Extended Abstract

Title: Increasing utilization of maternal, newborn and child health services in Bangladesh: Performance-based incentive works

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INTRODUCTION

In spite of having a comprehensive service delivery infrastructure from grassroots to tertiary levels, there is significant underutilization of the existing capacity in providing maternal, newborn, and child health (MNCH) services, especially due to shortages of qualified staff, and sub-optimal performance of providers. On this backdrop, a pilot study on pay-for-performance (P4P) for providers was initiated in Bangladesh. The P4P study has been included as a human resource innovation project under the operational plan of Ministry of Health and Family Welfare, Government of Bangladesh.

OBJECTIVES

The key objective of the study is to test the effectiveness of introducing P4P model for increasing utilization of delivery, maternal, and neonatal care services, and under-five children's life-threatening health care services, from facilities for contributing to the Millennium Development Goals 4 and 5.

STUDY DESIGN

The study, with separate sample pre-test/post-test control group design, has three arms: one control and two intervention arms. Two strategies have been employed in the two intervention arms for 12 months, while the control group remains unexposed of any intervention. The 'first strategy' is a combination of the pay-for-performance and demand-side-financing while the 'second strategy' employs only the pay-for-performance incentives for facility-based providers.

The study provides a unique opportunity for comparing the pay-for-performance for providers against interaction between the pay-for-performance for providers and demand-side-financing for the poor clients. Comparison between the control and intervention groups will inform the effectiveness of the incentive model while comparison between the two strategies will measure the relative effectiveness of adding the demand-side incentives on top of the supply-side incentives. To measure the impact of the intervention activities, data are collected through service statistics, population-based surveys among the eligible women and service providers, and visits of 'quality assurance group'.

Study sites

Bangladesh is administratively divided into 7 divisions, 64 districts and 508 upazilas. There is a comprehensive public-sector service delivery infrastructure to provide health care services at all levels. At the sub-district level, there is Upazila Health Complex with 31-50 beds, which covers 250,000-300,000 population. District hospital, with 100-250 beds, covers 1-2 million population

and serves as referral for Upazila Health Complexes. Above the district level, medical college hospitals and postgraduate institutes and hospitals are located, all in urban areas.

From three districts, 12 government health facilities are the intervention sites while four facilities in another district comprise of the control site. A total of four facilities from each district – one District Hospital, one Upazila Health Complex with comprehensive emergency obstetric care services and two Upazila Health Complexes with basic emergency obstetric care services – are exposed to the interventions for the study.

Among three intervention districts, two districts are implementing the Strategy 1 with incentives for both providers and the poor mothers, newborns and under-five children while one district is testing Strategy 2 with provision of incentive only for the providers. Two interventions, facility strengthening through human resource development and NGOs' community-based awareness raising and referral, remain constant across all sites.

KEY ACTIVITIES

Formation of quality assurance mechanism

One of the key prerequisites for introducing P4P approach is to have a quality assurance system. Quality Assurance Groups (QAGs) have been formed within each district, consisting of technical persons from nearby Medical College Hospital and professional body, with the purpose to provide systematic visits to health facilities to accredit and assess. In the preparatory phase, QAGs visited each facility to accredit the facilities for ensuring that they offer a minimal standard of quality of maternal, newborn and child health services. During the intervention, QAGs make quarterly visits to each of the facilities, grade the facilities and provide supportive feedback to the providers to improve maternal, newborn and child health services.

Introducing P4P approach

- **Incentive recipients.** Since the main thrust of introducing P4P approach is to increase institutional deliveries, direct and indirect providers, and administrative and support staff related to pregnancy, neonatal care and under five children's services at Upazila Health Complexes and District Hospitals are eligible to receive incentive if the performance targets are achieved or exceeded.
- **Targets.** Two levels of quantitative performance targets based on the benchmark are set to pay incentives to health facility that meets or exceeds the targets. Amount of incentive of a facility varies according to its level of performance improvement– higher incentive payment for higher performance improvement. Incentives payable to providers and staff are calculated on the basis of level of efforts; for instance the direct MNCH service providers receive full incentive while the indirect MNCH service providers and administrative staff receive half incentive. Performance targets, standard benchmark level of performance, and level of incentive payment are determined by QAG in consultation with respective facility-based project implementing committees.
- **Reimbursement mechanism for providing incentives.** At the end of each quarter, performance is measured and the magnitude of the incentives is determined. Incentive

payment related to performance is determined by the QAG teams, and reimbursed by the project implementing agency. The project staff calculates the amount of incentives payable to the service providers by using the QAG visit reports. The service providers receive money quarterly for achieving the facility-based performance targets. Meanwhile, the disbursement of fund is validated by an Audit Firm, in order to avoid fraudulent activities.

Demand side financing

On the demand side, poor pregnant women in the project areas receive financial assistance to meet costs of transportation, medicines and other incidentals for pregnancy-related complications. Newborns of poor pregnant women and mothers of under-five children receive similar financial assistance too. Vouchers have been developed to cover transportation, medicines, and incidental costs relating to unforeseen expenses women, newborns, and under-five children may incur while staying a facility. Medicines are provided on receipt of a medicine voucher, while cash is provided to beneficiaries to meet transportation and incidental costs after receiving services.

PROJECT BENEFICIARIES

The primary beneficiaries are the poor pregnant women aged 15-49 years, newborns and under-five children. Service providers who provide maternal, neonatal and under-five children services are the secondary beneficiaries.

PRELIMINARY FINDINGS

Performance-based incentive is implemented in 12 public sector health facilities. The interventions are in third quarter. Assessment of the performance in first two quarters indicates that 11 out of 12 facilities in 3 districts received incentives based on achieving the target in both the first and second quarters. In terms of quality, facilities that have achieved performance targets used partrograph in almost all deliveries and improved the readiness of labor room, emergency room, female ward, pediatric ward, lab and store. They have also introduced the Antenatal Care and Postnatal Care Corner. Preliminary findings demonstrate that incentive has the potential to entice the service providers to perform to reach the target within the stipulated time.