

## **Impact Evaluation of Performance-based Contracting for General Health and HIV/AIDS Services in Rwanda**

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The global shortage of human resources for health care delivery is reaching crisis conditions in the poorest countries, adversely affecting the lives of millions and preventing achievement of the Millennium Development Goals (Chen 2004, World Bank 2005). The deficit of well trained and highly motivated health care workers in developing countries is a reflection of the high levels of absenteeism (Chaudhury et al forthcoming) and worker emigration to richer countries (Stilwell et al 2004). This research will provide some of the first rigorous empirical evidence on whether Performance Based Contracting (PBC) for health services is a feasible method for improving quality of care, increasing access to quality health care services, and significantly increasing health outcomes. It will also be the first study of PBC in the African context. This work is especially timely since the human resources crisis, lack of progress towards the MDGs, and health needs of the poor (esp. HIV/AIDS and malaria) are the greatest in Africa. The knowledge generated by this research will not only fundamentally serve the Rwandan government, World Bank and other donor agencies as they prepare for expansion of PBC for health services within Rwanda, but also the international community as it searches for more effective means for addressing the human resource crisis in health care. PBC has been implemented by the government of Rwanda as part of the Health Sector Strategic Plan. PBC involves the transfer of conditional funds to health care centers to supply a package of basic health services to the population. The payments are two part tariffs, where the first part is a fixed budget to finance a minimum set of inputs that is independent of performance, and the second part is a payment whose size depends on a set of performance indicators. The indicators which will be the key points of interest in the evaluation are related to prenatal care, child immunization, delivery by skilled attendants, family planning, VCT, as well as ART, when available. At the hospital level, the indicators include in-patient days and caesarean sections. Funds from the performance-based payment can be used for any purpose, including topping up staff salaries, at the discretion of the facility. The performance-based component is expected to increase provider budgets as much as 50 percent if they meet all performance targets.

The evaluation will take advantage of a prospective quasi-experimental design. The evaluation sample consists of 168 of the approximately 400 facilities in Rwanda, with approximately half the sample receiving PBC in 2006, and half in the next phase of the rollout. The facilities that are incorporated into PBC first will form the treatment group and those incorporated 24 months later will be the controls. While the treatment facilities will receive extra resources through the PBC, the control facilities will also receive extra resources of an equal amount through an increase in their input based budgets. The purpose of this is to test the effect of the PBC incentives and not confound the identification with an increase in financial resources. If we did not also increase the input budget of the control facilities, then we would not be able to tell if

any increase in outcomes in the treatment facilities relative to the controls facilities was due to the PBC incentives or due to the increase in resources through PBC. Pre-intervention baseline data was collected (2006) and post-intervention follow-up data (2008) will be collected in both treatment and control areas in order to construct difference-in-difference estimates of the impact of PBC on facility performance indicators and on individual outcomes. The identifying assumption for difference-in-difference analysis is that the change observed among the controls is a consistent estimate of the counterfactual, i.e. of any change that would have occurred among the treatments, had they not been treated.