Assessment of the SC (US) performance-based incentive mechanism and economic analysis of the project “Revitalizing and Improving Primary Health Care in Battagram District”

SHORT SUMMARY REPORT

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Background

Save the Children US started working in Battagram district after the October 8th 2005 earthquake. From 2007, SC (US) entered a public-private partnership to revitalise primary health care in the district through reconstruction, equipment, provision of supplies, management support and training. In addition, from 2008, SC (US) started a performance-based incentive (PBI) scheme, whereby all government-employed health facility workers were entitled to receive an additional 20-35 percent of their pay, according to performance criteria. This project was funded by the World Bank. Its budget was just under $3 million.

Objectives of review

As the project draws to a close in June 2010, SC (US) has commissioned a review of the project, in particular the PBI component. The aims of the review are:

1. To assess the mechanism and effectiveness of the performance based incentives given to the staff during the project life;
2. To assess the effects of performance based incentives in terms of individual performance by staff;
3. To assess the costs of the performance based incentive component;
4. To prepare a short report on the performance based incentives and its costs giving recommendations to the Government

Review methods

A very "light touch" review was carried out in June 2010 using quantitative analysis of HMIS data, financial records and project documents. In addition, 11 key informant interviews were carried out with stakeholders at SC (US), the World Bank, and in the provincial and district offices. At facility level, in-depth interviews were held with seven managers and other staff working at four facilities (three BHUs and one RHC), and 11 focus group discussions with staff and community members were organised.

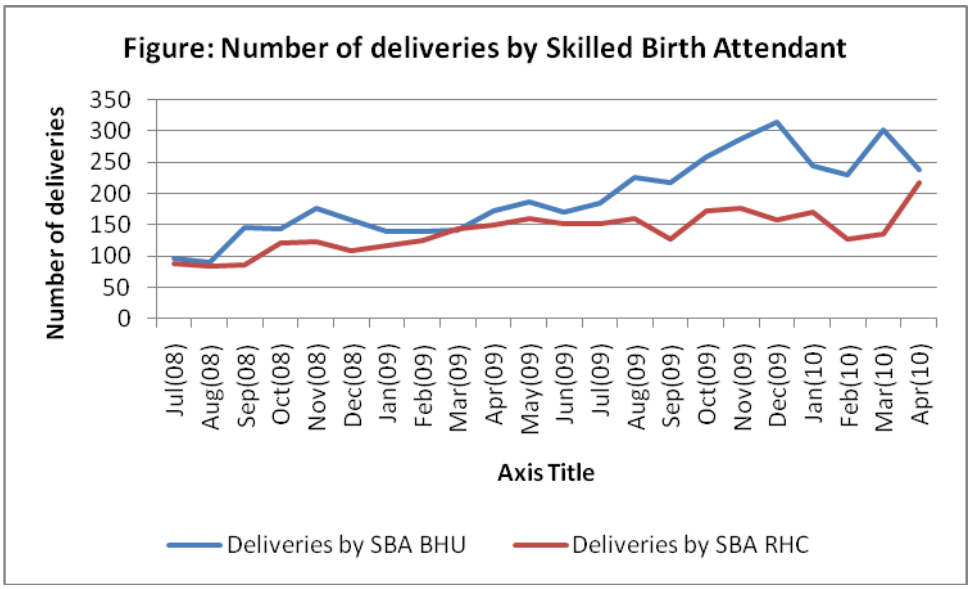
Description of PBI

The PBI has been designed around two measurement tools – one is a supervisory checklist, which is filled each month by an independent monitor (often from SC US), who checks on qualitative issues such as hygiene of the facility, functionality of equipment, maintenance of registers etc. The second is a set of targets set for preventive services, including coverage of ANC, deliveries by skilled birth attendants, post-natal care, newborn weighing, growth monitoring for under-threes, and three immunisation indicators (TT2 completed, infant immunisation started and immunisation completed). An overall weight of 40% was given to the qualitative indicators and 60% to the quantitative. According to the combined score reached, staff received a monthly supplement to basic pay of 20-35%, paid to all staff on the government payroll (which is managed in the district by SC US at present).

Impact on services

The review concluded that the project as a whole has contributed to an increase in the functionality of the health system and its outputs, as indicated by the interviews with staff and clients and also by the trends in specific services. Deliveries with skilled birth attendants, for example, increased by 150 per cent between July 2008 and April 2010 (see figure 1). Immunisation, while more variable month by month, still increased by 89% at BHU level, comparing the first six months of the project with the last six months. At RHC there was a reduction over the project lifetime – however, if this represents services shifting to the primary level, then that is an appropriate switch. Analysis of the TT2 uptake supports the view that users have been enabled to seek immunisation services at lower level facilities.

Figure 1. Number of deliveries attended by SBAs monthly in BHUs and RHCs from July 2008-April 2010, Bhattagram district



No data has been found for the period prior to the project to examine to what extent these positive trends are a continuation of previous trends, or a shift in the trend line. Comparing the MICs survey of 2001 with that of 2008, it can be seen that deliveries with SBAs had already risen significantly at district and province level by the time of the introduction of the PBIs, from 14% to 40.5 in Battagram and from 28 to 41% in the province as a whole. There are no comparable data for the other indicators. However, given the devastation wrought by the earthquake, it is fair to assume that much of the growth in services can be attributed to the project.

Whether it can be attributed to the PBI component is more contentious. The PBI represented 24% of the total project expenditure, and was accompanied by considerable additional investments in salaries, infrastructure, training, equipment and management support. The case studies of individual facilities suggest that general investments in staffing and upgrading facilities have been the main factors behind improved service delivery. Individual facilities show great fluctuations over time in performance scores, in particular, which are commonly linked with the availability (or absence) of key staff, such as doctors and nurses.

The review also concluded that the despite the focus on preventive care of the indicators, other services (as tracked very broadly through out-patient attendances) had not been squeezed out by the project. Analysis of total OPD visits over the project period reveal that utilisation rates rose from 0.42 per person per year (based on the first four months of the project) to 0.51 per person for the last four months. This is a rise of 22%, which is significant, although still well below the WHO norm of 2 OPDs per person per year. At the RHC level, the increase was from 1.13 to 1.85 per person per year – an increase of 63%.

Design of PBI

In terms of design, the use of two different scoring methods – one based broadly on 'process factors' which staff can directly influence (such as the cleanliness of the facility), and the other based on outputs, which are important but can only be partly influenced by supply-side actions, is seen to represent a good balance. Average scores were higher for the supervision scores (73%) than the performance ones (46%), as performance indicators are 'stickier' and change more slowly (especially skilled deliveries, which are affected by important community beliefs, as well as cost and other access barriers). Differential thresholds for targets allowed for the fact that some indicators (e.g. ANC) start at much higher levels than others (e.g. facility deliveries).

The two scores were correlated, as would be expected – generally, facilities with higher average supervision scores also had higher average performance scores, although the range was much greater for the latter (5% - 48%), while supervision only spanned 20% - 37%.

Implementation issues

In terms of its implementation, the perception of the PBI amongst staff was positive – importantly, it was seen as being objective and as rewarding the performance of the whole facility. There were however some concerns in relation to equity – the main one related to the different treatment of staff hired by SC (US), who are on a higher pay-scale and not included in the PBI scheme. The motivation behind this is not clear, but it does suggest that the PBI was being used primarily as a salary top-up for public servants.

The process for measuring performance appears to have functioned well for the BHUs and RHCs, although there were months in which no assessment was made (and facilities received an automatic score, which clearly undermines the approach). The average number of supervisions missed, per facility over the project lifetime, was 1.5, but for some facilities it reached 10-12 months (out of 30). There were also some discrepancies between the overall score reached and the level of incentive paid, but these were limited. The fact that payments were made directly into bank accounts, and were proportionate to income, removed the element of individual discretion that can prove very corrosive in performance management schemes.

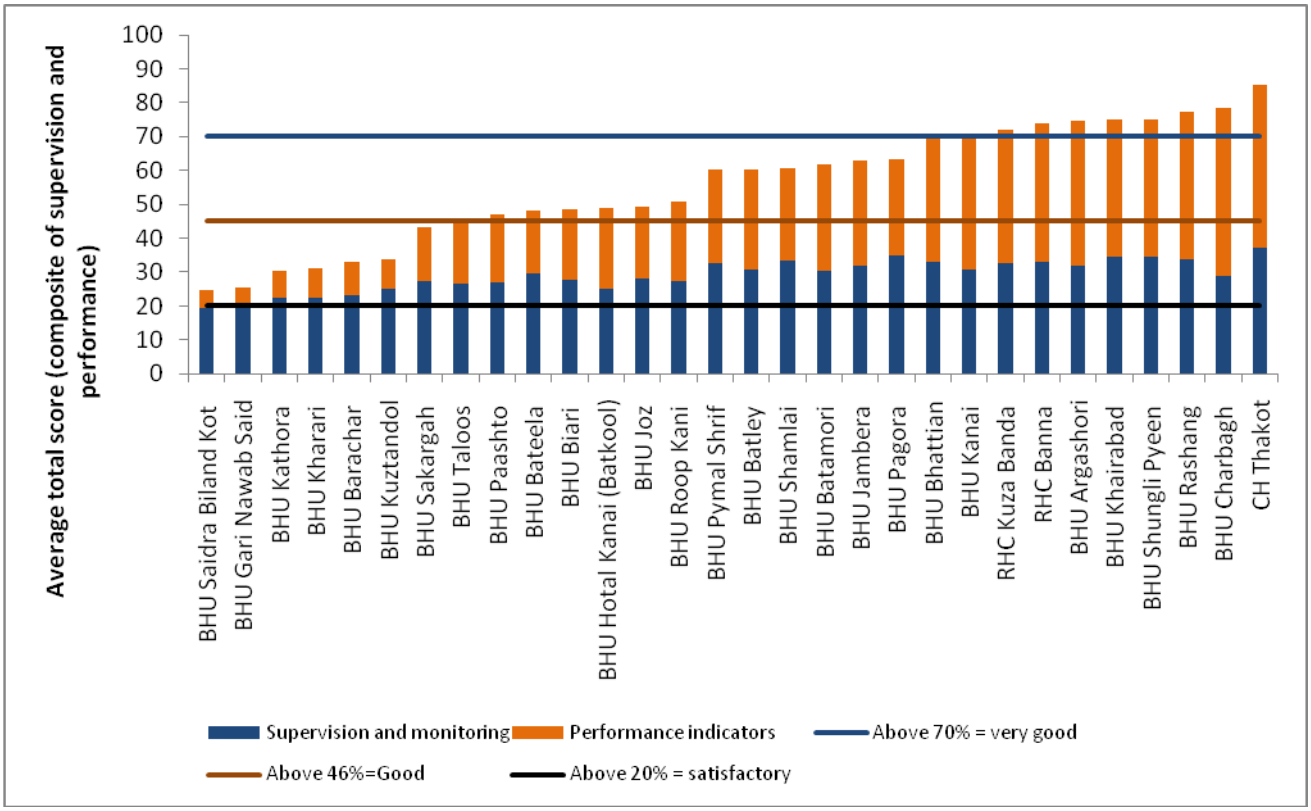
The system has worked less well for the civil dispensaries (CDs). All of the CDs scored less than 20 on the supervisory scores, and only one score higher than 10. The incentive paid to its staff never exceeded 20 percent. In addition, from the records it seems that the CDs were not visited regularly as part of the supervision and monitoring.

Motivational effects of the PBI component

The structure of the incentives did however raise some questions in relation to their effectiveness in motivating higher performance. Under the current system, a facility scoring a combined score of 0 would still receive an incentive of 20%. In order to receive the additional 15%, it would need to rise to 70% and higher – would that effort be justified? Interviews with staff suggested some scepticism, especially when the opportunity costs (no private practice) were considered.

A successful PBI scheme (one which motivated individuals and teams) would be expected to produce positive trends in performance scores, positive trends in incentives and also variation over time in the position of individual facilities, reflecting differential effort or ability. In Bhattagram, the supervision score component actually fell by 1 point (or -3%), reflecting its high starting point, while the performance score increased by 9 points (or 36%). However, the overall incentive score rose only by 2 points (7%) over the life of the project (comparing the first six months with the last six months), and payments to individual staff did not increase on average over time. This suggests that the overall project has been effective but that the link with the performance measurement system and incentives is weak.

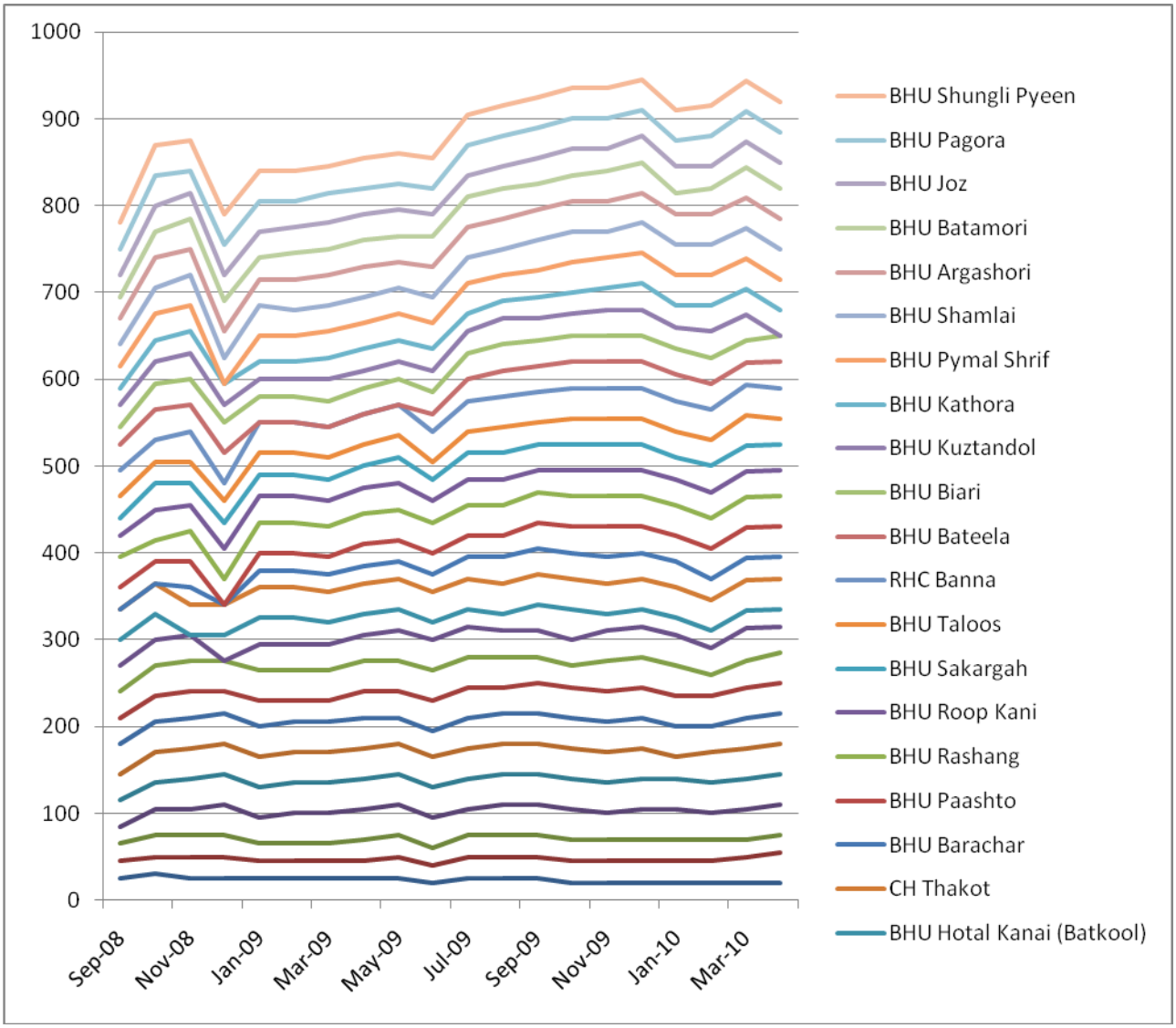
Figure 2. Average total score for each BHU and RHC between September 2008 and April 2010



On average, no facilities were graded as poor, and two-thirds fell within the incentive of 30%-35% band (see figure 2), suggesting that the scale was not sufficiently sensitive (or that all facilities are really achieving on the same high level). Moreover facilities maintained more or less their position in relation to the starting point, and moved in synchronised patterns (see figure 3). Those with higher performance at the start appear to have made more progress over time than those lower down. This

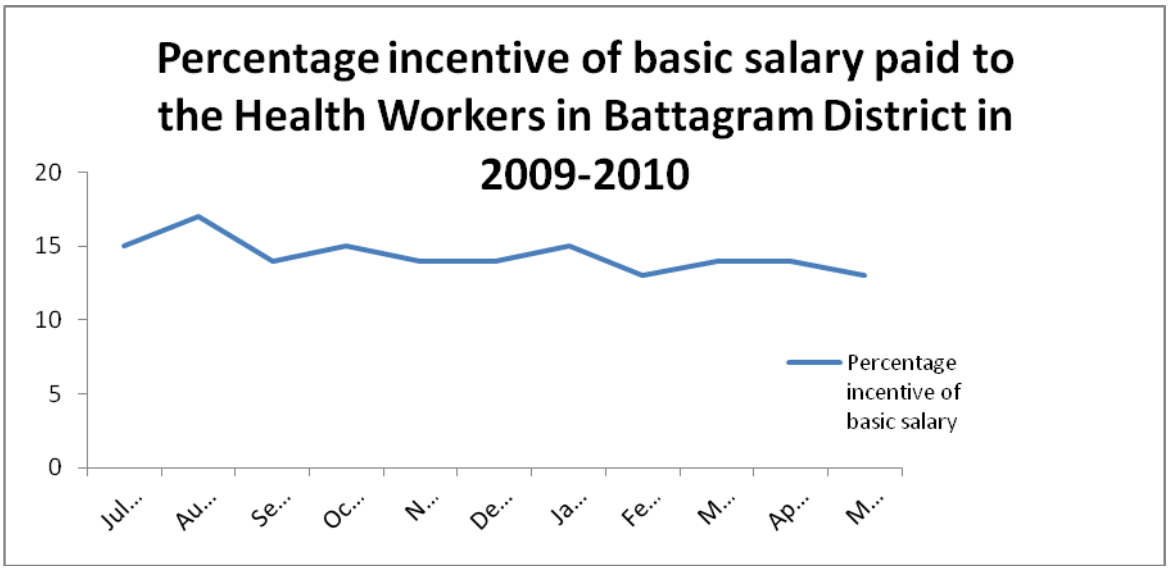
indicates that prior features (either features relating to the services or to the communities served) constrained their ability to change their performance and that it was also influenced by shared external factors.

Figure 3. Scoring for incentives for individual health facilities from September 2008 until March 2010



Given that the incentives are meant to range from 20 per cent to 35% of pay, it is not clear why the average found in this study was 16% of basic pay overall (see figure 4), and lower at BHU level (13%). This was also commented on by staff, who requested a higher level of incentive (50-100% of pay). The high payments to administration (68%) raise questions too.

Figure 4. Incentive as a proportion of basic salary in Battagram Distrct in 2009-10



Overall stakeholder feedback on project

Stakeholder feedback was positive about the project as a whole – communities particularly appreciated the low cost of services and the improvements to supply, including the availability of staff and medicines, and improvements in quality and appearance of the facilities. Recommendations include putting more emphasis on community-based activities, developing a closer relationship with the district and provincial authorities, particularly in relation to handing over the project, and providing more detailed feedback to staff on their performance, including discussion of how to improve it.

Sustainability of approach

The project as a whole cost 184% of the district health expenditure, while the PBI element on its own was equivalent to 44% (see table 1). Although the cost of the PBI element is low in USD per capita terms (USD 0.68 per person in the district per year), it is nevertheless high compared to the public spend of $1.57. The costs of the external monitoring which is required to support the PBI system have not been isolated but would also prove a barrier in scaling up or replicating this project. Stakeholders also expressed concerns about the sustainability of the project, given financial, managerial and organisational constraints in the public health sector.

Table 1. Total expenditure on project and on PBI per capita in district Battagram, 2008-10

	Total expenditure 2008-2010, USD	Expenditure in one year, USD	Per capita per annum spend, USD	Ratio of expenditure to government
Overall project	2,095,297		2.88	1.84

		838,119		
PBI component	497,103	198,841	0.68	0.44
Government expenditure on health	1205671	482268	1.65	
Total	3,233,333	1,293,333	4.45	

Conclusions

The review concluded that the SC (US) project in Battagram has contributed significantly to rebuilding district health services. It has done so at a cost of less than $4.5 per capita (combining project and district health expenditure) and has achieved significant growth in outputs. Staff, managers and clients are appreciative of the gains in availability and quality of services.

At the same time, the role that the PBI component has played is less clear – PBI has formed a relatively small component of pay, and has not increased in line with outputs. There is little evidence from interviews and data that the conditional element of the PBIs is influencing behaviour. They are appreciated as a top-up to pay, but remain low in absolute and relative terms, and only slightly and indirectly related to individual performance.

The PBI component has nevertheless provided useful learning opportunities. It has demonstrated that a transparent and objective process for measuring performance of a facility as a whole can be implemented in Pakistan without causing staff resentment. It has demonstrated that a PBI approach focussed on preventive care can boost those services without reducing curative visits. It has pioneered a 'scorecard' system which recognises the importance of process and output indicators, and has added to the growing literature on how and in what circumstance performance-based incentives can play a role in health care in low- and middle-income countries. This is acknowledged as an area which deserves more study internationally.

Recommendations

There is now an urgent need for SC (US), together with the district and provincial authorities, to plan for an exit strategy for the project. The rehabilitation stage is more or less complete and there are concerns that an abrupt hand-over will lead to the collapse of currently functional facilities. The focus should be on ensuring reliable drug supplies and maintaining affordable prices for users. An element of 'hardship' pay to retain staff in rural areas is likely to be essential (not least because expectations are now set at a higher level), but whether this requires a complex framework of facility indicators, or can be linked to something more simple, such as regular attendance, should be discussed by all stakeholders. Other recommendations which should be discussed are how to get greater support and involvement from the province, and how to set up systems for interactive review of constraints and successes with staff at the facility level. Despite the monitoring procedures in the PBI process (with monthly external visits to fill in checklists), staff did not feel that they were closely involved in the assessment process, nor did all have a clear understanding of how it was meant to work.