



Partners for Health Reformplus

### Primary Health Care Reform in Albania: Findings from an Impact Assessment of a Pilot Project

June 2005

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Partners for Health Reformplus is USAID's flagship project for health policy and health system strengthening in developing and transitional countries. The five-year project (2000-2005) builds on the predecessor Partnerships for Health Reform Project, continuing PHR's focus on health policy, financing, and organization, with new emphasis on community participation, infectious disease surveillance, and information systems that support the management and delivery of appropriate health services. PHRplus will focus on the following results:

- ▲ Implementation of appropriate health system reform.
- Generation of new financing for health care, as well as more effective use of existing funds.
- Design and implementation of health information systems for disease surveillance.
- ▲ Delivery of quality services by health workers.
- Availability and appropriate use of health commodities.

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## Abstract

This report describes results from the monitoring and evaluation of a primary health care (PHC) pilot in Albania. Recent health sector reform efforts in Albania have focused on strengthening the primary health care system. The Partners for Health Reform*plus* (PHR*plus*) Project provided technical assistance to Albanian counterparts for the implementation and assessment of a pilot PHC intervention in two Albanian districts with the hope that results from the pilot would inform the design of a national PHC model. Components planned under the PHC pilot intervention were: purchasing new equipment for pilot facilities; training providers in the implementation of clinical practice guidelines; revising the medical chart system; building management capacity; improving community outreach; and implementing health financing reform. The purpose of assessment was to evaluate whether the intervention was carried out as planned and to measure its impact on availability, utilization, and quality of PHC services, emphasizing reproductive and curative care.

Baseline and follow-up surveys were conducted of health facilities, individual providers, and households in four intervention areas (in Berat and Kuçova districts) and two control areas (in Fier district) between 2002 and 2004. The assessment showed that PHR*plus* was able to implement all of the planned intervention components, with the exception of health financing reform. Key results in intervention areas include: a sharp increase in modern contraceptive use; a significant decrease in "bypassing" of PHC facilities; an overall increase in the percentage of clients using PHC facilities; and evidence of increased use of data for clinical and managerial decision-making. This case study suggests that making changes in the PHC system using a pilot approach is not only feasible, but that pilot activities themselves have the potential to improve utilization and quality of care at PHC facilities.

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# Acronyms

| CPG     | Clinical Practice Guideline                        |
|---------|--|
| GP      | General Practitioner                               |
| HII     | Health Insurance Institute                         |
| HIS     | Health Information System                          |
| INSTAT  | Institute of Statistics                            |
| IRD     | Intensive Research and Demonstration               |
| МОН     | Ministry of Health                                 |
| РНС     | Primary Health Care                                |
| PHRplus | Partners for Health Reformplus                     |
| PRIME   | Partnership in International Medical Education     |
| USAID   | United States Agency for International Development |

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## **Executive Summary**

In the past decade, Albania's health care delivery system has experienced substantial structural changes that affect primary health care (PHC). The impetus for these changes comes from both outside the health sector – in the form of decentralization – and from inside the health sector (such as efforts to reform health financing and management in Tirana). Some of these structural changes, combined with the other economic and social challenges the country faces, have weakened the PHC system over the past decade. As a result, recent health care reform efforts have focused on strengthening PHC.

The Partners for Health Reform*plus* (PHR*plus*) Project provided assistance to Albanian counterparts to implement pilot PHC reforms in Berat and Kuçova districts. It was hoped that the pilot reforms would result in more efficient and higher quality care, and, if effective, that they could then be replicated from pilot sites to the entire country. To assess the impact of pilot reforms, PHR*plus* supported INSTAT (the Albanian Institute of Statistics) in conducting baseline and follow-up surveys to assess changes in availability, utilization, and quality of selected PHC services in pilot sites. The purpose of this report is to present major findings from the assessment of the PHC intervention.

#### **Description of the Pilot Intervention**

A situation analysis carried out by PHR*plus* suggests that a number of problems affect the provision of primary health care services in Albania. Overall, PHC facilities offer a limited scope of services in comparison with care offered in other countries at a comparable level, while there are also significant problems of quality. A number of factors have contributed to this situation. PHC facilities have weak linkages to the broader health care system and their financing and management has been fragmented due to recent decentralization efforts. Central budget constraints have left them with minimal resources for operations and maintenance, thus reducing the number and quality of services that they can provide. Facilities themselves possess little management autonomy and lack processes to improve quality of care. The Albanian government has not defined a PHC model, while lack of training materials for providers – especially in family medicine – further compromises quality of care. PHC facilities have little connection with the communities they serve. There are no mechanisms for the population to provide information about their perceptions of quality and efficiency of care, in order for facilities to better respond to individual and community health needs. Patients frequently self-refer to higher level facilities (polyclinics and hospitals) in response to the poor quality of care offered by PHC centers. This latter dynamic incurs additional costs in terms of travel, time, and higher out-of-pocket costs, and contributes to greater cost and inefficiency within the health care system overall.

PHR*plus* ' worked with national and local stakeholders to identify a set of pilot interventions to address the problems affecting the PHC system. The strategy focused on implementation of a pilot model for PHC delivery in order to test PHC reforms and to build local capacity, combined with organization and management at the district and regional levels; and policy work at the central level. Pilot implementation took place between early 2002 and mid 2004, and was conducted at four PHC

centers in Berat and Kuçova districts (two urban and two rural). The objectives of the pilot model, which was designed with national and local stakeholder input and support, were to: integrate PHC services including reproductive health and family planning services; improve quality of services; improve availability and use of health information; and improve budgeting, financing, and planning. Specific components planned for the level of PHC facilities were: developing a new health information system (HIS), purchasing equipment; developing clinical practice guidelines; training doctors and nurses; revising and auditing medical charts; and building management capacity. Community outreach mechanisms were designed to improve relations between PHC facilities and the communities they serve, while a health financing component was planned, with the objective of setting financing policies and guidelines for PHC nationally.

#### **Study Design and Methodology**

The pilot interventions were implemented at four PHC facilities – two in Berat and and two in Kuçova districts. The catchment areas in which these four facilities are located formed the basic units of analysis for the assessment study, along with two comparable areas in Fier district (also one urban and one rural) that served as control groups. This study design allows comparison pre- and post-intervention comparison, as well as comparison between treatment and control groups. Within each catchment area, PHR*plus* and INSTAT carried out household, facility, and provider level baseline and follow-up surveys. Baseline data collection took place in December of 2002 and follow-up data collection between November of 2004 and January of 2005. The surveys focused on four basic types of health services: treatment for chronic health conditions, treatment for acute health conditions, preventive health care, and reproductive health care. INSTAT administered all the surveys with assistance from PHR*plus*.

The baseline and follow-up household samples included 2,000 households in the catchment areas surrounding the four intervention PHC facilities in Berat and Kuçova districts, and two comparable catchment areas in Fier district. Information was collected on socio-economic and demographic characteristics, and on utilization of curative, preventive, and reproductive health care. The facility survey sample included all the types of government health care facilities in the six sample catchment areas (hospitals, maternities, polyclinics, PHC facilities, and ambulances), with 26 facilities participating in all. Information was collected on availability of services, number and types of staff working at each facility, hours of operation, facility infrastructure, availability of water and electricity, consultation fees, use of managerial and quality assurance practices, and availability of inservice training opportunities. Providers from each of these facilities participated in the provider survey, with a total of 110 providers interviewed. These individuals provided information on their technical qualifications and training, facility supervision and management practices, types of services provided at their facility, and their views on their place of employment.

#### **Results**

An analysis of project documents and survey results revealed that all of the components planned under the pilot intervention were implemented as planned, with the exception of the health financing component, the only component that was supposed to have impact beyond the four pilot PHC sites. As a result, the results presented here pertain only to the level of the four pilot PHC sites and their immediate catchment areas. Key findings from an analysis of household-, facility-, and provider-level data include the following:

- ▲ There was a sharp increase in the use of modern contraceptive methods in pilot areas between the time of the baseline and follow-up surveys, from 4.5 percent to 7.6 percent, a statistically significant increase at 1 percent level or better. The percent of women in control areas who reported currently using modern family planning methods remained virtually unchanged. The difference in performance between the intervention and control groups is statistically significant at the 5 percent level.
- ▲ Findings from the follow-up survey indicate that the rate of bypassing has dropped remarkably in the pilot areas. The rate of bypassing among cold and flu sufferers in the pilot areas decreased from 43.4 percent to 23 percent. The rate of bypassing in the control areas decreased also, but only by around 4 percent, which is not statistically significant. The difference in performance between the intervention areas and the control areas is statistically significant at the 5 percent level. Similar conclusions also emerge when the analysis is broadened to include all acutely ill government clients, not just those who report having colds and the flu.
- ▲ In intervention areas, the percent of clients who reported using primary care facilities for chronic care in the last month increased from 50.0 percent to 64.6 percent. Use in the control group increased as well, from 37.1 percent to 42.1 pecent, but this was not statistically significant. This difference in performance between the intervention areas and the control areas is statistically significant at the 10 percent level. Similar conclusions emerge when looking at the percent of clients using PHC services over the six-month or one-year period prior to the survey, rather than the one-month period.
- ▲ Health information systems put in place by PHR*plus* in 2002 had begun to prompt behavior change among providers by the time of the follow-up provider survey; 29 percent of providers at PHR*plus* sites said that they had made changes in their practice based on information from the HIS.
- ▲ Intervention facilities are much more likely to have clinical practice guidelines or protocols for specific physical conditions. The facility surveyed showed that between 75 percent and 100 percent of pilot facilities have clinical practice guidelines or protocols for family planning counseling, family planning methods, acute care, and chronic care. No control facilities reported having protocols or guidelines for these four types of services.

#### Conclusion

This Albania case study suggests that PHC system changes using a pilot approach are not only feasible, but can potentially improve the quality of care, reduce the bypassing of PHC facilities, and, in the case of reproductive health services, improve coverage rates in a short time. These results, which are based on the comparison of changes in utilization patterns among a random sample of individuals in the intervention areas vs. the control areas, suggest that the improvements in performance were the result of the PHR*plus*-supported intervention package, which included the HIS, provider training, the medical record chart audit, clinical practice guidelines, and community outreach activities. These tools and strategies appear to have improved PHC system performance through the adoption of and adherence to quality standards, the use of patient encounter data to improve clinical and managerial decision-making, and the provision of health information to target groups, including women of reproductive age, adolescents, and the chronically ill. While the results of this study support the finding that the pilot approach had an impact on PHC system performance in the pilot areas, the next step for Albania to realize the full "return" on this investment in research and

development is to implement broader system-level reforms in order to cost-effectively roll out reforms nationwide (Cook, McEuen, and Valdelin 2005). With sufficient political commitment to reforms and a well-developed implementation approach,<sup>1</sup> Albania can make considerable progress in improving the accessibility, quality, and efficiency of primary health care services for its entire population.

<sup>&</sup>lt;sup>1</sup> See Cook, McEuen, and Valdelin (2005) for a strategic framework for top-down implementation of PHC reform as well as recommended steps for implanting the reform in initial, mid-term, and long-term phases.

## 1. Introduction

In the past decade, Albania's health care delivery system has experienced substantial structural changes that affect primary health care (PHC). Ongoing efforts to reform the health care sector are vitally important because they can substantially influence the availability and quality of health care services, and the efficiency and financial viability of the health sector. The piloting of health reforms at the local level is one way to assess how well alternative health reform strategies work. The idea is to implement complex health reforms on a small scale, learn from the experience through monitoring and evaluation, and then, if effective, scale-up the reforms to the rest of the country. However, the experience of many pilots carried out in a wide variety of settings around the world suggests that the learning component frequently does not happen, largely because appropriate monitoring and evaluation is not carried out, or is started too late, to assess program impact. As a result, health decision makers are often uncertain about whether the pilot actually had an impact or not, and even whether the pilot was carried out as planned. This is unfortunate because the lack of evidence often leads to poor decisions on whether and how to scale up health reform initiatives.

In Albania, the Partners for Health Reform*plus* (PHR*plus*) Project provided assistance to Albanian counterparts to carry out a PHC pilot in two districts, Berat and Kuçova. The project results are feeding into a proposed model for the provision of PHC across Albania, including a replication plan of the pilot from the four pilot sites to the entire country. The PHC pilot may offer a number of potential tools to move the country toward a more efficient health care system and to deliver higher quality care.

To assess the impact of the pilot project on the availability and utilization of selected PHC services, the Institute of Statistics (INSTAT) administered baseline and follow-up surveys of health providers and households. The objective of this report is to use the information collected through the surveys to assess whether the pilot project achieved its intended goals.

#### 1.1 Background on PHRplus

PHR*plus* is the U.S. Agency for International Development's (USAID's) flagship project in health policy and systems strengthening. USAID looks to PHR*plus* to provide technical assistance in, and to help maintain USAID's worldwide leadership role in, health care reform, health policy, management, health financing, and systems strengthening. PHR*plus* works in more than 20 countries worldwide.

In order to improve the availability of evidence on the impact of health system-strengthening initiatives, USAID requested PHR*plus* to establish an intensive research and demonstration (IRD) site under one if its long-term country assistance programs. Albania was selected as this IRD site. This means that, in addition to assisting Albanian counterparts to design and implement PHC reforms, a separate PHR*plus* team provided assistance to monitor and evaluate the effectiveness of these reforms. These IRD evaluation efforts are a research and development investment designed to enhance the amount and the quality of evidence on the piloted reforms in order to help guide future health sector investments by Albanians, USAID, and other donors. The return on this investment will

be useful information and concrete products that can inform the development of an integrated PHC delivery system that is affordable to the Albanian economy, hence reducing costs for future investments. This IRD evaluation will also hopefully prove useful to international donors and other countries pursuing health sector reforms by demonstrating the feasibility and value of evaluating the impact of health system interventions.

#### 1.2 Overview of Evaluation Study

The purpose of the research study is to evaluate the impact of the PHR*plus*-supported interventions on the use of PHC services, with particular focus on reproductive and curative health care. The data used in the evaluation study have two dimensions:

- ▲ Baseline and follow-up surveys in the pilot areas of Berat and Kuçova that measure changes in specific indicators before and after the program interventions. The baseline surveys were completed in November/December 2002 and the follow-up surveys were completed in November 2004/January 2005.
- ▲ Baseline and follow-up surveys in intervention and control groups that compare indicators in locations that received interventions (four "intervention" areas in Berat and Kuçova) with locations that did not receive interventions (two "control" areas in Fier).

The surveys are composed of a household and facility surveys, both administered by INSTAT. Each household survey collected information on health problems, preventive and curative health care utilization, contraceptive use, health care expenditures, and perceptions of service quality from 2,000 urban and rural families living in Berat, Kuçova, and Fier. The survey of 26 health care facilities included interviews of 110 health care providers and patients at each type of public health care facility – ambulances, PHC centers, polyclinics, maternities, and hospitals. Information was collected on the availability and quality of services, provider training, quality assurance, and management practices.

The objectives of the impact evaluation are the following:

- To investigate whether the intervention in Berat and Kuçova was carried out as planned
- To investigate whether the expected changes in quality and health care service use occurred
- ▲ With a focus on utilization, to investigate whether the changes that occurred are attributable to the PHR*plus*-supported intervention

The remainder of the report is organized as follows. After this introductory section, Section 2 describes the PHR*plus*-supported pilot interventions. Section 3 provides details on the survey design and study methodology. Section 4 describes the household-, facility-, and provider-level results. The last section, Conclusions, provides a summary of the results and a brief discussion of policy implications.

#### 2.1 Situational Analysis of Primary Health Care System

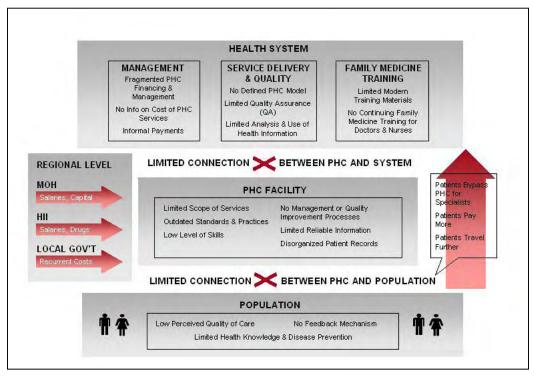
In 2001, at the request of USAID/Albania, a three-person PHR*plus* team carried out a situational analysis of the Albania health system, focusing on primary health care (Paterson, Fairbank, and Poer, 2001). PHC is mentioned in numerous strategies, policies, and decrees as the government's main focus of health sector reform efforts in Albania. As described in the *Long-Term Strategy for the Development of the Albania Health System* (Albania Ministry of Health [MOH] 2004), PHC is seen as the first point of contact of the patient with the health system, and should be considered the "foundation" of that system. That PHC interventions are cost-effective investments to improve health outcomes is well established. In addition, PHC facilities in Albania are already more physically accessible for the population, especially in rural areas, reducing time and travel costs for patients. Finally, focusing on PHC is important when reforming a health system like the one in Albania. Before patients can be expected to change their current care-seeking behavior of going directly to specialists, capacity to deliver high quality, efficient services at the PHC facility level has to be strengthened. For these reasons, strengthening the PHC system has been a key focus of USAID in Albania. The PHR*plus* design team, accordingly, agreed to focus their assistance at the PHC facility level.

The assessment and subsequent PHRplus analyses concluded that a number of problems affect the provision of PHC services in Albania. PHC facilities have limited connections with the broader health system. Management and financing of PHC is fragmented. The MOH pays for nurses salaries, finances capital expenditures, and employs general practitioners (GP), but the Health Insurance Institute (HII) pays GP's salaries. Fragmentation was compounded by decentralization that made districts responsible for paying for recurrent (non-staff) costs, but without any systems or adequate funding. Moreover, PHC facilities have neither adequate supervision, nor formal management autonomy (Fairbank and Gaumer 2003). Governmental budget constraints have left PHC facilities with practically no funding for operations and maintenance, over and above personnel costs, thus reducing the number and quality of services they can provide. Payment to health facilities is not based on actual cost of services, while facilities do not have the capacity to use cost data or to implement accounting systems that can monitor spending and help argue for additional resources (or increase efficiency). Informal out-of-pocket payments are commonplace at all levels of the system and affect efforts to improve accountability, efficiency, equity, and service utilization (Vian et al. 2004; Hotchkiss et al. 2004). The PHC physical infrastructure has been made obsolete to a large extent by the forceful demographic changes of the past decade that have left whole villages empty and crowded suburban areas that lack facilities. Although a number of primary care facilities were renovated and reconstructed with donor assistance in the past five years, many facilities were found to be in poor condition and lacked adequate heating and running water.

Although some elements of PHC service delivery are stipulated in contracts that general practitioners have with the HII, the government of Albania has not defined a PHC model in terms of service delivery and quality. District public health departments do not have quality assurance mechanisms in place, do not analyze and use the health information that is available to them for

informed decision-making, and lack processes to continuously improve quality of care. Regarding ongoing medical training, Albania lacks a system of continuous medical education and training, as well as modern training materials, especially for family medicine. Low utilization of PHC facilities does not allow doctors and nurses adequate patient volume to maintain knowledge and skills.

PHC facilities also have limited connections with the populations they serve. This is evident by the frequent bypassing of PHC facilities and their low utilization. The population perceives that service is unavailable (doctors are simply not there) and that quality of care is lacking. In response to poor quality of care, patients frequently self-refer to polyclinics and hospitals to seek higher quality care, often incurring additional costs in terms of travel, time, and higher out-of-pocket costs. PHC facilities also offer a limited scope of services in comparison with care offered in other countries at the PHC level. This is partly due to the lack of necessary equipment and supplies, and partly related to the low level of knowledge and skills of PHC practitioners. On the demand side, a minimal focus on prevention has resulted in an ill-informed population with little and outdated knowledge on how to prevent and treat disease, when to seek care, and how to use modern family planning methods. There are no mechanisms for the population to complain about health care service delivery or to provide information about their perceptions of quality and efficiency of care, in order for facilities to better respond to individual and community health needs. Figure 2.1 presents a graphic representation of the Albanian PHC system situation analysis.



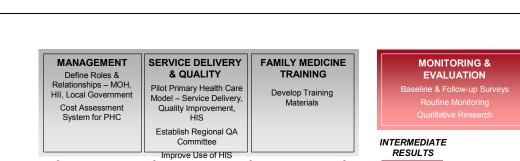


#### 2.2 Description of PHRplus-supported Intervention

Figure 2.2 illustrates the intervention and expected results in graphical form. PHR*plus'* assistance to strengthen PHC in Albania focused on interventions at the level of the PHC facility,

combined with organization and management at the district and regional levels; and assistance with the policy process at the central level. The strategy centered on implementation of a pilot model for PHC delivery in order to test PHC reforms and to build local capacity. Pilot implementation took place between early 2002 and mid 2004, and was conducted at four PHC centers in Berat and Kuçova districts (two urban and two rural). The objectives of the pilot model, which was designed with national and local stakeholder input and support, were:

- ▲ Integration of PHC services including reproductive health and family planning services
- ▲ Improved quality of services
- ▲ Improved availability and use of health information
- ▲ Improved budgeting, financing, and planning



Introduce Management & Continuous

Quality Improvement (CQI) Processes

Patient Satisfaction Surveys

Develop Health Info System (HIS)

Revise & Audit Medical Charts

IMPROVE CONNECTION BETWEEN PHC AND SYSTEM

**IMPROVE CONTENT OF PHC** 

PRIMARY HEALTH CARE FACILITY

IMPROVE CONNECTION BETWEEN PHC AND POPULATION

Health Info for Target Groups Community Screening

Define Scope of Services

Train Doctors & Nurses

**Develop Clinical Guidelines** 

Women's Health Groups

Improved

of Health

Improved

Quality of

Services

Increased Use of PHC Services

РНС

Management

STRATEGIC

OBJECTIVE

Selected PHC

Services in Targeted

Improved



PHR*plus* worked with PHC facilities' staff and with local authorities to define the scope of PHC services to be provided throughout Albania. Pilot activities had the overarching objective of helping pilot sites achieve the capacity to deliver this newly defined scope of services. This section describes the interventions that PHR*plus* and its Albanian counterparts planned to execute (section 4 describes to what degree the planned interventions were actually implemented). With the exceptions of the community outreach and health financing components, all intervention components described below were to be targeted to the four pilot PHC facilities. The community outreach component was to be

REGIONAL

Define Roles &

Relationships –

MOH, HII, Local

LEVEL

targeted to specific population groups (women of reproductive age, adolescents, and chronic disease patients) and the health financing reform was to be more broadly targeted to all government health facilities in Berat.

Specific intervention components that were planned included<sup>2</sup>:

**Health Information Systems:** A priority objective of PHR*plus*' pilot was to strengthen facilitylevel management through improved health information systems (HIS) and use of data for management. To achieve this objective, PHR*plus* planned to develop a new facility-based health information system that would provide data for both facility- and central-level decision making. The new system was to be based on patient encounter information, providing up-to-date information on patient visits and use of services to help PHCs track services delivered and monitor outcome indicators. The new HIS was also supposed to include an expenditure tracking system to help improve financial efficiency. Overall, the system was intended to enable PHC practitioners to make better-informed clinical decisions and PHC management to make managerial decisions, and to assist the central level monitor PHC services delivered and assess PHC facilities' compliance with standards.

**Purchase Equipment:** Pilot and control sites had been renovated with support from the Albanian government and from USAID prior to PHR*plus*' intervention. As a result, all had relatively good infrastructure. However, several sites lacked the basic equipment needed to provide the newly revised list of PHC services which was also linked to the provider training. PHR*plus* proposed purchasing equipment necessary to deliver the revised scope of services.

**Develop Clinical Practice Guidelines (CPGs):** In order to upgrade provider skills, PHR*plus* planned to develop clinical practice guidelines on a range of health issues based on the defined scope of PHC services. These were to serve both as the basis for provider training (see below), but also as job aids. The project planned to work with the Family Medicine Faculty of the University of Tirana to develop the CPGs. PHR*plus* also planned to implement a system of chart audits to assess compliance with the CPGs and to continuously measure quality improvement.

**Train Doctors and Nurses:** Retraining general practitioners and nurses at the pilot sites was viewed as an essential component of pilot activities. Pilot site physicians had not been trained in the principles of family medicine and few had received continuing professional development or training since completing medical school. Many nurses had only received minimal vocational training. PHR*plus* collaborated with an existing effort by Partnership in International Medical Education (PRIME) to develop a curriculum for retraining physicians, with the objectives of introducing the philosophy and methodology of family medicine in line with European Union recommendations, increasing the knowledge and clinical skills of doctors, and introducing and institutionalizing the use of clinical practice guidelines. The project also planned to develop a nurse training curriculum with the aim of bridging the gap in pilot site nurses' educational background.

**Revise and Audit Medical Charts**: Poor medical record keeping had been negatively impacting the quality of PHC throughout Albania. Records tended to be disorganized and inadequate for recording patient care. Old records were organized by family (rather than by patient), tended to be incomplete, and there was no standard form. PHR*plus* planned to design and implement a new

<sup>&</sup>lt;sup>2</sup> While the overall objectives and broad strategies remained constant since the inception of the pilot, many of the specific intervention components were developed after the baseline survey was administered. Examples include the final selection of PHC services to cover in the Clinical Practice Guidelines, the trainer-of-trainer approach for the community mobilization campaign, and the use of patient satisfaction surveys.

medical records system that could provide clear information on individual clients and also contribute to the overall quality of care within facilities. The revised medical records system was also intended to be used to carry out medical audits in order to track whether providers were adhering to the newly introduced clinical practice guidelines.

**Build Management Capacity:** The role of PHC managers was minimal in 2002 when the pilot began. However, managers' roles were expected to become more pronounced against the backdrop of broader reforms affecting the PHC system (new legislation mandating decentralization of the system had come into effect). For this reason, building managerial capacity at the PHC level took on greater urgency. In its pilot model, PHR*plus* planned to improve management capacity by providing training on management problem-solving techniques, policy development, strategic planning, hiring practices, and quality assurance.

**Improve Community Outreach Mechanisms:** In order to improve relations between facilities and the populations they serve, one of the intended pilot interventions was to help facilities provide health information to specific target groups: women of reproductive age, adolescents, and chronic disease patients. Unlike the interventions listed above, whose impact was limited to the four PHC intervention facilities, community outreach was planned to impact the catchment areas in which these facilities are located. Family health campaigns were planned to encourage the population to register with new medical records and receive information on health issues. Additionally, outreach screening for chronic diseases and education for women was planned. PHR*plus* hoped to train midwives on reproductive and women's health in order to launch a series of women's health campaigns. It was envisioned that the project would train midwives to become community trainers, who would train nurses, who would in turn educate women in the community about female anatomy, family planning, and sexually transmitted diseases.

In addition, to bolster the involvement of communities in their health care, patient satisfaction surveys were planned to provide feedback to PHC facilities and to help providers be more responsive to individual and community health needs, perceptions, and attitudes. The concept of seeking patient feedback, and using that feedback to improve quality, was entirely new to both staff and clients in Albania.

**Design and Implement Health Financing Reform:** PHR*plus* undertook a comprehensive assessment of PHC financing and provided suggested solutions and alternative approaches. These alternatives approaches were intended to support the broader financing and management objectives of decentralization of PHC and more effective facility-level management. They were supposed to impact PHC at the broader level by setting policy guidelines applicable to PHC across the board. PHR*plus* proposed the creation of regional-level health authorities that would include a unit responsible for planning, resource allocation, and delivery of regional PHC services. In terms of specific activities impacting health care facilities in the pilot areas, PHR*plus* proposed the following:

- ▲ Defining the PHC benefit package and associated resource requirements.
- ▲ Establishing financing requirements for funding PHC in the pilot area; policies regarding financing such as user fee levels, waiver policies for user fees, prescription coverage and costs, referral polices, bonus potentials, and salary levels.
- Designing and implementing polices about how formal user fees would replace informal payments.
- Training provider staff on budgeting, budget monitoring, the performance measurement

system and bonus potential.

• Conducting quantitative and qualitative studies on informal payments to help key stakeholders design appropriate interventions to address this growing problem.

A more detailed description of each of the intervention components can be found in Cook, McEuen, and Valdelin (2005).

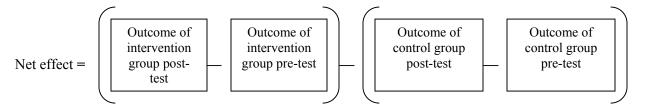
## 3. Study Design and Methodology<sup>3</sup>

The evaluation is based on a quasi-experimental study design with pre- and post-intervention measurements in both treatment and control areas. This quasi-experimental study design allows for the assessment of the impact of the intervention in two ways – by comparing between the intervention and control groups, and by analyzing changes over time pre- and post-intervention. Because the design of the PHR*plus*-supported PHC pilot was comprehensive and was aimed to improve a number of dimensions of PHC performance, the study included several different types of units of analysis. The catchment areas surrounding the four pilot PHC facilities in Berat and Kuçova districts formed the basic units of analysis for the study, along with two comparable areas in Fier district (also one urban and one rural) that served as control groups. Fier was selected for its comparability along several dimensions with Berat and Kuçova. Within each catchment area, the study design included public health facilities, providers at these facilities, and the populations in the catchment areas as units of analysis for the study.

The research design can be depicted as:

| ${f X}$ Baseline                     |                           | X Post-test measure |
|--------------------------------------|---------------------------|---------------------|
| O Baseline                           | Primary Health Care Pilot | O Post-test measure |
|                                      |                           |                     |
|                                      | TIME                      |                     |
| X = Areas outside of intervention a  |                           |                     |
| O = Areas receiving intervention (in | ntervention group).       |                     |

The net effect of the intervention can be though of as:



The net effect is the difference between the change in the intervention areas and the change in the control areas. In the results section, we test for the statistical significance of this net effect for

<sup>&</sup>lt;sup>3</sup> For a more in-depth description of the study design and methodology, see Partners for Health Reform*plus* Project (2004).

three types of health services: treatment for chronic health conditions, treatment for acute health conditions, and reproductive health care.

Data used in the study comes from three types of surveys 1) a household survey; 2) a facility survey; 3) and a provider survey, all administered by INSTAT with assistance from PHR*plus*. Baseline data collection took place in December of 2002 and follow-up data collection between November of 2004 and January of 2005, ostensibly allowing enough time for the PHR*plus* pilot intervention to have had an impact. By the time of the follow-up survey, the PHR*plus* office in Berat had been closed for more than six months, and the project was providing little technical assistance to the pilot facilities.

The rest of the section describes each type of survey.

#### 3.1 Household Survey

The baseline and follow-up household surveys were administered to a sample of 2,000 households in the catchment areas surrounding the four intervention PHC facilities in Berat and Kuçova districts, and two comparable catchment areas in Fier district. Table 3.1 shows the distribution of households in the sampling frame across the four intervention and two control areas.

| District                  | Urban | Rural | Total |
|---------------------------|-------|-------|-------|
| Intervention area: Berat  | 400   | 600   | 1,000 |
| Intervention area: Kuçova | 220   | 180   | 400   |
| Control area: Fier        | 240   | 360   | 600   |
| Total                     | 860   | 1,140 | 2,000 |

Table 3.1: Households in the Sampling Frame, by Study Group

An important obstacle to carrying out the household survey was the unavailability of reliable lists of households residing in each catchment area. In order to produce the sampling frame for the survey, the cartography department at INSTAT mapped the catchment areas in consultation with doctors at the PHCs and officials at the MOH. The resulting maps, along with information from the 2001 Albania census, were then used to create a list of dwellings from which a specified target number were systematically sampled for each of the six catchment areas included in the study (Table 3.2).

Table 3.2: Number of Households in the Sampling Frame and the Number Surveyed,<br/>by Sample Area

| Area         | Total Households | nolds Sample households |  |  |
|--------------|------------------|-------------------------|--|--|
| Berat Urban  | 2,314            | 400                     |  |  |
| Berat Rural  | 2,641            | 600                     |  |  |
| Kuçova Urban | 3,654            | 220                     |  |  |
| Kuçova Rural | 671              | 180                     |  |  |
| Fier Urban   | 6,287            | 240                     |  |  |
| Fier Rural   | 2,316            | 360                     |  |  |
| Total        | 17,883           | 2,000                   |  |  |

Because of regional differences in the way catchment areas for health services are determined, the mapping exercise was carried out separately for urban and rural areas. In the urban areas, household dwelling units were enumerated within uniquely identified enumeration areas of approximately 50 to 120 dwellings. Lines were then drawn on maps to delineate the health service catchment areas surrounding each of the PHCs in Berat, Kuçova, and Fier. The sampling frame for each area consisted of the dwellings that were identified as being within the boundaries of the health service catchment areas. In the rural areas, the determination of households served was simpler because the health service catchment areas were composed of entire villages. Village codes and census enumeration area codes were used to list and map households served by rural facilities.

The sampling frame provided the basis for both the baseline and follow-up samples. Where households from the baseline sample were empty or refused interview, households were substituted from a pre-selected reserve list of random households in the enumeration area. The household surveys collected information on socio-economic and demographic characteristics, and on utilization of curative, preventive, and reproductive health care.

**Socio-economic and demographic characteristics:** This included age, sex, marital status, educational level, and health insurance status of all individuals residing in the household, and household characteristics such as asset ownership, living conditions, and household size.

**Curative health care utilization:** This included information on chronic and acute illnesses and disabilities, whether health care services were used, the type of provider, the type of facility, out-of-pocket expenditures on consultations, medicines, tests, and food and transportation, and opinions about the quality of care received.

**Preventive health care utilization:** The survey respondents were asked whether they had received check-ups, prenatal care (for women only), and child immunizations (for children only).

**Reproductive health care utilization:** Women who reported giving birth in the two years prior to the survey were asked about their use of reproductive health services, type of provider, and type of facility. All women of reproductive age (15 to 49 years) were asked about their current utilization of family planning methods and whether they received advice on reproductive health issues.

#### 3.2 Facility Survey

While most components of the intervention targeted only PHC facilities, the health financing component was intended to be carried out in all types of government health facilities in Berat and Kuçova. As a result, the facility survey was used to collect information from all types of government facilities that deliver PHC services and serve the population in each of the six sample catchment areas. These consist of hospitals, maternities, polyclinics, PHC facilities, and ambulances (rural health posts). Under current law, dentists and pharmacies are the only health providers allowed to be private, so there were no private health facilities in the study areas. Table 3.3 shows the total number of facilities by type and district included in the study sample. The baseline and follow-up samples consisted of the same 26 facilities.

| Type of Facility      | Interve | ntion Areas | Control Areas | Total |  |
|-----------------------|---------|-------------|---------------|-------|--|
|                       | Berat   | Kuçova      | Fier          |       |  |
| Hospitals             | 1       | 1           | 1             | 3     |  |
| Maternities           | 1       | 1           | 1             | 3     |  |
| Polyclinic            | 1       | 1           | 1             | 3     |  |
| Primary Health Center | 2       | 2           | 2             | 6     |  |
| Ambulance (Post)      | 5       | 1           | 5             | 11    |  |
| Total                 | 10      | 6           | 10            | 26    |  |

#### Table 3.3: Government Health Facilities by Type of Facility and by Study Group

Note: The interventions were carried out in four primary health centers

The facility questionnaire was administered to the chief doctor or provider at each health care facility, and included questions on availability of services, number and types of staff working at the facility, hours of operation, facility infrastructure, availability of water and electricity, consultation fees, use of managerial and quality assurance practices, and availability of in-service training opportunities.

#### 3.3 **Provider Survey**

Providers at each of the government that were included in the facility survey formed the sample for the provider survey. INSTAT interviewed 110 providers – a combination of doctors and nurses – for the baseline survey, and the same number for the follow-up. The survey included questions on provider technical qualifications and training, facility supervision and management practices, types of services provided, and provider opinion on their place of work. Table 3.4 shows the distribution of providers in the survey sample by facility type and region.

| Type of Facility      | Intervention Areas |        | <b>Control Areas</b> | Total |  |
|-----------------------|--------------------|--------|----------------------|-------|--|
|                       | Berat              | Kuçova | Fier                 |       |  |
| Hospitals             | 7                  | 7      | 7                    | 21    |  |
| Maternities           | 5                  | 2      | 4                    | 11    |  |
| Polyclinic            | 10                 | 10     | 10                   | 30    |  |
| Primary Health Center | 12                 | 13     | 13                   | 38    |  |
| Ambulance (Post)      | 4                  | 1      | 5                    | 10    |  |
| Total                 | 10                 | 6      | 10                   | 26    |  |

#### Table 3.4: Providers by Facility Type and Region

Note: The interventions were carried out in four primary health centers

## 4. Results

This section addresses the three principle evaluation questions investigated in the study. First, was the intervention carried out as planned? Second, did the expected changes occur, as measured through the household, facility, and provider surveys? And third, with a focus on utilization, were the changes that occurred attributable to the PHR*plus*-supported intervention? The discussion is limited to impact on the four pilot PHC facilities, with some references to the impact of community outreach on the areas surrounding the pilot sites. It does not include findings from non-PHC facilities in the six sample areas because it was not possible to conduct the multivariate level analysis necessary to draw sound conclusions about impact at these facilities. Nor does the discussion touch upon broader repercussions and implications of PHR*plus*' work; it is too early to tell what broader impact the implementation of the pilot model will have beyond the four pilot sites, while the one component that was supposed to set broader policy guidelines was the only component that was not carried out as planned.

#### 4.1 Was the Intervention Carried Out as Planned?

We begin by summarizing whether the intervention was carried out as planned under the PHC pilot model. The analysis presented below is based on a review of project documents and on survey result comparisons between the four pilot PHC facilities and the two control PHC facilities. The results show that, with one exception, health financing, PHR*plus* was able to implement each of the intervention components described in Section 2 (health financing was the only intervention component that was expected to have an impact beyond the four pilot sites).

**Health Information Systems (HIS):** PHR*plus* was able to successfully design a new HIS for pilot facilities, which was initiated in July 2002, allowing for collection of data for each patient visit. Between July 2002 and May 2004, data on more than 90,000 encounters has been collected and analyzed in the four pilot facilities. An example of how HIS data were used to improve quality involved reduction in the use of antibiotics. The HIS indicated that the use of antibiotics was very high, especially in the rural centers. In discussing the HIS results with pilot site physicians, the quality consultants realized that there was an over-use of antibiotics for viral respiratory infections. In response to this finding, a clinical practice guideline and quick reference for adult respiratory infections was developed and implemented in February 2004. Patient information sheets were made available for physicians to share with patients. After the intervention, the percent of visits where an antibiotic was prescribed decreased. Another facility noticed that they had a much higher number of patients with hypertension. This led them to conduct a community blood pressure screening and hypertension education.

**Equipment Purchase:** Project records indicate that the project purchased equipment required to provide the revised scope of PHC services for all four pilot facilities. Examples of the types of equipment purchased included sphygmomanometers, stethoscopes, tape measures, and scales.

In the follow-up survey, facilities were provided with an inventory of basic equipment and supplies that are likely to be found in a well-supplied facility. Respondents were asked to indicate

which items typically were available in their facilities. For PHC facilities, it was found that most or all of the intervention PHC facilities (n=4) reported that they had basic sterilization and vaccination equipment, had proper waste disposal, toilets, and running water, and had the necessary equipment for acute and chronic care, although the two control facilities reported having these as well. Although the baseline survey collected information on the availability of some types of equipment, it did not collect as complete an inventory as in the follow-up study. Nevertheless, a comparison of the four intervention PHC facilities with the two control PHC facilities at the time of the follow-up survey suggests that the intervention facilities did not have a greater availability of supplies and equipment. Unfortunately, we cannot explain this finding.

**Clinical Practice Guidelines:** PHR*plus* supported Albanian clinicians to write 21 CPGs in the summer of 2003, with one-page summaries of the guidelines developed shortly afterwards. The guidelines and one-page summaries were distributed to physicians at each of the pilot PHC facilities.

**Training:** Refresher training in family medicine was provided to more than 70 physicians and 40 nurses under the pilot model. Training for physicians took place from January to September 2003, and training for nurses between May and October 2003. In both cases, provider training was implemented through a local institution (the Tirana University Medical School and Vlora Nursing School) to encourage sustainability and institutionalization. The survey results suggest that providers at PHR*plus* pilot facilities have been trained in a wider range of subjects than their control site counterparts; 96 percent received training since January 2003 vs. 23 percent at control facilities. The difference between the two groups appears sharp for certain technical areas: 100 percent of pilot providers had received training in reproductive health, diabetes, hypertension, family planning methods, and prenatal care, compared to 0 percent for all these topics across the two control sites.

**Medical Records and Audits:** The project was also able to help the pilot facilities design and implement a new medical records system, and to establish medical records and documentation standards. Additionally, PHR*plus* quality consultants developed chart audit tools to assess and sustain compliance with the new guidelines. PHR*plus* quality consultants and implementation officers audited 20 charts per month for each physician between January and April 2004. Providers from the health care facilities received their audit results but were not involved in carrying out the audits.

**Managerial Capacity:** To build management capacity, the project provided a three-day management workshop in collaboration with World Learning in November 2003 for doctors and nurses from the pilot facilities. Topics discussed included management problem-solving techniques, position description formation, policy and procedure development, strategic planning and "Continuous Quality Improvement" principles. Project documents indicate that PHR*plus* staff followed up with participants to help them apply what they learned in terms of defining roles and responsibilities for staff, improving patient flow, and developing quality improvement plans and operations manuals.

**Community Outreach**: The project carried out activities aimed at broadening community participation and awareness. In collaboration with pilot site staff, patient satisfaction surveys were administered in January 2004 at all four pilot sites. Project documents indicate that all sites used results of the surveys to identify ways to improve quality. However, both health center staff and patients questioned the need for this type of information and pilot sites chose not to continue the process beyond the pilot period (the assessment of the Albanian PHR*plus* staff was that patients in Albania are not expected to have or voice an opinion about their health care and that the experience illustrates an important cultural dynamic that may affect other attempts at community involvement). This is believed to be a cultural attitude that dates back to the time of the communist regime in Albania.

PHR*plus* developed, replicated, and distributed a number of health education materials. This included distributing health education materials to pilot sites, publishing a diabetic education poster (in collaboration with the Institute of Public Health) that was distributed throughout the country, and producing pregnancy wheels in the Albanian language (this was the first time that the wheels had been produced in Albanian).

Outreach education for midwives, nurses, and women was carried out in two campaigns, both in collaboration with the Public Health and Primary Care Directorates in Berat. From January to July 2003, a campaign was conducted in the pilot PHC centers with the dual objectives of: 1) increasing midwives' knowledge in the areas of women's health, sexually transmitted disease, and family planning; and 2) increasing community awareness of existing family planning services in their health centers. During this first campaign, 10 midwives in Berat and Kuçova districts were trained to become community trainers, and 113 women in two rural communities were informed about family planning and women's health. Following the successful education campaign in the pilot sites, the effort was expanded to all 12 urban and rural PHC facilities in the Berat district. A training-of-trainers approach was used to train 30 midwives, who in turn trained 213 nurses, who then educated 2,667 women on female anatomy, family planning, and sexually transmitted diseases. A third women's health education initiative involved classes in a Berat high school for young women 16-18 years old. Chronic disease screening outreach was carried out in only one of the four pilot catchment areas, and identified 302 community members with high blood pressure and 226 at risk for diabetes. The doctor and nurses from the PHC center made follow-up visits to identified persons to make sure that appropriate treatment was initiated.

Health Care Financing: Under the health financing component, the project was instrument in identifying a number of obstacles that resulted in the inefficient, inadequate, and inequitable PHC financing (Fairbank and Gaumer 2003). At the central level, PHRplus facilitated a consensus among a number of government stakeholders on financing reforms that included pooling government resources into a single fund administered by the Health Insurance Institute, which led to the government amending the Health Insurance Law of 1995. The project also was instrumental in helping the HII to plan a single-source financing reform pilot for the Berat region, which includes the intervention areas in Berat and Kuçova. The objective of the pilot was to help define roles and relationships for PHC in terms of management and supervision and to pool fragmented financing to purchase health care services, thereby improving management at the district and regional levels and introducing incentives to improve quality and performance. However, political tensions and possible government reorganization in the fall of 2003 together with delayed implementation of laws governing health financing throughout the spring and summer of 2004, the time when PHR*plus* closed its office in Berat, prevented the start of the pilot of single-source financing. There is currently a government initiative to pass new laws regarding health financing, but no action had been implemented by the government of Albania on piloting reforms in the Berat region by the time of the follow-up survey (Cook, McEuen, and Valdelin 2005).

#### 4.2 Did the Expected Changes Occur?

This section presents findings on whether the expected changes at the household and facility levels occurred by the time of the follow-up survey, which was carried out six months after PHR*plus* closed its office in Berat. Three types of expected changes are investigated: use of health information for decision-making at the provider level; quality of health care; and utilization of PHC.

**Use of Information for Decision-Making:** The results of the provider survey suggest that the HIS put in place by PHR*plus* in 2002 had begun to prompt behavior change among providers by the time of the follow-up provider survey in 2004: 29 percent of providers at PHR*plus* sites said that they had made changes in their practice based on information from the HIS. An example of how HIS data were used to improve quality involved reduction in the inappropriate use of antibiotics, which was found to be over-used to treat viral respiratory infections. By contrast, the MOH's information system, which is used in PHC facilities throughout the country, including in the intervention and control facilities, does not seem to have led to these types of changes, as none of the providers in both control and intervention groups said that they had made changes to their practice based on information provided by the MOH system. This finding suggests that information from the PHR*plus* HIS system is beginning to reach providers and gives them pertinent information for decision-making. However, that less than a third of the providers in the intervention sites report using HIS data to inform their practice patterns suggests that further progress can be made.

In the past year, the HIS intervention has been replicated to the entire Berat region, and a HIS Technical Working Group was established centrally to decide on the types of information that will be collected by PHC facilities. Data user groups are also meeting monthly to review reports for decision-making and discuss issues related to the HIS system in general (Cook, McEuen and Valdelin 2005).

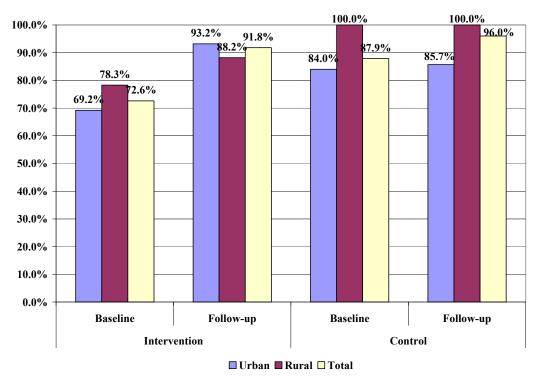
Anecdotal evidence suggests that client opinions and suggestions also contributed to managerial decisions at the pilot sites. Examples cited of changes made based on client input include development of a code of conduct and understanding between providers and clients, and increased confidentiality of the client–provider relationship.

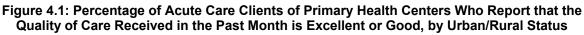
**Quality of Care:** Survey results suggest that the intervention facilities are much more likely to have CPGs or protocols for specific physical conditions. The difference between pilot and intervention PHC facilities is particularly pronounced for certain conditions. At the facility evel, 75 percent of chief physicians in the pilot facilities reported that they have CPGs or protocols for family planning counseling, 100 percent reported having CPGs or protocols for family planning methods, 100 percent had CPGs for acute care, and 75 percent had protocols for chronic care. None of the chief physicians in the two control facilities reported having protocols or guidelines for these four types of services. At the provider level, the results are similar. About 70 percent of pilot providers said they follow CPGs or protocols, compared to 15 percent at control sites. Introducing CPGs was a key component of the PHR*plus* pilot intervention; these data suggest that providers at the intervention sites not only have physical copies of CPGs, but they are also using them.

To investigate changes in the quality of care, the household survey included questions of PHC clients on whether the quality of health care services was considered to be poor, acceptable, good, or excellent. Figure 4.1 shows that the share of clients who rated the care they received as either good or excellent increased between the baseline and follow-up surveys not only in the intervention areas but the control areas as well. While the increase in the intervention areas is consistent with the premise that the strategies to improve quality of care in pilot facilities was successful in raising quality levels, it is unclear why the perceptions of health care quality also increased in the control areas. The difference in the changes in perceptions of quality of care between the intervention group and the control group was not found to be statistically significant.

Notice from the table that, at the time of the baseline survey, a very high percentage of PHC clients reported that the care they received was good or excellent (72.6 percent in the intervention areas and 87.9 percent in the control areas). The percentage of clients in the intervention area who rated the quality of care as "good' or excellent" jumped 19.2 percentage points (from 72.6 percent to 91.8 percent) between the baseline and follow-up survey but the comparable percentage in the control

area increased by only 8.1 percentage points. None of these changes were found to be statistically significant at the 10 percent level. A summary of the results of the statistical tests used to assess the difference in population-based indicators of change between intervention and control groups can be found in Annex Table A1.





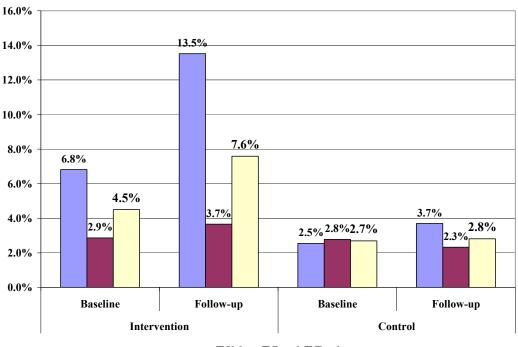
That the perceptions of quality of care are high even at the time of the baseline are surprising given that a key rationale for the intervention was that the quality of health care quality in Albania is generally poor. This finding may be an indication that the expectations of Albanian health care clients regarding the quality of care offered by government-run facilities are relatively low. That rural clients rated the quality of care received higher than rural clients may be an indication that rural individuals may be less likely to question the authority of health staff. However, it may also be the case that when answering the question on quality of care, respondents may not have been assessing what they believe to be the technical competence of the health care provider, but other aspects of health care quality.

Results from the provider survey indicate that providers in intervention facilities were more likely to report better practice patterns than their counterparts in control facilities. Based on answers to open-ended questions for doctors in pilot facilities about treatment approach, intervention site providers appear to be more prone than providers in control facilities to perform specific examination visits for hypertension and diabetes, as well as to refer patients to hospitals for upper respiratory infections. However, these findings need to be verified through direct observation or other means before sound conclusions can be drawn. Nonetheless, it is promising that intervention providers are more likely to report that they are performing exams and referrals as important components of treatment for these three conditions, in contrast to providers in the control district. Similarly, doctors at intervention sites were more likely to give correct answers (unprompted) regarding the treatment of diabetes and upper respiratory infection compared to their control group counterparts. This suggests that doctors at intervention sites might have the knowledge to provide better quality care for these conditions, though further research and observation is needed to verify this finding as well. Differences in responses to questions about hypertension were not meaningful in the control and intervention groups, as no doctors in either group responded correctly to open-ended questions about hypertension.

Use of Primary Health Care Services: In the analysis of changes in PHC utilization, three types of service use were investigated: family planning services, acute health care services, and chronic health care services.

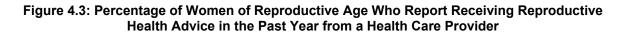
One objective of the pilot project was to increase the use of modern contraceptive methods among women in the intervention areas. This is particularly important given Albania's very low levels of contraceptive use. A 2002 nationally representative study that found that only 8 percent of women of reproductive age report currently using a modern contraceptive method, a rate far lower than in any other European country (Institute of Public Health, U.S. Centers for Disease Control and Prevention, and INSTAT, 2004). Figure 4.2 shows that, in the pilot areas, there was a sharp increase in the use of modern contraceptive methods between the time of the baseline and follow-up surveys, from 4.5 percent to 7.6 percent, a statistically significant increase at 1 percent level or better. On the other hand, in the control areas, the percent of women who reported currently using modern family planning methods remained virtually unchanged. The difference in performance between the intervention and control groups is statistically significant at the 5 percent level.

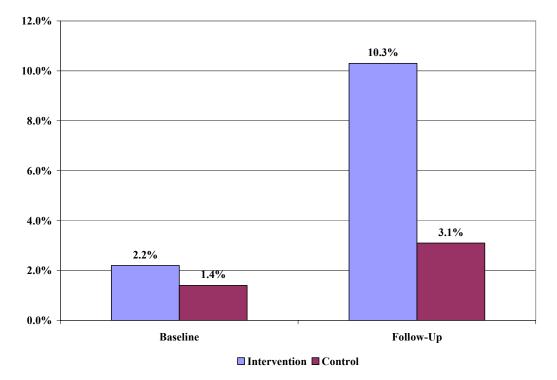




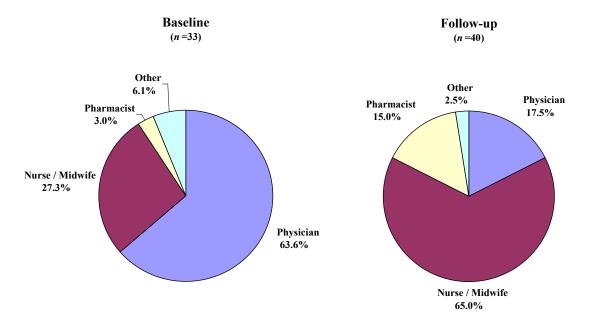
🗖 Urban 🔳 Rural 🗖 Total

A plausible explanation for the large percentage increase in the percent of women using modern contraceptives is that the project's community awareness campaign helped raise awareness among women about family planning services and where to get them. To explore this issue, all sample women of reproductive age were asked whether they received advice on reproductive health during the past year from a health care provider. The results, shown in Figure 4.3, indicate that the percent of women in the intervention areas who received reproductive health advice during the one-year period prior to the survey tripled, from 2.2 percent at baseline to 10.3 percent at follow-up, a statistically significant increase at the 1 percent level. The percent of women residing in the control areas who reported receiving reproductive advice also increased (statistically significant at the 5 percent level), but by at a much lower rate. The difference in performance between the two groups is statistically significant at the 1 percent level.





The survey also asked contraceptive users about the type of person who provided the reproductive health advice. The results in Figure 4.4 show that, in the intervention areas, there was a large increase in the percentage of women who received advice from a nurse or midwife, the types of health care provider that were the focal points for the community awareness intervention strategy (27.3 percent in the baseline vs. 65.0 percent in the follow-up survey).



#### Figure 4.4: Percent of Contraception Users Who Received Advice on Family Planning in the Intervention Group, by Type of Person Who Provided Advice

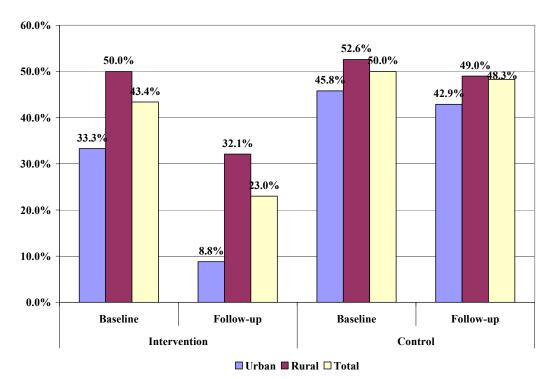
What types of contraceptive methods did women use? The survey findings suggest that contraceptive users in both intervention and control areas were considerably more likely to use condoms in the follow-up survey than in the baseline survey. For example, the percent of contraceptive users who report using condoms increased from 23.8 percent in the baseline to 64.0 percent in follow-up survey in the intervention areas and from 13.3 percent in the baseline to 47.1 percent in the follow-up survey in the control areas. (Note that these findings are based on small sample sizes because only a small percentage of women report currently using modern contraceptive techniques). The explanation for why women relied more on condoms at the time of the follow-up survey is unclear.

Where did women get their contraceptive methods? Consistent with the finding reported above that the reliance of couples on condoms increased from 2002 to 2004, the share of women who report drugstores and open markets as their source increased during the intervention period from 2.0 percent to 9.3 percent. It is interesting to see that the share of current contraceptive users in the pilot areas who reported getting their method from primary health centers and ambulances remained roughly constant between the baseline and follow up surveys (22.0 percent vs. 20.0 percent).

Regarding bypassing for treatment of acute health problems, the baseline household survey revealed that a large percentage of government clients go directly to polyclinics and hospitals rather than to PHC facilities for basic health care, even for treatment of relatively minor problems. This "bypassing" of PHC facilities in favor of secondary health care facilities is of concern because it suggests that the referral system does not function well and because, from the perspective of the government, minor problems are probably more efficiently treated in primary facilities. A key objective of the intervention was to reduce the extent of bypassing by improving the availability and quality of services. The findings from the follow-up survey indicate that the rate of bypassing has dropped remarkably in the pilot areas. To assess bypassing, we investigated utilization patterns among a subset of acutely ill individuals – those who report suffering from a cold or flu, problems

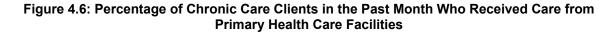
that should be reasonably diagnosed and treated at the PHC facility level. Figure 4.5 shows the percent of government clients with a cold or flu who report going directly to a polyclinic or hospital in the month prior to the survey at both baseline and follow-up. As indicated by the table, the rate of bypassing among cold and flu sufferers in the pilot areas decreased from 43.4 percent to 23.0 percent, a statistically significant decrease at the 1 percent level or better. The rate of bypassing in the control areas decreased also, but only by about 4 percent, a change that was not found to be statistically significant. This difference in performance between the pilot and control districts is statistically significant at the 10 percent level. Similar patterns also emerge when the analysis is broadened to include all acutely ill government clients, not just those who report having colds and the flu. It should be noted that in the intervention areas, the overall percent of household respondents who reported having an acute health care problem was very similar in the baseline and follow-up surveys (7.5 percent in the baseline and 7.6 percent in the follow-up survey), as was the percent who reported using any health care services (47.5 percent in the baseline and 46.6 percent in the follow-up). In the control areas, a much higher percentage reported acute health care problems (13.9 percent in the baseline and 13.1 percent in the follow-up), while the percent who reported using health care services declined (from 41.3 percent to 29.8 percent).

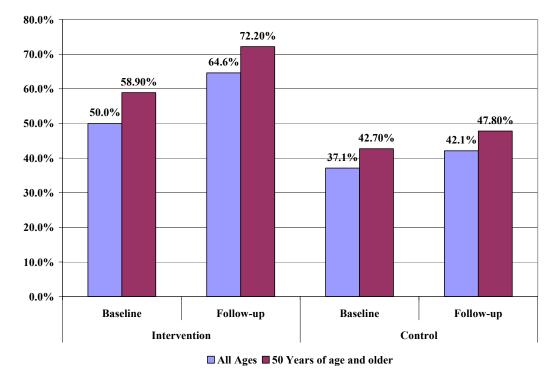
#### Figure 4.5: Percentage of Government Clients in the Past Month with a Cold or Flu Who Report First Seeking Care from a Polyclinic or Hospital



The results on service utilization among chronically ill individuals also reveal increases in the use of PHC facilities in the intervention areas. For example, Figure 4.6 shows the percent of chronic health care clients during the month prior to the survey who report using a PHC or an ambulance at both baseline and follow-up. In the intervention areas, the percent of clients using primary care facilities increased from 50.0 percent to 64.6 percent, a statistically significant increase at the 1 percent level or better. Although the percentage of comparable clients in the control group increased from 37.1 percent to 42.1 percent, the change was not found to be statistically significant. The difference in the performance between the pilot and control districts was found to be statistically

significant at the 10 percent level. Similar conclusions emerge when looking at the percent of clients using PHC services over the six-month or the one-year period prior to the survey, rather than the one-month period. It should be noted that, in both the intervention and control areas, there was a slight increase between the baseline and follow-up surveys in the percent of the population who reported a chronic problem. In the intervention areas, the percent of respondents who reported a chronic problem increased from 14.2 percent to 15.7 percent, while in the control areas, the percent of respondents who reported a chronic problem increased form 17.9 percent to 19.2 percent.





Again, the findings above support the conclusion that the quality of health care in the pilot primary health centers increased between the baseline and follow-up surveys. Unfortunately, pre- and post-intervention comparisons of the perceptions on the quality of care among health care clients cannot be made because questions on the perceptions of quality among chronically ill clients were only asked in the follow-up and not the baseline survey. The results from the follow-up survey reveal that, of those clients who used PHC facilities over year prior to the survey interview, the same percentage (90.8 percent) in both the intervention and control areas rate the quality of care as good or excellent.

#### 4.3 Are the Changes that Occurred Attributable to the Intervention?

As reported in the section above, the survey findings suggest that the pilot areas outperformed the control areas with respect to a number of key population-based indicators of health care utilization. For example, in the two-year period between December 2002 and December 2004, current use of modern contraceptive methods increased by 69 percent, bypassing for treatment of simple

acute health problems during the month prior to the survey decreased by 47 percent, and the percentage of chronically ill health care clients who utilized PHC facilities for treatment in the month prior to the survey increased by 29 percent. These differences in performance between the treatment areas (Berat and Kuçova) and the control area (Fier) are statistically significant at the 10 percent level or better. These findings suggest that the improved performance in the pilot areas is attributable to the PHR*plus*-supported intervention. An important limitation of this analysis is that the follow-up survey was carried out less than two years after most of the intervention components were introduced, and, as such, the long-term effects of the intervention could not be evaluated.

Which of the intervention components were responsible for the population-based changes in the pilot areas? The improvements in modern contraceptive use appear to have resulted in part from the community mobilization efforts in the pilot areas. As described in section 4.1, community outreach efforts resulted in more than 250 nurses and midwives receiving supplementary training in family planning and women's health, while educational campaigns reached nearly 3,000 women. That women of reproductive age in the intervention areas were significantly more likely to have received advice on reproductive health supports the premise that the campaign was effective. It is also possible that improvements in facility-based reproductive health care services were also partly responsible for the increase in contraceptive use. Although the share of contraceptive users who reported that they obtained their contraceptive method from PHC facilities remained constant, the number of women using PHC facilities overall increased between baseline and follow-up. At the same time, it appears that providers in the pilot facilities increased use of clinical practice guidelines and protocols for family planning over the course of the pilot, with 100 percent of chief physicians in intervention PHC facilities reporting having and using family planning protocols vs. 0 percent of chief physicians in the control PHC facilities.

There are a number of plausible explanations for why the use of PHC services increased among the acutely and chronically ill population. That the results from the provider surveys revealed that providers in the pilot PHC facilities were more likely to have and use CPG and protocols and to use HIS data for decision-making than their counterparts in the control PHC facilities supports the conclusion that quality of care improved in the pilot facilities. Could improvements in the technical quality of health care be sufficient to generate the large changes in utilization practices detected by the household survey data? Our results appear to be consistent with a number of research studies on the demand for health care in low- and middle-income countries that suggest that the effect of quality of care on the choice of health care providers is quite large (Gertler and Hammer, 1997; Alderman and Lavy, 1996). However, many of these same studies also suggest that the net effect of improvements in the quality of care on the decision to seek out medical care is small, which is also consistent with our finding of little or no change in the percent of individuals with a chronic or acute health problem using any type of health care provider between the baseline and follow-up surveys.

It is also possible that the intervention led to more motivated health staff who may have improved non-technical aspects of quality (such as courtesy), which can have a strong attraction for the general public. To investigate this explanation, we investigated whether PHC facility clients in the intervention areas reported improvements in the manner of the health care providers between the baseline and follow-up surveys. The results suggest that the percentage of PHC facility clients in the intervention areas rating the manner of the providers as "good" or "excellent" did not change. Thus, we have no evidence that health worker motivation improved, although our data on this topic is very limited.

Another possible explanation for the changes in utilization patterns is that communities were aware that the PHC facilities were receiving foreign assistance and assumed that quality of care had increased as a consequence. Anecdotal evidence does suggest that the majority of providers in the two intervention districts, as well as residents, had a high level of awareness of the PHR*plus* pilot project. This, in itself, may have generated positive publicity for the pilot sites and led to their increased utilization. Based on the information currently available, it is not possible to assess whether this factor had a role in the positive outcomes of the intervention

## 5. Conclusion

This Albania case study suggests that PHC system changes using a pilot approach are not only feasible, but can potentially improve the quality of care, reduce the bypassing of PHC facilities, and in the case of reproductive health services, improve coverage rates in a short time. These results, which are based on the comparison of changes in utilization patterns among a random sample of individuals in the intervention areas vs. those control areas, suggest that the improvements in performance were the result of the PHR*plus*-supported intervention package, which included the HIS, provider training, the medical record chart audit, clinical practice guidelines, and community outreach activities. These tools and strategies appear to have improved PHC system performance through the adoption of and adherence to quality standards, the use of patient-encounter data to improve clinical and managerial decision-making, and the provision of health information to target groups, including women of reproductive age, adolescents, and the chronically ill. These results are impressive given that the follow-up survey was administered more than six months after PHR*plus* had closed the office responsible for overseeing the implementation of the pilot intervention, and that none of the planned financing reforms were carried out.

While the results of this study support the finding that the pilot approach had an impact on PHC system performance in the pilot areas, the next step for Albania to realize the full "return" on this investment in research and development, is to implement broader system-level reforms in order to cost-effectively roll out reforms nationwide (Cook, McEuen, and Valdelin, 2005). Without broader system-level reforms in health policy, financing, and sector organization and management, any improvements in PHC performance – such as those measured in this study – run the risk of not being sustained. The government of Albania has already embarked on, or is currently considering, many important system-level reforms. These include shifting the role of the MOH from that of a service provider to a new role of stewardship, establishing a defined package of PHC services, pooling health resources into a single fund administered by the Health Insurance Institute, and establishing independent regional health authorities organized at the prefecture level that would be responsible for purchasing PHC services and monitoring the quality of care. With sufficient political commitment to these reforms and a well-developed implementation approach,<sup>4</sup> Albania can make considerable progress in improving the accessibility, quality, and efficiency of primary health care services for its entire population.

<sup>&</sup>lt;sup>4</sup> See Cook, McEuen and Valdelin (2005) for a strategic framework for top-down implementation of PHC reform as well as recommended steps for implanting the reform in initial, mid-term, and long-term phases.

# Annex A. Average Changes in Selected Population-based Indicators

Table A-1: Average Changes in Selected Population-based Indicators between Baseline and Follow-up Surveys and between Intervention and Control Areas

|  | Intervention           |                         |           | Control               |                       |          | Difference<br>in<br>difference |
|--|------------------------|-------------------------|-----------|-----------------------|-----------------------|----------|--------------------------------|
| Indicator  | Baseline               | Follow-up               | % change  | Baseline              | Follow-up             | % change | significance<br>level          |
| Percent of acutely ill clients of PHC facilities who report that the quality of care received is excellent or good                   | n=62<br>72.5           | <i>n</i> =61<br>91.8    | 26.6      | <i>n</i> =33<br>87.9  | n=25<br>96.0          | 9.2      | 0.690                          |
| Percent of women of reproductive age who report currently using a modern contraceptive method  | <i>n</i> =1,554<br>4.5 | <i>n</i> =1,501<br>7.6  | 68.9***   | n=632<br>2.7          | <i>n</i> =605<br>2.8  | 3.7      | 0.044                          |
| Percent of women of reproductive age who report receiving advice in the past year from a health care provider on reproductive health | <i>n</i> =1,576<br>2.2 | <i>n</i> =1,518<br>10.3 | 363.1 *** | <i>n</i> =634<br>1.4  | <i>n</i> =611<br>3.1  | 119.0 ** | 0.000                          |
| Percent of government clients with a cold/flu who report first seeking care from a polyclinic or hospital                            | n=83<br>43.4           | n=87<br>23.0            | -47.0 *** | <i>n</i> =62<br>50.0  | n=58<br>48.3          | -3.5     | 0.104                          |
| Percent of government clients who are chronically ill who used PHC facilities during past month                                      | <i>n</i> =388<br>50.0  | n=393<br>64.6           | 29.2 ***  | <i>n</i> =229<br>37.1 | <i>n</i> =247<br>42.1 | 13.4     | 0.091                          |
| Percent of government clients 50 years of age and older using who used PHC facilities during past month                              | n=270<br>58.9          | n=288<br>72.2           | 22.7 ***  | n=164<br>42.7         | n=178<br>47.8         | 11.9     | 0.212                          |

\*\*\* p<0.01; \*\* p<0.05; \* p<0.10

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