

Patouillard E^{1,2}, Mamdani M², John P², Mashasi P, Mayumana P, Njau P, Ipuge Y², Olafsdottir A², Abdulla S² and Borghi J^{1,2}

¹ London School of Hygiene & Tropical Medicine, London, UK
² Ifakara Health Institute, Dar es Salaam, Tanzania

ih! IFAKARA HEALTH INSTITUTE
 research | training | services

Introduction

A Pay for Performance (P4P) scheme of 6-monthly results-based bonuses to health workers, their facilities and district/regional managers who achieve pre-defined performance targets for maternal and child health (MCH) services is being piloted in one region of Tanzania. All MCH 7 Hospitals, 17 Health Centres and 182 Dispensaries can participate. Bonuses amount of \$30 to health workers - ~10% of average monthly salary (\$4 to non-MCH hospital workers) and \$25 to managers. We present data on MCH service use at baseline, facility performance at the first payment cycle (Cycle 1) and P4P implementation process during the first 16 months of the pilot.

Methods

A non-randomised controlled before-after study was designed to measure the impact of P4P on the use, cost and quality of targeted and non-targeted services. Interviews during the baseline surveys were conducted with 3,000 households of women who gave birth in the past year; 1,500 patients following a consultation at a health facility; 200 health workers; and 150 health facilities. A qualitative study was also designed to collect information on the implementation process of the P4P pilot and its acceptability and sustainability through document review and 60 qualitative interviews with key stakeholders.

Figure 1 – Health Workers’ Satisfaction

Source: P4P baseline health worker survey

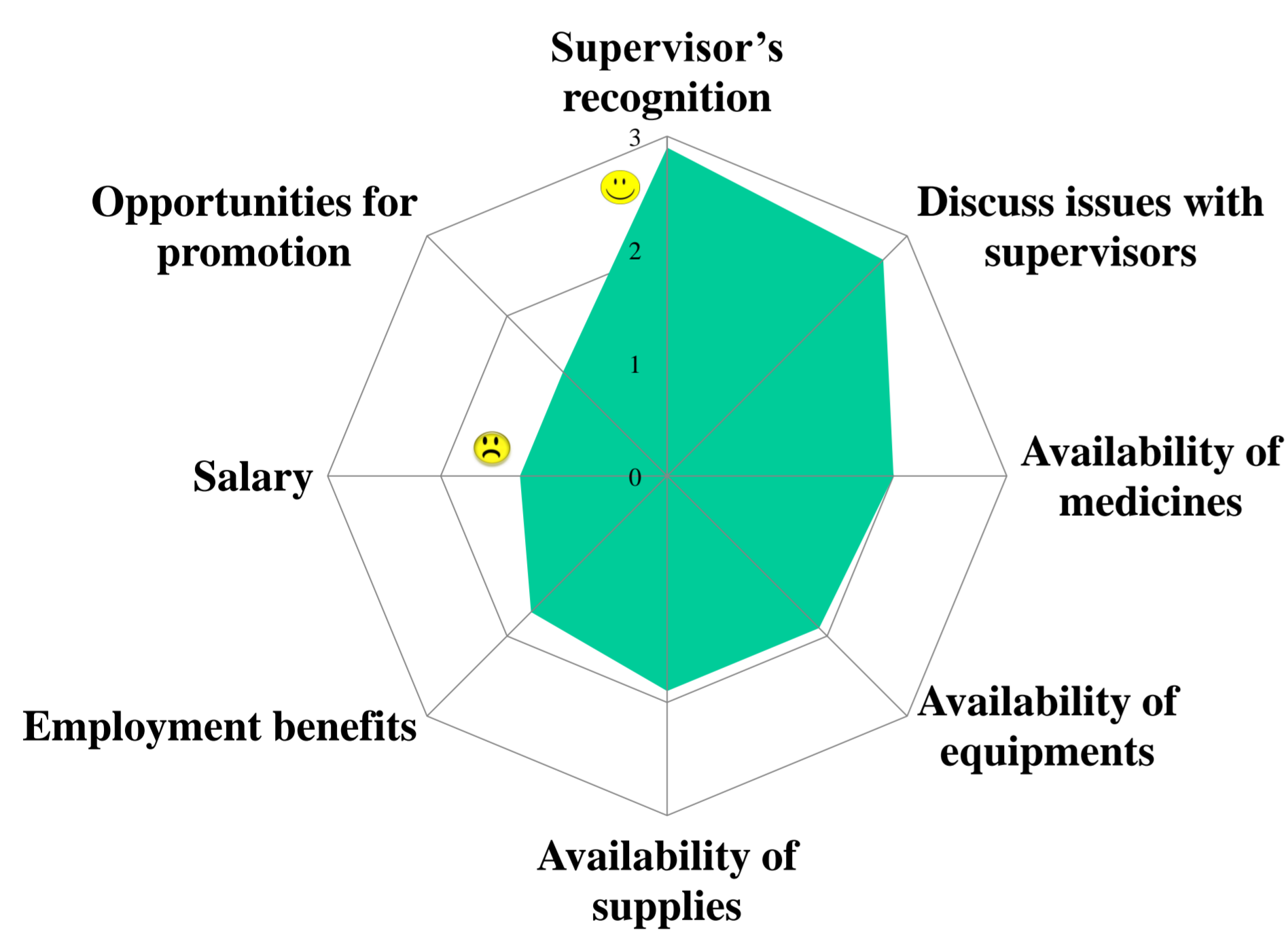


Table 3: Facility resources at baseline

Source: P4P baseline health facility survey

Resource Availability at facility	% facilities that report resource availability*	% facilities that report stock out / absence** (mean no of days)
IPT drugs	83	19 (54)
Oral polio vaccine	98	15(24)
Measles vaccine	98	9 (25)
Medical officer	14	30 (n/a)
Clinical officer	46	35
Nurse midwives	41	17

*for drugs, availability at time of interview; for staff, at least one staff employed at facility; **for drugs, stock outs in past 90 days; for staff, absence at least one day in past 30 days.

Conclusions

P4P is a welcome initiative with the potential to boost health workers' motivation, notably at lower levels of care. However, systemic constraints are perceived to impede implementation. Bonuses allocated to health facilities are expected to be used for addressing such constraints. Continuous process implementation research will provide evidence on how bonus payments are used by facilities to address such constraints whilst endline survey data will reveal P4P impact on targeted and non-targeted service use, cost and quality.

Results

Household survey baseline data show relatively high coverage of MCH services in P4P's facility catchment areas, notably for institutional deliveries. Postnatal care (PNC) coverage was however relatively low (Table 1).

Table 1: Coverage of MCH services in the pilot region at baseline

Source: P4P baseline household survey

Baseline household data	Women with ≥ 4 ANC visits	ANC by doctor (nurse)	Delivered at facility (public)	Delivery by medical staff (TBA)	PNC ≤ 2months after birth
% of women	66	12 (88)	85 (77)	86 (14)	32

Facility performance and bonuses. Cycle 1 overall performance was low, except for vaccination targets of infants under one year (U1) (Table 2).

Table 2: Performance indicators and facility target achievements

Source: P4P Project Management Team Cycle 1 performance report

P4P Performance Indicators Cycle 1	% facilities that achieve 100% of performance target <i>Full bonus received</i>	% facilities that achieve 75-99% of performance target <i>Half bonus</i>	% facilities that achieve <75% of performance target <i>No bonus</i>
% of ANC clients receiving IPT2 (malaria prophylaxis)	8	5	87
% of HIV+ ANC clients receiving ARVs	19	4	76
% of newborns receiving oral polio vaccine ≤2 weeks after birth	24	16	60
% of U1 receiving measles vaccine	45	22	32
% of U1 receiving pentavalent 3 vaccine	44	24	33
% of institutional deliveries	27	16	57

Factors affecting P4P implementation. Qualitative interviews revealed that P4P bonuses were a motivating factor for health workers in the context of health workers' dissatisfaction with their pay (Figure 1), notably at dispensary and health centre levels.

"P4P helps [workers] to get some money and this motivates them to provide services more efficiently", District manager
"P4P payment motivates me to work [...]" Health worker.

There were however important concerns regarding the potential for P4P to create tensions between RCH/non-RCH staff at hospital level due to the differential bonus amount (\$30 vs. \$4 respectively).

P4P targets were also perceived to be too difficult to attain due to current system constraints.

"They want us to implement P4P but they did not consider the weaknesses in the system" District Manager.

The main constraint included medical supply and drug shortages, and the lack of medically trained staff (Table 3).

"The shortage of drugs, this makes us fail...many drugs were not available; malaria pills [IPT] were not available and it is one of the P4P indicators" Health Worker

"Because of the shortage of [medically trained staff] you can hold a newborn while the mother continues to bleed [...] you don't know who to save [...] this situation is totally demoralising" Health Worker