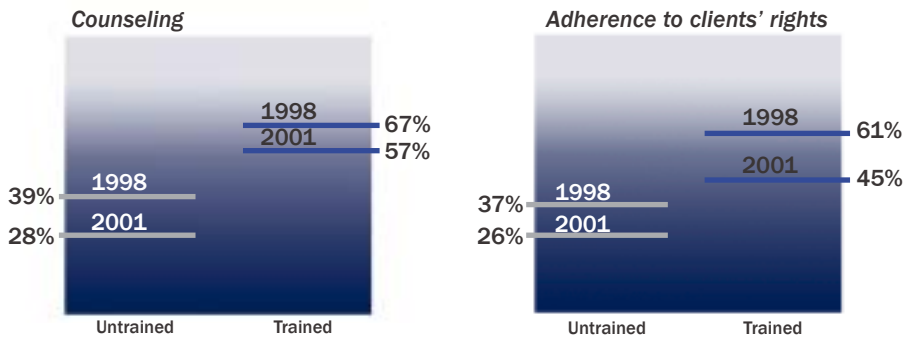


ing pharmacies. The study focused on the ability of agents to counsel new clients for family planning according to a series of required steps and adhere to a set of ten clients' rights including access, privacy, safety, confidentiality and choice.

The follow-up study showed that the trained agents were delivering higher-quality family planning services than their counterparts at pharmacies that had not participated in training. The evaluation also implied that the trained agents might be positively affecting the performance of their untrained co-workers through sharing information or modeling behaviors acquired during training. Overall, however, the levels of performance showed room for improvement. Trained agents scored 67% in counseling and 61% in adherence to clients' rights; their untrained co-workers tallied 58% and 55% in the two categories, while untrained agents at non-participating pharmacies scored 39% and 37% respectively.

Between February and April 1999, 60 additional pharmacy agents were trained in counseling and contraceptive technology and 44 of the previously trained agents received updates, including new material on condoms, spermicides and STI/HIV prevention. Another PRIME follow-up study conducted in November and December 1999 showed that trained agents continued to perform significantly better than their untrained counterparts. The study cited the need for improved supervision and job aids, however, in response to findings that some agents were not offering clients enough information about missed pills and danger signs or providing adequate counseling on condoms and other available methods. After revising the self-study materials in December 1999, PRIME

Mean summative scores, trained and untrained pharmacy agents, 1998 and 2001



worked with PSI trainers to update the skills of 90 previously trained agents, and to strengthen the capacity of the trainers to conduct future updates without PRIME's technical assistance.

Most recently, PSI asked PRIME to assist with a December 2001 evaluation of the program. While performance remained less than optimal, findings once again showed trained agents' scores to be significantly better than their untrained counterparts at non-participating pharmacies in counseling and contraceptive method delivery (57% vs. 28%) and adherence to clients' rights (45% vs. 26%). According to PSI, as of June 2002 more than 250,000 cycles of *Harmonie* have been sold in Benin since the product was first marketed in April 1998.

Moving Forward

As PRIME-assisted programs in Benin develop and expand, the Project is offering technical expertise in new areas. Inspired by an action plan prepared by Benin's country delegation at the first conference on postabortion care (PAC) in Francophone Africa (held in Dakar, Senegal, in March 2002), the Ministry of Health has asked PRIME to assist in conducting an assessment and organizing a meeting to explore the addition of PAC to the MOH's strategy for reducing maternal mortality. During 2002-03, PRIME is also helping to design a community-based services curriculum that will be integrated into the Ministry's existing programs as part of its emphasis on decentralizing health care. In addition, Benin is one of three countries participating in a USAID/Washington-funded PRIME initiative to reduce maternal mortality and morbidity due to postpartum hemorrhage.

While nationwide implementation of the family health protocols and EONC action plan will continue to present challenges, the encouraging preliminary results from these programs—and the exemplary model for collaboration that has been established—hold great promise for sustained improvements in family planning and reproductive health care for all Beninese.

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