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SUMMARY REPORT

PERFORMANCE-BASED INCENTIVES: CONSULTATIONS FOR HARYANA STATE DEMONSTRATION

New Delhi; May 7–8, 2015 | Gurgaon; May 23, 2015 | Panipat; June 3, 2015



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This report was prepared for the Health Finance and Governance project by Kavita Sharma, with technical inputs from Rena Eichler, Karishmah Bhuwanee, and Amit Paliwal.

The Health Finance and Governance Project

USAID's Health Finance and Governance (HFG) project will improve health in developing countries by expanding people's access to health care. Led by Abt Associates, the project team will work with partner countries to increase their domestic resources for health, manage those precious resources more effectively, and make wise purchasing decisions. As a result, this five-year, $209 million global project will increase the use of both primary and priority health services, including HIV/AIDS, tuberculosis, malaria, and reproductive health services. Designed to fundamentally strengthen health systems, HFG will support countries as they navigate the economic transitions needed to achieve universal health care.

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Submitted to:
Ekta Saroha
Programme Management Specialist
Strategic Information and Policy
Health Office
USAID

Abt Associates Inc. | 4550 Montgomery Avenue, Suite 800 North | Bethesda, Maryland 20814
T: 301.347.5000 | F: 301.652.3916 | www.abtassociates.com

Avenir Health | Broad Branch Associates | Development Alternatives Inc. (DAI)
| Johns Hopkins Bloomberg School of Public Health (JHSPH) | Results for Development Institute (R4D)
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CONTENTS

ABBREVIATIONS

ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
BMO	Block Medical Officer
CHC	Community Health Center
CMO	Chief Medical Officer
CSO	Civil Surgeon Office
DHIS	District Health Information System
DPMU	District Project Management Unit
HFG	Health Finance and Governance (project)
IPHS	Indian Public Health Standards
MCTS	Mother and Child Tracking System
MO	Medical Officer
MO I/C	Medical Office In-Charge
MoHFW	Ministry of Health and Family Welfare
MPHW	Multi-purpose Health Worker
NHM	National Health Mission
PBI	Performance-based Incentive
PGIMR	Postgraduate Institute of Medical Education and Research (Chandigarh)
PHC	Primary Health Center
PNC	Postnatal Care
SC	Sub-center
SMO	Senior Medical Officer
TWG	Technical Working Group
USAID	United States Agency for International Development

1. INTRODUCTION: CONSULTATIONS ON PBI DESIGN

India has successfully established an extensive network of physical infrastructure for primary health care –148,366 sub-centers (SCs), 24,049 primary health centers (PHCs), and over 4,833 community health centers (CHCs). Nevertheless, wide gaps in access to quality health care continue to pose a challenge, as indicated by unsatisfactory performance on maternal and child health-related indicators. There is a clear need for strategies and interventions that can strengthen and leverage the existing health care system to improve access to quality health services. Performance-based incentive (PBI) – a strategy of rewarding behaviors that improve health – is widely seen as a potentially powerful tool to strengthen health systems and outcomes.

The government of the northern Indian state of Haryana has evinced strong interest in adopting a PBI scheme to improve primary health care services in the state. To this end, in December 2014 the USAID-funded Health Finance and Governance (HFG) project conducted a qualitative investigation in two blocks of Haryana (Nuh block, Mewat district, and Rai block, Sonipat district) to examine the existing incentive and operating environments, assess whether performance incentives would be motivating to facility staff and supervisors, and inform the design of a PBI scheme for demonstration in the two study blocks.

As the next step toward defining the PBI scheme framework, a series of consultative workshops were conducted to generate discussion and garner views and ideas on the different design elements of the PBI scheme. Departing from the conventional top-down approach, the consultative workshops sought to engage field-level health workers and other stakeholders in deliberations on intervention design and facilitated open and frank discussion and feedback sharing. Consultations on PBI design were thus spread across three workshops – a two-day national-level workshop held in New Delhi on May 7–8, 2015; a one-day block-level workshop for Nuh (Mewat), held in Gurgaon on May 23; and a one-day block-level workshop for Rai (Sonipat), held in Panipat on June 3. (See Annexes A and B for national- and block-level workshop agendas.) These workshops engaged different stakeholders in discussion and deliberation on the design of the PBI intervention that could be implemented in Haryana under the aegis of the National Health Mission (NHM).

The national-level workshop was attended by over 50 participants, including all cadres of health workers from both the demonstration blocks and representatives from national and state governments (Haryana, Punjab, Himachal Pradesh, Madhya Pradesh), technical support teams of the Ministry of Health and Family Welfare (MoHFW), and donor partners. The block-level workshops each were attended by over 25 participants, with representation from all cadres of regular and contractual field-level health staff – Medical Officers (MOs), Staff Nurses, Auxiliary Nurse Midwives (ANMs), Lab Technicians, and Pharmacists – as well as senior district and state-level functionaries. Annexes C and D contain lists of workshop participants.

1.1 Objectives of the Consultation Workshops

The main objective of the national-level consultation workshop was to involve ground-level staff, key decision makers, and health sector stakeholders in the design of the PBI intervention. The workshop aimed to:

- Share global experiences with PBIs
- Consider potential PBI models that would improve health system performance in the Indian context
- Involve stakeholders in refining the PBI model and the institutional implementation arrangements that will be adopted and implemented in the two demonstration blocks of Haryana

For consultations at the block level, these objectives were extended to include sensitization of the field health staff. The block-level workshops, thus, had the following objectives:

- Obtain feedback on the proposed PBI design
- Build understanding and buy-in

1.2 Methodology of the Consultation Workshops

The format for the workshops comprised a combination of didactic presentations and group work and discussions. The combination of presentations and consultative sessions enabled participants to learn about PBI and hold informed discussions about potential design elements and implementation issues. Presentations on different aspects of a PBI model were followed by group discussions. Each group then gave a brief presentation of some highlights of their discussion.

The national-level workshop opened with a welcome address and brief discussion of workshop objectives by Smt. Inoshi Sharma, Director Administration, NHM Haryana; Mr. Ashok Jha, USAID, New Delhi; and Dr. Rena Eichler, health economist and international expert on PBIs; Dr. Eichler led the workshop discussions on PBIs. The workshop began with a presentation on the theory of and global evidence on PBIs as a health system strengthening strategy. Following this foundation, the participants were presented a snapshot of a possible PBI model that could work in the Indian context. An overview of the health system performance challenges in Haryana and the findings of a recent PBI formative investigation in two blocks of Haryana were then shared with participants to orient the discussion. These presentations were followed by a series of group discussions, which began with a brief presentation on each design element of the PBI system and the operational decisions that needed to be made. At the end of each group work, the participants shared their feedback, comments, and suggestions on the design element under discussion. The workshop concluded with a discussion on the next steps and the post-workshop decisions toward formulating a PBI scheme for demonstration in Haryana.

The two block-level workshops began with an opening address by Smt. Inoshi Sharma, Director Administration, NHM Haryana, and by senior members of the HFG team. To enable informed discussions, the workshop participants were given brief presentations on the concept of PBI and its varied application in different contexts worldwide. The participants were also acquainted with the PBI model proposed for India. Once the background information on PBI design had been shared with participants, the workshops proceeded to focus on the main activity: participative, interactive discussions on three key design elements of the planned PBI scheme – incentive recipients, payment model, and indicators and targets. Drawing on the experience of the national-level workshop, the more complex aspects of PBI scheme operationalization (reporting, verification, and payment) were omitted from the block-level discussions.

The consultation workshops witnessed lively and productive discussions among participants. These discussions not only generated an improved understanding and sharing of ideas and concerns relevant to PBI scheme design, but, more crucially, informed and involved the different stakeholders on the need for transforming the current public health service delivery culture and created wide consensus on the role that a well-designed PBI scheme could play in motivating improved performance.

2. PBI: ESTABLISHING A COMMON UNDERSTANDING

In recognition of the crucial importance of common understanding and expectation setting for an informed, collaborative discussion, the consultations began with an incisive presentation on PBI, its parameters, potentialities, applications, and pitfalls. PBIs are supply-side incentives (given to health care providers) and demand-side incentives (given to beneficiaries of health services) that are rewarded conditional on the performance of some agreed-upon health behaviors or achievement of outcomes. For the current purposes, the discussions focused only on the supply-side incentives that are given on the service delivery side to governments, supervisors, health facilities, health teams, or individual health workers.

Workshop participants were oriented to the existing health services challenges and the need for innovative PBI approaches to motivate providers to perform desirable behaviors; this is important, since centralized supervision of individual performance is close to impossible. PBIs not only improve provider performance but also strengthen the health system by building pressure for proper functioning of all the components of a health system. The participants were exposed to international case studies on the various PBI models that have been successfully adopted in diverse settings globally (Mesoamerican region, Argentina, Philippines, Rwanda, and Mozambique).

Key takeaways

- PBIs have a tremendous potential to improve performance and strengthen health systems.
- PBIs are not the answer to every problem but are a complement to the other essentials of the health system.
- There is growing international evidence of PBIs working even in settings that are resource-constrained and have a weak enabling environment.
- PBI design must be sensitive to the needs and imperatives of specific contexts.
- Clear communication of expected behaviors and verification of results are crucial for an effective PBI strategy.
- Time-limited measurable interventions (like immunizations, antenatal care [ANC] visits) respond faster to PBI than extended-duration interventions (like postnatal care [PNC], family planning) or chronic conditions (like HIV infection, diabetes).
- Ensuring quality of care remains a challenge and requires a sophisticated system.

3. PROPOSED: A DRAFT PBI MODEL FOR INDIA

A draft PBI model was presented to workshop participants to stimulate thought and discussion on the different design elements of a PBI scheme. The suggested model was based on the findings of the formative research conducted in Nuh and Rai blocks of Haryana in December 2014. For this draft model, as for any strategy, the goals of the PBI scheme were defined at the outset: reduce maternal, newborn, and child mortality; strengthen the performance of the public primary care system; enhance the quality of care; and improve the health of those with diabetes and hypertension. The principle of "accountable care" underlined the recommended approach. Accordingly, the PBI model set to foster health workers' and supervisors' accountability to the catchment population; strengthen prevention and primary care; promote coordinated delivery of care; reward target outcomes; encourage active problem solving; and strengthen monitoring and data use. The key design elements of the proposed PBI model are presented in Table 1.

TABLE 1. KEY DESIGN ELEMENTS OF THE PROPOSED PBI MODEL

Incentive Recipient(s)	At least: (i) Primary care teams at public SCs, PHCs, and CHCs (ii) Block Medical Officers (BMOs) *Rationale:* Health is produced by the health team working together. Rewarding facility teams encourages teamwork, group problem solving, and mutual accountability. Supervisors (BMOs) play a major role in enabling facilities to improve performance.
Indicators/ Targets	**Selection of indicators (up to 10) that:** • Reward attainment of targets, calculated against each facility's baseline performance *(This would ensure that the target for each facility is relative to its situation, for example, staffing level.);* consider "super bonus" for exceeding targets • Are part of the existing health information tracking and reporting system (District Health Information System [DHIS]) • Capture services provided to each priority population group (pregnant women, newborns, children, people with non-communicable diseases) • Include supply-side readiness measures at supervisor level (regular supply of drugs/commodities, properly functioning equipment, timely DHIS reporting, etc.) **Indicators could, for example, include**: • # of pregnant women receiving TT2 or booster • # of women receiving first postpartum check-ups within 48 hrs of facility delivery (CHC & PHC) or 48 hrs of home delivery by ANMs & Accredited Social health Activists (ASHAs) (SC) • # of children between 9 and 11 months fully immunized (BCG+DPT123+OPV123+measles) • Number of people attending family planning counseling sessions • Quality indicators, such as data reporting, cleanliness, and stock management
Reward Payment Model	• Quarterly payment • Payment to facilities as teams (up to 8% of the 3-monthly salaries for a facility type, based on staffing according to Indian Public Health Standards [IPHS] norms); plus extra 25% of what was earned to be used for facility investments and for outreach (hence, a 75% / 25% division between teams and facilities) • Payment to supervisors (up to 8% of the 3-monthly salary for achieving a targeted increase in performance in the facilities they supervise plus supervisor-specific indicators) • Reputational incentives, wherein best-performing facilities and supervisors are publicly recognized at quarterly meetings • Quality could be incentivized at a later phase

Operational Aspects	Operational cycle would involve: • Performance agreements and contracts • Results reporting and monitoring • Verification of results • Payment generation • Assessment and revision A PBI unit at the state level could: • Compare results and targets • Identify and investigate outliers • Calculate performance payment • Provide ongoing technical support • Undertake revisions of tools and guidelines A senior official assigned as PBI Manager could: • Oversee the PBI unit • Oversee training/sensitization • Coordinate audits • Approve payment • Oversee implementation research

Workshop participants were oriented to the changes that implementation of the suggested PBI model was expected to demonstrate in phases. Phase 1 was likely to encounter data challenges, staff's limited understanding of and belief in the PBI scheme, and minimal improvement in results. In phase 2, however, once the health workers see that the PBI system really works, the motivational impact of monetary and reputational incentives were expected to manifest in increased focus on attainment of targets, greater pro-activeness in reaching underserved populations, formulation and implementation of action plans to achieve results, and improved reliability of data. In about a year, the PBI scheme was expected to show positive changes in service delivery, depending on the indicators selected, for example, more women receiving TT2 during pregnancy, more children being fully vaccinated, more enabling supervisors, and fewer stock-outs.

Key takeaways

- Selection of existing indicators from DHIS would make reporting easier and strengthen DHIS.
- Rewarding contract workers the same as regular workers would support teamwork and equity.
- As targets would be relative to facility-specific baselines, an understaffed facility would, for example, be able to achieve its own performance targets.
- Pegging the incentive amount as salary percentage for a fully staffed facility type (based on IPHS norms) would result in higher individual payout in lower-staffed facilities, which could potentially retain/attract staff to such facilities.
- Incentive payment to supervisors and 25% as investment in facilities would strengthen facilities and contribute to service-readiness.
- The cost implications of this payment model would be about 4–5% of the state salary budget, as the actual payout will range from 0–8%.
- Sensitization and training would be critical to the success of the PBI scheme.
- A simple and easy-to-implement PBI design would be most manageable in the demonstration stage.
- A continuous improvement cycle for PBI scheme design could help address service quality issues.
- The perverse effects of incentives, such as neglect of non-rewarded services and false reporting, must be addressed at the design stage and through strong verification processes.

4. HARYANA: A CASE FOR ADOPTING PBIs

Paradoxical to its status as a fast-growing, economically strong state of India, Haryana finds itself encumbered with poor progress on the health care front. The state's health system challenges can be gauged from a quick comparison of its health indicators with those of the neighboring states of Himachal Pradesh, Punjab, and Delhi. Haryana lags its neighbors on under-5, neonatal, and infant mortality rates and immunization coverage. Similarly, the state has a relatively poor record on maternal health, nutritional indicators, drug stock-outs, family planning, and sex ratio. Clearly, there are inadequacies in Haryana's primary health care system's performance that need to be addressed.

The government of Haryana has shown interest in adopting a PBI scheme as a strategy to spur the performance of its public health facilities. In support of evidence-based programming, the HFG project conducted a formative investigation to gain insights into the existing incentive and operating environment and inform the PBI scheme design. Qualitative research was conducted at 10 public health facilities in two blocks of Haryana (Nun block in Mewat district and Rai block in Sonipat district). The study's findings were shared with workshop participants in order to orient them to the ongoing discussion on the planned PBI scheme.

The formative research had found a potentially receptive environment for PBIs, with the study participants welcoming the initiative to boost performance, encourage teamwork, and earn extra for achieving health service targets. The optimism was, however, tempered by lack of clarity and concerns about supply-side shortages of manpower, drugs, and infrastructure; the potential adverse effects of incentives, like distortion of priorities; and poor demand for health services. Salary-related grievances, particularly wage disparity between regular and contractual health workers, weak performance management and accountability culture, and lack of initiative and problem solving emerged as the other major challenges. On the positive side, the investigation revealed the presence of enabling factors and systems, such as recording of service delivery data, indicator tracking, and reporting and supervision structures. Analysis of study findings pointed to some issues/considerations that should be attended to in PBI scheme design. The box below presents some of the key considerations that informed the design of the draft PBI model.

Key considerations

- **Messaging** on the intervention should clearly communicate what the scheme offers, who will receive the incentive, how the scheme will work, and what role PBIs can play in improving performance and strengthening health systems.
- **Incentive amount and allocation** should be clearly delineated and communicated, addressing concerns of understaffed facilities, wage disparity between contractual and regular staff, and the need for ensuring supervisor accountability and investment in facilities.
- **Operational aspects** about who will perform the PBI management functions of performance agreements, results reporting and monitoring, verification, payment generation, and review, should be attended to.
- **Use of data** needs to be promoted.

5. SUMMARY: DISCUSSIONS ON KEY ELEMENTS OF PBI DESIGN

"This is the first workshop I am seeing in my 16 years of service where people from the level of LT [laboratory technician], ANM, and staff nurses have been invited to participate and decide what should be the parameters and what should be the incentive…"

Senior Medical Office (SMO), Rai block, Haryana

Discussions among stakeholders from different levels and cadres formed the most important part of the consultative workshops. A series of group discussions were organized in support of a bottom-up design process, which getting right would determine the effectiveness of the PBI initiative. To this end, active participation of workshop participants was encouraged to enable open exchange of views, ideas, and concerns on the key design elements of the planned PBI scheme.

5.1 Key PBI Designs Elements

For each design element, the participants were provided background information and some options to consider and discuss during group work. The four design elements discussed at the national workshop are briefly described below. For the block-level workshops, only the first three design elements were covered; the more complex aspects of PBI scheme operationalization (reporting, verification, and payment) were not.

1. Who should be rewarded – Recipients of incentives

As a starting point, the participants were advised to think about the challenges that the PBI scheme would try to address and the persons/teams whose behavior it would seek to change. They were also asked to consider the implementation-related aspects and potential difficulties that could emanate from choosing a set of recipients. Health facilities (SCs, PHCs, and CHCs, including ASHAs) and BMO and Chief Medical Officer (CMO) office teams were suggested as potential recipients. Participants were asked to consider whether all the facilities should be eligible for PBIs or some minimum criteria should be set, for example, facilities with a certain staffing level or facilities reporting DHIS data on time.

2. What should trigger incentive payment – Payment model

The second element the participants were asked to consider was on what basis the payment should be made, i.e., what kind of results would trigger performance incentive? The participants were reminded that incentives would not change the existing payment structure (salaries) and would also not replace the technical and financial support a facility gets for providing services. For the payment model, participants were asked to consider three options: payment of bonus for each unit of service (fee-for-service approach); payment for reaching targets; and payment for reaching targets plus "super bonus" for exceeding targets (the latter two represent a target-based approach). The different ways the incentive is paid has implications for cost control, data needs, and complexity of management. Based on the discussed pros and cons of the different approaches, participants were asked to select a preferred payment option for incentivizing recipients. They were also asked to consider whether the 75% / 25% split for individual bonuses and facility investment was appropriate.

3. What should be rewarded – Indicators and targets

Selection of performance indicators for the PBI scheme was an important area for group work and discussion. Aiming to clarify the concepts involved, the participants were explained the difference between "indicators" (what the facility is expected to do; for example, children being fully immunized) and "targets" (how far the facility should progress on an indicator; for example, 80 percent of children under one year being fully immunized). The participants were reminded that each facility would have a target relative to its own baseline. They were advised to take into consideration certain factors when selecting indicators: the health system challenges to be addressed and the key population groups to focus on; whether the facility team/supervisor can influence performance on the indicator; whether the indicator/target can be quantified, is the indicator already being reported/tracked (DHIS) or requires a new mechanism, and is it still verifiable after 2–3 months of service delivery; and whether the quality aspect of the indicator can be measured.

A list of potential facility-wise indicators (see Annex E) was shared with participants to consider. These indicators covered maternal and child health, nutrition, family planning, adolescent health, and non-communicable diseases. The participants were asked to consider the list and identify the indicators most suitable for the PBI scheme, and encouraged to think of other indicators that are not currently in DHIS but could measure data quality, facility management/governance, and quality. As the supervisory function is critical to improved performance, participants were asked to also think of suitable supervisor-level indicators. Participants were also acquainted with the perverse effects that may arise from selecting indicators that are important to track (for example, "% malaria in children [0-5 yrs.] to total reported childhood diseases") but may not be good to incentivize, and are, thus, unsuitable for inclusion in a PBI scheme.

4. How will it work: Reporting, verification, and payment

Operational aspects of PBI design and the incumbent administrative functions are crucial to the success of any PBI strategy. The national-level workshop participants reflected on and discussed these aspects in their final group work session. To enable an informed and focused discussion, the participants were, through a brief presentation, acquainted with the key functions in the PBI cycle and asked to think of the entities that will be responsible for/engaged in these different functions: negotiate and sign performance agreements, train and support facilities, establish reporting procedures, monitor performance (routine), audit and verify performance, generate payments, and evaluate and revise contract terms. The participants were asked to also consider the role that a PBI unit could play, along with a senior official providing program leadership and overseeing implementation research and an audit team performing audits of facilities. Energetic group discussions took place on the session theme, but it was clear that some of the concepts relating to operational aspects were complex to think about and tackle for field-level staff and would require more time and deliberation.

5.2 Consultative Discussions on PBI Design Elements

The workshop participants, organized into mixed groups of 6–8 people, discussed the multiple aspects of the different PBI design elements and came up with an array of comments and suggestions, informed by their experiences and the situation on the ground. Following each group discussion, the groups presented their feedback and ideas to all the workshop participants; their inputs were recorded for further deliberation and consideration in PBI scheme design. Summaries of group discussions at each of the three workshops are presented below.

i. Summary of discussions: National-level workshop

The two-day national workshop witnessed in-depth discussions on each design element of the PBI scheme. To aid clarity and understanding, the summary of group discussions from the national workshop is organized theme-wise, under two headings: areas of agreement and areas for further discussion.

Recipients of incentives

- **Areas of agreement**

  1. Primary health care facilities – SCs, PHCs, and CHCs – should be recipients of PBIs.
  2. The rewards should go to the facility as a unit because health care staff delivers health as a team.
  3. Both regular and contractual staff should be rewarded.
  4. ASHAs, all cadres of medical staff, and cleaners at a facility should receive the reward.
  5. Incentive percentage given to different functions could be in proportion to the contribution they make to health care delivery. For example, ANMs and ASHAs (at SCs) could be rewarded the most, as many of the parameters are primarily dependent on their efforts.

- **Areas for further discussion**

  1. There was disagreement about whether some support staff at facilities (drivers and guards) should also be rewarded as part of the team, as some participants felt that their inputs do not directly contribute to improved performance.
  2. A range of suggestions and concerns emerged on whether the supervisory BMO/SMO and CMO office staff should be rewarded. These points are summarized below for consideration:
     - They should be rewarded because their contribution in ensuring service-readiness of facilities is crucial.
     - SMO and CMO could be incentivized only for exemplary work, and their incentive could largely be reputational.
     - Another key issue to discuss is how supervisors would be incentivized, given that they play a dual role – being part of the service delivery team at their own facility (CHC) and also overseeing the performance of facilities under their supervision.
     - The increasing difficulty in attributing performance to a higher-level function (CMO) should be taken into consideration when/if designing incentives for the CMO office.
  3. Administrative staff at facilities and District Project Management Unit (DPMU) office could also be added to the list of recipients.
  4. Mobile medical unit and emergency ambulance service (102) staff could also be given incentive payouts, but as a separate category and not part of a PHC and CHC. (Notably, block-level supervisors have no control over their performance. Also, it should be checked whether these services are run by private agencies and already, under their existing performance agreements, claim bonus for providing service beyond a benchmark.)
  5. The payment structure for ASHAs may need to be different from that of other staff, as ASHAs do not get a salary. One suggestion was that their average payout for the previous three months (quarter) could be seen as salary and the percentage calculated based on that figure.
  6. The issue of unequal distribution of salary and work (to the disadvantage of contractual staff) should also be taken into consideration. ("*As a contractual ANM, I get only Rs. 3,800 monthly*

for covering a population of over 10,000 people…Apart from vaccination, birth and death certificates, and all other work, I also end up doing LTs' [laboratory technician] and pharmacists' work…all this under the threat of transfer.")

7. Another suggestion was that the block could be considered as a whole to avoid conflict and promote synergy between different facilities (which are sometimes adjacent to each other).

Payment model

- **Areas of agreement**

1. There was agreement on incentivizing improvement in performance. (However, concerns were voiced against using targets. Complexity of target-based terminology, potential for falsification of target data, and difficulty in setting targets for facilities that have a substantial floating/migratory population were the key concerns against using a target-based approach. Instead, use of "benchmarks" [the word could perhaps have been suggested as a semantic alternative to the word "target"] was suggested.)
2. Benchmarks could be identified for each service, and incentives could be linked to achievement of benchmark performance.
3. Bonus could be paid for exceeding benchmark performance.
4. The reward should not only be monetary but also reputational and non-financial.
5. The 75% / 25% split between individual bonuses and facility investment was seen as appropriate.

- **Areas for further discussion**

1. Fee-for-service approach could be explored, but the incentive would be paid only for exceeding the expected benchmark/performance *("not just for doing their job")*.
2. When looking at the fee-for-service approach, the cost implications for the state should also be taken into account. For example, if the number of services grew exponentially, how would the state manage within a fixed budget?
3. A separate target could be set for triggering bonus payment, and not just for exceeding the target by a point or so.
4. The incentive target could also be linked to maintenance of quality (such as clean equipment, neat surroundings).
5. Punitive measures could be adopted for non-performers, such as non-renewal of contracts.

Indicators and targets

- **Areas of agreement**

1. Indicators must be clearly defined to avoid any ambiguity or misuse.
2. Denominators should be well thought out. For example, for ANC visits, the denominator could be the number of pregnant women who were due for ANC during a period and not the total ANC visits registered.
3. Denominator/coverage and the related targets must be clearly stated for each facility, as there is overlap.
4. The way some indicators in DHIS are defined needs to be examined closely. (However, the feasibility of revising/modifying DHIS indicators requires careful thought.)
5. Operating variables need to be considered carefully while setting targets. For example, there are instances when a facility serves a much larger or much smaller population than it is expected to serve.

- **Selected/suggested indicators**

  As the different groups at the national workshop separately tackled the extensive exercise of indicator selection, consensus on each selected indicator was not established. The different groups selected some indicators from the list of potential indicators (see Annex E) and suggested some new indicators for inclusion in PBI design. The indicators not selected were not always discussed, but some were rejected for being vague, non-verifiable, or inappropriate for a facility type.

  For ease of reference, the selected indicators and the suggested new indicators have been compiled in Tables 2 and 3, respectively. The benchmarks, verification measures, and calculations, where suggested, are also recorded in the table. (Note: The order does not imply ranking.)

TABLE 2. SELECTED PBI INDICATORS

Facility type (S. No.)	Indicator	Target population	Which data can be used to verify this indicator?	Comments
CHC				
1	# of pregnant women having severe anemia (Hb<7) treated at institution	Pregnant women	ANC register, Hb test results	*Modification suggested:* % of pregnant women diagnosed and treated at CHC
2	% of complicated pregnancies treated with IV antihypertensive/ Magsulph injection to total women with obstetric complications attended	Deliveries / PNC	Register of facility and home deliveries, Partographs	*Modification suggested:* % of complicated/high-risk pregnancies treated at CHC
3	# of women receiving first postpartum check-ups within 48 hrs of facility delivery (CHC & PHC) or 48 hrs of home delivery by ANM & ASHA (SC)	Deliveries / PNC	Delivery register (facility delivery), Mother and Child Tracking System (MCTS) follow-up calls (home delivery)	Incentive must be given to paramedical staff also so that they take interest in keeping the patient.
4	# of newborns receiving first postnatal check-up within 48 hrs of facility-based birth (CHC & PHC)	Deliveries / PNC	Delivery register (facility delivery)	Incentive must be given to paramedical staff also so that they take interest in keeping the patient.
5	# of severely malnourished children referred and received by Nutrition Rehabilitation Centers (NRCs) (applies to facilities without NRCs)	Children		*Modification suggested:* # of severely malnutrition children detected, treated, and referred to NRC
PHC				
1	# of pregnant women given full course of 100 IFA tablets	Pregnant women		
2	# of pregnant women delivered at facility initiated on calcium in the reporting month. (Include albendazole, Vitamin B12, and Vitamin V into a combined indicator?)	Pregnant women		
3	# of pregnant women having severe anemia (Hb<7) treated at institution	Pregnant women		

Facility type (S. No.)	Indicator	Target population	Which data can be used to verify this indicator?	Comments
4	% of complicated pregnancies treated with IV antihypertensive/ Magsulph injection to total women with obstetric complications attended	Deliveries / PNC		
5	# of women receiving first postpartum check-ups within 48 hrs of facility delivery (CHC & PHC) or 48 hrs of home delivery by ANM & ASHA (SC)	Deliveries / PNC		
6	# of newborns receiving first postnatal check-up within 48 hrs of facility-based birth (CHC & PHC)	Deliveries / PNC		
SC				
1	# of pregnant women receiving TT2 or booster	Pregnant women	Stock registers, ANC register, MCTS follow-up calls, field visit by supervisor, open vial, and the due list (Haryana has the open vial policy)	*Modification suggested:* Should be taken as % and not number *Benchmark suggested*: Minimum 90% of the total ANC should receive TT2 or booster
2	% of pregnant women received 3 ANC check-ups to total ANC registrations	Pregnant women	Lab technician register, ANC register, DHIS data, ASHA register, cross-verify with beneficiaries, check the knowledge of the ANM (by supervisor) on whether she is checking Hb and correctly; this would also indirectly check the supervisor (availability and functioning of hemoglobinometer, etc.)	*Modification suggested*: Should be taken as number and not % *Benchmark suggested:* Check 3 ANC check-ups (trimester-wise) done timely
3	# of pregnant women given full course of 100 IFA tablets	Pregnant women	Empty tablet packets checked (to ensure beneficiary compliance) and collected by ASHA/ANM and cross-checked by supervisor, ANC register, stock register, DHIS data, lab reports	*Modification suggested*: Should be taken as % and not number *Benchmark suggested:* Minimum 50% of women with no anemia at 3 months of ANC

Facility type (S. No.)	Indicator	Target population	Which data can be used to verify this indicator?	Comments
4	# of women receiving first postpartum check-ups within 48 hrs of facility delivery (CHC & PHC) or 48 hrs of home delivery by ANM & ASHA (SC)	Deliveries / PNC	Delivery register (facility delivery) MCTS follow-up calls (home delivery)	Verification may be an issue for this indicator. Also, the current poor condition of facilities deters women from staying post delivery.
5	# of newborns with more than one danger sign and referred to higher facility	Deliveries / PNC		Verification may be an issue for this indicator.
6	# of children between 9 and 11 months fully immunized (BCG+DPT123+OPV123+measles)	Children	Immunization cards Vaccine stocks	There should also be an incentive (to ASHA) for the second dose of measles. Incentive should be given for the immunization work done by ANM (and not private sector).
7	# of people with high BP or other risk factors for diabetes or hypertension referred to PHC for treatment	Non-communicable diseases		False reporting may be an issue here. There should be some screening camps, and then look at how many were identified and referred.

TABLE 3. NEW INDICATORS SUGGESTED FOR PBI

Facility type (S. No.)	Indicator	Target population	Which data can be used to verify this indicator?	Comments
CHC				
1	% of high-risk pregnancies/obstetrical population treated	Pregnant women		*Calculation suggested:* # of high-risk pregnancies or obstetrical cases treated at CHC/Total pregnancies registered at CHC X 100
2	LSCS (lower segment Cesarean section) rate	Deliveries / PNC		*Calculation suggested:* # of LSCS / # of LSCS + Normal deliveries X 100 (*Note*: This indicator needs to be carefully considered, as incentivizing C-sections has earlier been seen to result in misuse.)
3	% of deliveries conducted during night	Deliveries / PNC		*Calculation suggested:* Deliveries conducted during night / Day + night deliveries X 100 (*Note*: This indicator needs to be carefully considered, as incentivizing night deliveries has earlier been seen to result in misuse.)
4	OPD per doctor			*Calculation suggested:* Sum of outpatients of all departments / # of doctors conducting OPD

Facility type (S. No.)	Indicator	Target population	Which data can be used to verify this indicator?	Comments
5	% of deliveries where partograph was maintained	Deliveries / PNC		
6	% of AEFI (adverse event following immunization) reported	Children		*Calculation suggested:* # of AEFI reported / # of children receiving vaccinations X 100
7	% of delivered mothers staying for at least 48 hrs.	Deliveries / PNC		
8	% of delivered mothers provided drop-back facility	Deliveries / PNC		
9	AFP (acute flaccid paralysis)/measles cases reported			
PHC				
1	% of deliveries conducted against what is expected	Deliveries / PNC		*Calculation suggested:* # of deliveries conducted at PHC / Deliveries expected in the catchment area X 100
2	% of high-risk pregnancies or obstetric complications detected and referred	Pregnant mothers		*Calculation suggested:* # of high-risk pregnancies or obstetric complications detected and referred / Total ANC conducted X 100
3	% of delivered mothers staying for at least 48 hrs.	Deliveries / PNC		
4	% of delivered mothers provided drop-back facility	Deliveries / PNC		
SC				
1	% of first trimester registration	Pregnant women	Pregnancy test kits with the ASHA and her diary, DHIS entry, field visit by supervisor and random checks	*Benchmark suggested:* Minimum 60% of total ANC
2	% of high-risk pregnancies identified and referred	Pregnant women	DHIS data, ANC register, records of 102 ambulance	*Benchmark suggested:* 100% of high-risk pregnancies should be identified and referred
3	Institutional deliveries (including HepB, BCG, and OPV given at birth and Vitamin K given within 1 hr.)	Deliveries / PNC	Report based verification, birth certificates (which mention if it was institutional delivery), DHIS data, and stock registers of drugs	Incentive should be given to SCs where deliveries are being conducted, as currently very few SCs conduct deliveries. *Benchmark suggested:* Minimum 95% should be institutional deliveries
4	Home visits within 48 hrs for PNC	Deliveries / PNC	ASHA records, ANC record, DHIS data, and cross-verification with beneficiaries (over mobile phone)	During this visit the ASHA must also check if the newborn needs to be referred. *Benchmark suggested:* Minimum 90% should be covered

Facility type (S. No.)	Indicator	Target population	Which data can be used to verify this indicator?	Comments
5	Use of 102 ambulance for pick up and drop back	Deliveries / PNC	Call records of 102, call register	SC staff is responsible for making the call to 102, so the indicator could be number of calls. Having this indicator would also allow check of whether free drugs and free diet was given to the patient.
6	Newborn check-up at PNC (birth weight taken and breastfeeding initiated within 1 hr)	Deliveries / PNC	ASHA records, Hb PNC card, and cross-verification with mother by supervisor	*Benchmark suggested:* Minimum 90% should be covered
7	Vaccination (3rd dose of Penta OPV, BCG, and measles with Vitamin A at 9 months)	Children	Scar, vaccination card, ANM register, DHIS data, Aganwadi worker (AWW) register, check supervisor's visit by checking signatures	*Benchmark suggested:* Minimum 90% should be covered
8	2nd dose of measles vaccination at 1 1/2 yrs. of age	Children	AWW register, vaccination card, DHIS data, ASHA record	*Benchmark suggested:* Minimum 90% should be covered
9	Assessment of malnourishment	Children	AWW register, ASHA record, MCP card	*Benchmark suggested:* Minimum 90% should be covered

- **Areas for further discussion**

1. Use of only DHIS, which primarily looks at outpatient indicators, could result in inattention to quality concerns. (However, it must be considered that adding new indicators or having a parallel monitoring system has implications for how the results are reported and the system managed.)
2. Output and outcome indicators must be focused on, but process indicators could also be included.
3. Human resources being a dynamic process, a facility may experience a change in the number of human resources after the indicators have been set.
4. For areas with a substantial floating/migratory population, setting targets can be challenging.
5. Geographical distribution of health facilities should also be considered when setting targets vis-à-vis a facility's catchment population. Having a district hospital in close proximity to a PHC results in lop-sided distribution of catchment population.
6. Each type of facility must have its own indicators and targets. This is important in cases, for example, where PHCs and CHC are adjacent and one facility receives the majority of patients and the other only a small number.
7. Defining the supervisory levels is very important; otherwise, reliance would entirely be on DHIS data.
8. Indicators for supervisors could be selected to reinforce quality parameters. For example, an indicator could be "how many times supportive supervision was done" (through surprise checks, random visits).

9. Low demand for services among beneficiaries must also be considered when setting targets, and it should be attended to through demand-generation initiatives.
10. In agreement with the common sentiment that ASHAs and ANMs should be the most rewarded, it was suggested that selection of indicators could be done to include, from say a total of 10 indicators, five indicators for ASHAs/ANMs, one for Multipurpose Health Workers (MPHWs), and so on. The incentive could then be divided in this proportion.
11. Concerns were expressed about including indicators like "% of women given full course of 100 IFA tablets," which depend on external factors (supply of IFA tablets) that are beyond the control of the PHC. (However, one goal of PBI is to strengthen systems like the supply chain.)
12. Distribution of work and technical competence of staff must be considered. *("ANMs are already overburdened…and don't really even know how to do the Hb test properly. Why is the lab technician there if we have to do this test? We are forced to do this test, so we do false reporting.")*
13. Some suggested indicators implied a different payment system – activity-based incentives as opposed to team/facility-based incentives. A few of these recommendations are listed below.
    - ASHAs and ANMs could be incentivized for converting home deliveries into institutional deliveries, and for completion of records.
    - ANMs could be incentivized for assisting in skilled births during home deliveries.
    - ASHAs could be given some mobility incentive for visiting difficult areas. ASHAs could also be incentivized for initiation (first dose) of iron sucrose, following which the beneficiaries could be instructed to come to the facility for the next doses.
    - To motivate MOs to conduct ANCs (to improve ANC quality and detection of high-risk pregnancies), there could be a package for MO, ANM, and Lab Technicians for improving ANC check-ups. (ASHA is already getting an incentive for ANC.)
    - Lab Technicians could be given a fixed incentive for visiting SCs for Hb testing (ANC).
14. Different formats could also be considered, for example:
    - A negative incentive could be placed (at the PHC level) for referring cases beyond a certain benchmark to tertiary care hospitals (general hospitals); this would avoid unnecessary overcrowding at tertiary hospitals.
    - Annual incentive could be considered, for example, if some SC has shown decline in birth rate or increase in couple protection rate.
15. One proposal was that, considering the huge number of facilities in the country, setting individual targets for each facility may be complicated and difficult to manage. Instead, facilities could be categorized on the basis of certain variables, including current performance, caseload, and staffing levels, and targets could be set for each category.

Reporting, verification, and payment

- **Areas of agreement**

1. Payment should directly go to the facility's bank account, and from there to employee account.
2. Dissemination of information to health workers would be very important. The dissemination material should be in the local language and be disseminated through the existing reporting structures, workshops, leaflets, etc.
3. Contracts should include a mechanism to address grievances.
4. The verification system should be simple, objective, and robust to prevent gaming and falsification.
5. When designing the verification model, attention should also be given to cost considerations and trade-offs, so as to ensure financial viability and sustainability.
6. For verification, DHIS should be the primary source, but there should also be other mechanisms like crosschecking with beneficiaries.
7. There should be an independent external agency to audit facilities.

- **Areas for further discussion**

1. The size of the PBI unit could depend on whether some of its functions could be devolved to the Monitoring and Evaluation or some other unit. For example, in Haryana, Postgraduate Institute of Medical Education and Research, (PGIMR), Chandigarh, is undertaking a concurrent audit. Haryana could, thus, have a smaller PBI unit than some other states.
2. Development partners and NGOs could be roped in to perform some functions.
3. One proposal was that existing structures like Rogi Kalyan Samitis (RKS) could be explored to take on some functions.
4. It was proposed by one of the groups that a government order, and not separate performance agreements, could suffice if all the contracting entities are from within the system and outside entities are not involved.
5. There could be intra-SC or intra-PHC level planning with the MO playing the key role.
6. For verification, the internal hierarchy, MO to BMO to CMO, could be leveraged. (However, there could be conflicts of interest if BMOs and CMOs also stand to benefit from performance incentive payments.)
7. When considering MOs to perform any PBI-related functions, their current workload must be considered. ("*We are open to this program, but we are already overburdened…We are not ready to take up charge for accountability and verification.*")
8. Apart from top-down monitoring, there could also be a mechanism for random customer feedback, perhaps over mobile phone. The existing MCTS system could be explored and built on for this purpose.
9. There could be a small internal audit team, which could make visits and calls on a random basis to audit facilities.
10. The verification/monitoring system could have an element of deterrence against falsification, inducing a *"fear of being caught if fudging."*
11. How the incentive payout is to be divided between different staff should be written down and clearly communicated and not left to the discretion of a facility.

12. Payment could be made by a team other than the existing accounts team, as the current structures are linked to problems of delayed payments.
13. The frequency of the cycle (monthly, quarterly, or bi-annually) needs to be finalized keeping in mind the motivational and cost/effort trade-offs.
14. Learning from other states would help address some concerns. For example, looking at the mechanism Punjab has adopted for deploying NHM funds to incentivize regular employees.

ii. Summary of discussions: Block-level workshop – Nuh (Mewat)

A summary of discussions from the Nuh block-level workshop is presented below, organized under three heads: areas of consensus, selected/suggested indicators, and areas for further discussion.

- **Areas of consensus**

1. Payment should be to facilities (SC, PHC, CHC) as teams.
2. Both regular and contractual staff should be incentivized.
3. All clinical staff (ANM, MO, Staff Nurse, Lab Technician, Pharmacist) and non-clinical staff (such as Information Assistant, sweeper) should receive the incentive.
    - However, MPHWs-Male, Dental Surgeon (unless the Dental Surgeon is Medical Officer In Charge [MO I/C]), and Accountant should not receive the incentive.
4. The referral transport staff and 102 drivers should also be incentivized.
5. DPMU and BMO office should get the incentive, but not the administrative staff.
6. The CMO/Civil Surgeon Office (CSO) can be incentivized but at a later stage of the program.
7. Payment should be made quarterly.
8. The proposed monetary incentive of 8 percent of the salary was acceptable, but a higher percentage (10 percent) was seen as more desirable.
9. The 75% / 25% split for individual rewards and facility investment was seen as appropriate.
10. Reputational incentives should also be included.

- **Selected/suggested indicators**

Table 4 presents the indicators that Nuh block workshop participants suggested for inclusion in PBI scheme design.

TABLE 4. PBI INDICATORS SELECTED/SUGGESTED AT THE NUH (MEWAT) BLOCK-LEVEL WORKSHOP

Facility type (S. No.)	Indicator
CHC	
1	Number of outpatients
2	Number of severely malnourished children referred to Nutrition Rehabilitation Centers
3	Quality of treatment and handling of cases (including behavior of health workers toward patients)
4	Availability of supplies and logistics; avoiding stock-outs (for SMO)
5	Proper and meaningful referral system (for example, reason for referral of deliveries)
6	Regular monitoring and meetings by SMO (including review of minutes of meetings and action taken)
7	100% JSY payments within 15 days of delivery (block-level indicator for SMO)
PHC	
1	100% ANC registration within 12 weeks of pregnancy (first trimester)
2	Pregnant women receiving TT2 or booster
3	100% institutional delivery for high-risk pregnancies
4	Institutional delivery for normal pregnancies and 24-hour stay at facility
5	Care of newborn (NBSU)
6	Full immunization of children (9 to 12 months)
7	Cold chain, including temperature control, stocks, storage, etc. (for MO I/C)
8	Readiness of labor room, including hygiene, lights, temperature, etc.
9	Outpatients and inpatients (for MO I/C)
10	Proper reporting (by Information Assistant)
11	Management of bio-medical waste
12	Availability of supplies and logistics
SC	
1	Pregnant women receiving TT2 or booster
2	100% registration within 12 weeks of pregnancy (first trimester)
3	All ANC check-ups (4) done on time, including early registration
4	Pregnant women given full course of 100 IFA tablets; 50 tablets of folic acid before 3 months
5	High-risk pregnancy identified, referred, and followed up for institutional delivery (based on incidence level, at least 15% identified as high-risk pregnancies)
6	Follow-up for increase in public institutional deliveries (100% institutional delivery for high-risk pregnancies and 50% for normal pregnancies)
7	Birth preparedness (by ANM)
8	Full immunization of children (9 to 12 months); use of Pentavalent vaccine

Facility type (S. No.)	Indicator
9	Reporting and audit of maternal and infant deaths
10	Family planning (IUCD)

- **Areas for further discussion**

1. Blocks like Punahana, which are among the worst performers in the state, could be considered for the PBI initiative.
2. Falsification of data and political interference could pose a threat to the intervention. Nepotism and favoritism by supervisors would also need to be addressed.
3. Stock-outs of important drugs, such as BCG, must be prevented.
4. Attention must also be paid to preferences for capsule vs. tablets (for example, for IFA) and the drug supplies should accordingly be ensured.
5. Multiple reporting/records (such as for migratory population and for married women's parents' and in-laws' home) can pose a challenge.
6. Support of people and their health seeking behavior would be crucial to the success of any intervention.

iii. Summary of discussions: Block-level workshop – Rai (Sonipat)

A summary of discussions from the Rai block-level workshop is presented below, organized under three heads: areas of consensus, selected/suggested indicators, and areas for further discussion.

- **Areas of consensus**

1. Payment should go to facilities as teams.
2. Regular and contractual staff should receive the same incentive.
3. All clinical cadres (ANM, MO, Staff Nurse, Lab Technician, Pharmacist) and some non-clinical staff (such as class IV, sweepers, ambulance drivers) should receive the incentive.
    - However, radiographers and office staff (including Information Assistant and Accountant) should not be given the incentive due to their minor role in RMNCH+A (reproductive, maternal, neonatal, and child health + adolescent) work.
    - MPHW-Male could either be paid half of what the ANM (MPHW-Female) earns or not paid at all, but not receive the full amount given to ANM.
4. Incentives should be given to both health workers and supervisors.
5. SMO/BMO should receive the incentive for the work at CHC and for supervision, but not for administrative work.
6. CSO should not receive the incentive.
7. Payment should be made quarterly and go directly to the facility account.
8. Although the incentive amount pegged at 8 percent of the salary was seen as acceptable, 10 percent was suggested as being more appropriate.
9. The 75% / 25% split for individual rewards and facility investment was acceptable.

10. Inclusion of reputational incentives was seen as important, especially to acknowledge the facilities that show the biggest improvement.

- **Selected/suggested indicators**

Table 5 presents the indicators suggested by Rai block workshop participants as important for inclusion in PBI scheme design.

TABLE 5. PBI INDICATORS SELECTED/SUGGESTED AT THE RAI (SONIPAT) BLOCK-LEVEL WORKSHOP

Facility type (S. No.)	Indicator
CHC	
1	Pregnant women having severe anemia treated at institution
2	Handling of high-risk pregnancies (management of eclampsia but referral for C-section); referral to First Referral Unit/High Risk Pregnancy Unit
3	Women receiving first postpartum check-ups within 48 hrs of facility delivery (CHC & PHC) or 48 hrs of home delivery by ANM & ASHA (SC)
4	Pregnant women receiving 4 ANC check-ups
5	PNC; newborns receiving first PNC check-up within 48 hrs of facility-based birth
6	Supervision - Full immunization of children (birth to 12 months)
7	Night deliveries
8	Increase in public institutional deliveries (more than 90% of the total deliveries)
9	Postpartum IUCD within 48 hrs of delivery
10	Ambulance service, covering no. of calls, promptness of service, and availability of EMT and medicines
11	Adherence to touring plan, manpower availability, and prevention of stock-outs (for SMO)
PHC	
1	Pregnant women given full course of 100 IFA tablets
2	Pregnant women receiving TT2 or booster
3	Supervision of pre-conception care package
4	Supervision of first trimester registration
5	Pregnant women receiving 3rd and 4th ANC check-ups
6	Management and referral of high-risk pregnancies, including administration of iron sucrose
7	Complete immunization, including birth dose
8	PNC within 48 hours
9	Availability of stocks of all medicines (preventing stock-outs of, for example, IFA, calcium, and iron sucrose)
10	Adoption of family planning method (any)
11	Public institutional deliveries
12	Detection of non-communicable diseases like hypertension and diabetes
13	Outpatient (including register and stock availability)
14	Lab investigations (ANC, anemia)
15	Adherence to touring plan, manpower availability, and prevention of stock-outs (for MO)

Facility type (S. No.)	Indicator
SC	
1	High-risk pregnancies detected and referred
2	Complete ANC check-ups (4) done on time, including early registration ('timely' refers to first ANC in first trimester, and so on)
3	Number of timely referrals
4	Pregnant women given full course of 100 IFA tablets
5	Full immunization of children (birth to 12 months); use of Pentavalent vaccine
6	Number of anemic women identified and treated
7	PNC visits
8	Reporting of infant mortality rate and maternal mortality ratio
9	Promotion of family planning (but not of any one single method) through counseling, motivating, etc.

- **Areas for further discussion**

1. The current workload of MOs and their various duties, such as court duty and touring plan, that keep them away from base facility must be taken into account.
2. Stock-outs of medicines pose a major challenge.
3. Due to the poor infrastructure at facilities, most new mothers do not want to stay back for 48 hours after delivery, adversely impacting the infant mortality rate.
4. Commitment and involvement of health services beneficiaries is crucial.

6. KEY AREAS OF CONSENSUS AND FURTHER DISCUSSION

The three consultative workshops proved successful in generating active participation and discussions among a wide range of stakeholders. In general, the participants appreciated the potential benefits that PBI could have on the health staff's working conditions, motivation levels, and quality of health services. The two block-level sensitization workshops with field-level staff brought forth an overwhelming support for the PBI intervention. Based on the discussions, the key areas of consensus and further exploration between the national and block-level workshops are presented in Table 6.

TABLE 6. KEY AREAS OF CONSENSUS AND FURTHER DISCUSSION

Element of PBI Design	Areas of Consensus	Areas to be Discussed Further
Recipients of incentive payments	• Incentive payments should be made to teams. • SC, PHC, and CHC should be rewarded. Medical mobile unit and emergency ambulance services should also be included in the incentive structure. • Both regular and contractual staff should be rewarded.	• Should the non-clinical support staff (drivers, cleaners, administration) at the facilities be included? • Should BMO/SMO and CMO office staff be included?
Payment model	• 8% of the salary was deemed acceptable for calculating the value of the potential incentive payout, although both blocks felt 10% would be more effective. • 75% / 25% split for individual rewards and facility investment was accepted by all.	• How should reputation incentives be incorporated?
Indicators and targets	• Payment via fee-for-service over and above the quantity from the previous quarter (benchmark) was the point of consensus at the national workshop, but was not discussed by participants at the block-level workshops. • Participants at all three workshops selected indicators on immunization, pregnancy (ANC), institutional delivery, and family planning.	• Should/for which "process" indicators should the facilities be incentivized (for example, hygiene, stock management, waste management)?

Consultations on the operational aspects of PBI scheme (reporting, verification, payments) were held at the national-level workshop but could not generate in-depth discussions or put forth clear points of consensus, owing perhaps to the complexities involved in these functions and the attendant institutional arrangements. These aspects would need to be dealt with in depth during discussions and deliberations among policymakers and technical experts in the future.

7. NEXT STEPS

The consultation workshops enabled frank and productive discussions on the design elements of the pilot PBI scheme. Open sharing of views, ideas, and concerns by participating ground-level health workers and other stakeholders provided a good starting point for further discussions on why, how, and what shape the PBI scheme should take. The key next steps in the PBI scheme formulation process are summarized below.

- **Firm up the design**

  Designing the pilot PBI scheme would necessarily be an iterative process, involving a series of steps and more consultations and discussions, perhaps through more workshops. The next level of discussions would involve smaller groups engaging technical expertise to focus on each design aspect and element in detail. The points that have emerged during the national- and block-level workshops will also be discussed and used by the Haryana state staff to finalize the design. The state has agreed to constitute a Technical Working Group (TWG) of senior officers to guide the scheme's technical design and steward the program. The TWG would co-opt the necessary officers and services of the institutions and agencies as required to ensure effective guidance, advocacy, and support in designing the PBI intervention.

  National ministry officials and other states' health staff and officials might be engaged in the PBI design process, to create a more widely accepted model and build a bigger advocacy group supporting the intervention than would otherwise be possible.

- **Arrange finances**

  At the outset, the state will need to define the scope of the PBI intervention, specifically, the number of blocks would it cover. The costs of the intervention – of the PBI scheme itself as well as its administration – will also need to be studied. Finally, the mode of financing needs to be selected from among three options: NHM, state funding, or a mix of the two.

The above two steps could be worked on simultaneously.

- **Establish institutional arrangements**

  Once the design has been finalized, institutional arrangements will need to be made to address the various strategic and operational functions involved in successfully implementing the PBI scheme. The above-mentioned TWG will provide leadership and guidance to the overall design, implementation, and operationalization of the PBI demonstration in Haryana and do advocacy at the state and national level. A PBI unit would also be put in place to provide operational support for PBI implementation. The symbiotic responsibilities of the TWG and the PBI unit are briefly discussed below.

  The TWG will facilitate the PBI unit's implementation of various activities (such as baseline study, signing of performance contracts, verification, and payment as well as help the unit to resolve challenges to implementation), with technical assistance from the HFG project. Together the TWG and PBI unit will ensure effective coordination among the key national and state-level health departments: the NHM, Directorate General of Health Services (DGHS), State Institute of Health and Family Welfare (SIHFW), and others. The TWG will also help the PBI unit coordinate with other health institutions/organizations like medical colleges, training institutes, and NGOs on independent verifications or community surveys, as per the finalized design. Other key responsibilities of the TWG will include periodically reviewing the functionality of the PBI demonstration, using feedback from the PBI unit; identifying issues and challenges in the implementation of the PBI demonstration and formulating strategies to overcome them; and

reviewing the results of implementation research and proposing modifications in PBI design.

The PBI unit will provide the TWG operational support for PBI pilot implementation. As noted above, it will support various TWG activities and help the group coordinate with key health departments, offices, and organizations/institutions in the field. The PBI unit will provide support for designing an organogram, finalizing terms of reference, and recruiting/contracting. There is still a lack of clarity about where the proposed PBI unit functions will be located. Some functions could be outsourced to institutions like PGIMR, Chandigarh, which is doing a concurrent audit of public health facilities in Haryana; arrangements would need to be made to involve these institutions.

- **Undertake implementation**

  Implementation of the PBI scheme would include efforts toward:

  - Devising and rolling out a communications strategy
  - Ensuring detailed orientation of all health facilities in the PBI intervention on the final design and how it will be implemented
  - Conducting a baseline study to calculate the benchmark for each facility's performance contract
  - Drafting, negotiating, and signing performance contracts with each facility
  - Conducting verifications and making payment
  - Undertaking implementation research for annual review of design and making course corrections
  - Supporting institutionalization of structures and processes

All these activities need to be discussed and mechanisms for their implementation devised and instituted.

ANNEX A: AGENDA FOR NATIONAL-LEVEL WORKSHOP

PERFORMANCE-BASED INCENTIVES: DESIGN WORKSHOP FOR HARYANA STATE DEMONSTRATION

New Delhi

May 7–8, 2015

Objective: One objective of this workshop is to share global experiences with PBI and to consider potential PBI models that would improve health system performance in the Indian context. A second objective is to refine the PBI model and institutional implementation arrangements that will be adopted and implemented in two demonstration Blocks in Haryana State. In this workshop, key decision makers and health sector stakeholders will provide feedback on design elements and to contribute to making design decisions about this Performance Based Incentives initiative that will be implemented in two blocks in Haryana: Nuh block, Mewat district, and Rai block, Sonipat district.

Methodology: Workshop participants will include a range of stakeholders – staff from health facilities, representatives from national and state governments, and donor partners. On Day 1, participants will learn about global experience with PBI and will explore potential applications in the Indian context. Day 2 will focus on specific design decisions for the PBI demonstration initiative in Haryana. The workshop will utilize a combination of didactic presentations with discussion and group work to elicit feedback on potential design elements and move toward decisions. This combination of presentations and interactive sessions will enable participants to learn about PBI and to grapple with design and implementation issues.

After opening remarks and discussion of workshop objectives, the workshop will establish a common understanding of performance-based incentives as a health system strengthening strategy by presenting the theory and global evidence. This foundation will be followed by a discussion of the design elements and operational decisions that need to be made in any PBI initiative, followed by options to consider in the Indian context. This will provide the framework for the participative design process that will follow. An overview of health system performance challenges in Haryana will be provided to orient the design decisions. HFG will complement this with findings from a formative investigation that occurred in December 2014 and aimed to inform PBI approaches that would be feasible. Following this, participants will be organized into groups of 6-8 people comprised of a mix of stakeholder types to discuss each design and operational decision. Participants will engage in design decision group sessions. Groups will present their feedback for consideration by all workshop participants. These group presentations will follow a summative discussion to determine elements of consensus and elements that need post-workshop decisions.

Outcomes: Participants will appreciate the elements needed to implement PBI and will understand the options. Findings will contribute to design and operational decisions that will be made by Haryana state and national GOI [Government of India] decision makers.

Next steps: Once design and operational decisions are taken, HFG will work closely with the state of Haryana decision makers to develop an implementation plan that establishes roles, responsibilities, and timelines.

DAY 1: May 7, 2015

9:30-10:00	Registration
10:00- 11:00	Welcome remarks and conference opening (Smt. Inoshi Sharma, IRS, Director – Administration, NHM Haryana; Mr. Ashok Jha, USAID, New Delhi; Dr. Rena Eichler, international expert on PBIs)
11:00-11:30	Tea Break
11:30- 12:30	What is "PBI"? (presentation plus Q&A - Rena Eichler) - Taste of global evidence - Emphasis on strengthening health systems so that they perform better - Emphasis on behavior changes and resulting actions - Possible model, institutional arrangements, and challenges - PBI holds promise but it is not the "magic bullet" to solve all problems.
12:30-1:30	Snapshot of a possible PBI approach for India: informed by Haryana (presentation plus Q&A – Rena Eichler)
1:30- 2:30	Lunch
2:30-2:50	Overview of health indicators, performance, and system challenges in Haryana state (Mudeit Agarwal)
2:50-3:10	Results of the PBI formative investigation (Francis Raj)
3:10-3:30	Q&A
3:30-4:00	Tea
4:00-4:30	Overview of elements of a PBI system, selecting recipients and the payment model (Karishmah Bhuwanee)
4:30-5:30	Group work on: 1. Who should be rewarded with PBIs 2. Payment model
5:30-6:30	Group presentations and discussion

DAY 2: May 8, 2015

9:00-9:30	Recap of Day 1
9:30-10:00	What should be rewarded (indicators and targets)? (Karishmah Bhuwanee)
10:00-11:00	Group work (with working tea)
11:00-11:45	Group presentations and discussion
11:45- 12:30	Introduction to group work on decisions about reporting, verification and payment functions (Rena Eichler)
12:30-1:30	Group work
1:30-2:30	Working lunch
2:30- 4.00	Groups present on preferred design options and suggest way forward
4:00-4:30	Summary, next steps, and workshop close (Amit Paliwal)

ANNEX B: AGENDA FOR BLOCK-LEVEL WORKSHOPS

Block-Level Sensitization Workshops on PBI Design

(Nuh, Mewat: May 23, 2015; Hotel Park Inn, Gurgaon)

(Rai, Sonipat: June 3, 2015; Hotel Gold, Panipat)

10:00-10:30	Registration and tea
10:30-11:00	Welcome remarks (Inoshi Sharma – Director Administration, NHM Haryana)
11:00-12:00	What is "PBI"? Considerations for PBI for the block Possible model, institutional arrangements, and challenges (Mudeit Agarwal)
12:00-1.15	Elements of a PBI System, introduction to group work and discussions, and Q&A (Amit Paliwal)
1:15-2:00	Lunch
2:00-3:00	Group work on: 1. Who should be rewarded with PBIs 2. Payment model 3. Indicators and targets
3:00-4:00	Group presentations (with working tea)
4:00-4:30	Summary, next steps, and workshop close (Amit Paliwal)

ANNEX C: PARTICIPANTS AT THE NATIONAL-LEVEL WORKSHOP

TABLE C-1. PARTICIPANTS FOR PBI DESIGN WORKSHOP (MAY 7–8, 2015; NEW DELHI)

S. No.	Name	Organization	E-mail ID	Phone No.
1	Abrar A Khan	Sr Technical Advisor, INTRA Health	akhan@intrahealth.org	9818127200
2	Alka Dubey	HR Consultant, NHM – MP		9981836621
3	Anoop Vais	Consultant, NHM - MP		7489127103
4	Ashok Jha	USAID		24198000
5	Bhupinder Verma	NHM Haryana		8288030229
6	Damandeep Singh	HR Consultant, NHM – Panchkula		8288084059
7	Dr Anvita	SMO I/C Badkhalsa, Rai	dranvita70@yahoo.com	9818547666
8	Dr Arun K Gupta	Dy MD, NHM Himachal Pradesh		9418100055
9	Dr B K Rajora	Civil Surgeon, Mewat		8295937194
10	Dr Dilip Singh	Advisor, NHSRC		9778553300
11	Dr Gopal Beri	NHM Himachal Pradesh		9418013888
12	Dr Mahender Singh	Dy Civil Surgeon, Sonipat	dr.msgothwal@gmail.com	8572802374
13	Dr Richa Malhan	MO, PHC Jakholi, Sonipat		9999344095
14	Dr Vijay Batra	NHSRC		9560508430
15	Dr Vishal Jaiswal	State MH Consultant, NHM-MP	drvishaljaiswal@gmail.com	9827327386
16	Harish Kumar	DPM. Sonipath	dpmsonipat@gmail.com	8295936587
17	Inoshi Sharma	Director Administration, NHM Haryana		8283066666
18	Kavita Kaushal	HR Consultant, NHM – Panchkula		8288084039
19	Kavita Rani	ANM Sonipat		8295929895
20	Lalita Devi	ANM, S/C Rai, Sonipat		9729531427
21	Mohd Mustafa	Mewat		9813461038
22	Mona Gupta	Sr Manager, TSA Deloitte	monagupta@deloitte.com	9971913481
23	Navdeep Gautam	Consultant Policy & Planning, Govt of Punjab		8872090008
24	Niyaz Mohd	SA, Mewat		9992348934

S. No.	Name	Organization	E-mail ID	Phone No.
25	Pinki	Lab Technician, CHC Badkhalsa, Sonipat		9671291715
26	Rajwanti	ANM, S/C Rai, Sonipat		8295931702
27	Rohit Raman	MO I/C PHC Padheni, Mewat		9671337920
28	Rajiv Ahuja	Sr Economist, BMGF	rajeev.ahuja@gatesfoundation.org	9999984041
29	Sabir Hussain	Lab Technician, Mewat		9813173158
30	Sanjeev Jain	AO, NHM Haryana	jainsan72@yahoo.co.in	8146510000
31	Shalini Nair	Manager, TSA Deloitte		9810860336
32	Snower Nisha	DPM, Mewat	dpmsonwer@gmail.com	8295937200
33	Sonu	Lab Technician, NHM Sonipat		9728172673
34	Sudesh Kumari	Staff Nurse, CHC Badkhalsa, Sonipat		9467106387
35	Suman Lata Chaudhary	Staff Nurse, Mewat		9671530226
36	Sumitha Chalil	NHM, MoHFW, Delhi	chalilsumitha@gmail.com	7835828463
37	Sushant Saxena	MoHFW		
38	Sweety	Staff Nurse, CHC Badkhalsa, Sonipat		9467106387
39	Rena Eichler	HFG	renaeichler@broadbranch.org	
40	Karishmah Bhuwanee	HFG	Karishmah_Bhuwanee@abtassoc.com	
41	Arun Monga	HFG	arun@abtindia.net	9873041122
42	Alia Kauser	HFG	Alia_Kauser@abtassoc.com	9899389261
43	Amit Paliwal	HFG	amit_paliwal@abtassoc.com	9891110083
44	Bhavesh Jain	HFG	bhavesh_jain@abtassoc.com	9999039819
45	G Francis	HFG	Francis_Raj@abtassoc.com	9395533068
46	Dinesh Jagtap	HFG	drd.jagtap@gmail.com	9958988299
47	Mudeit Agarwal	HFG	mudeit.hfg@gmail.com	7087233709
48	Parminder Gautam	HFG	drparmindergautam@yahoomail.com	9818469062
49	Jim Seitzer	HFG	jim_setzer@abtassoc.com	
50	Kavita Sharma	HFG	kavita_sharmark@hotmail.com	9958336239
51	Manmeet Bhalla	HFG	manmeet@abtindia.net	9810923163

ANNEX D: PARTICIPANTS FOR BLOCK-LEVEL WORKSHOPS

TABLE D-1. LIST OF PARTICIPANTS: NUH (MEWAT) – BLOCK-LEVEL WORKSHOP (MAY 23, 2015)

S. No.	Name	Designation	Facility	E-mail ID	Contact Number
1	Mohd. Irshad	Pharmacist	PHC Ghasera	mohd.irshad17799@gmail.com	9812911227
2	Lekhraj	LT	PHC Ghasera		8053235758
3	Suman Lata Choudhary	Staff Nurse	PHC Ghasera		9617530226
4	Sunita Yadav	MPHW (F)	Ghasera		9991451524
5	Dr. Jatinder Kumar Sapra	Programme Manager	CSO, Mewat		9416486701
6	Dr Manpreet	MO I/C	PHC Nuh		9671484885
7	Dr Kamal Mehra	DCS and SMO	CHC Nuh	dtkamalmehra1961@gmail.com	9416288134
8	Dr Jitendra Singh	Urban Nodal Officer	CSO, Mewat	deomewat@gmail.com	8930075502
9	Dr Irfan	MO	PHC Sudaka		8053734012
10	Dr Javed Ahmed	MO	PHC Tauru	mo.tauru@rediffmail.com	8572812720
11	Dr Rohit Raman	MO	PHC Padheni	phcpadheni@gmail.com	9671337920
12	Lokesh	Pharmacist	PHC M P Ahir, PHC Jaurasi	phcjaurasi210704@gmail.com	8221872950
13	Dr Brijesh	MO	PHC Jaurasi	phcjaurasi210704@gmail.com	9996843025
14	Rehan Raza	DMEO	CSO, Mewat	nhrm.meo.mwt@gmail.com	8295937203
15	Mindu Lata	Staff Nurse	PHC Padheri		9992893095
16	Surekha	Staff Nurse	PHC M P Ahir		9992991619
17	Anita Yadav	Staff Nurse	PHC Jaurasi		9728495847
18	Mohd. Mustaq	LT	PHC Padhani		8818085155
19	Sharda	Staff Nurse	CHC Nuh		8685831179
20	Anupma	ANM	PHC Nuh	anupama.7s.27@gmail.com	9729531527
21	Babli Rani	ANM	PHC Nuh		9729531520
22	Dr. Mohd. Tahir	MO I/C	PHC M P Ahir		880116120
23	Dr. B K Rajora	Civil Surgeon	Mewat		
24	Inoshi Sharma	Director Administration, NHM Haryana	NHM - HQ		8283066666

S. No.	Name	Designation	Facility	E-mail ID	Contact Number
25	Kavita Sharma	Documentation Specialist	HFG/ USAID	kavita_sharmark@hotmail.com	9958336239
26	Mudeit Agarwal	HRH Consultant	HFG/ USAID	mudeit.hfg@gmail.com	7087233709
27	Amit Paliwal	Senior Advisor – HRH	HFG/ USAID	amit_paliwal@abtassoc.com	9891110083

TABLE D-2. LIST OF PARTICIPANTS: RAI (SONIPAT) – BLOCK-LEVEL WORKSHOP (JUNE 3, 2015)

S. No.	Name	Designation	Facility	E-mail ID	Contact Number
1	Pinki	Lab Technician	CHC Badkhalsa	chcbadkhalsa@gmail.com	9671291715
2	Geeta	ANM	SC Pabasra	geetbalyan@gmail.com	82959530100
3	Kamlesh Dhiman	Staff Nurse	PHC Jakholi		9958807786, 8059220388
4	Rajni	Staff Nurse	PHC Jakholi		8397857251
5	Mrs. Nirmala	DMEO	Dist. Sonipat		8295936590
6	Bimla Devi	ANM	Dist. Sonipat		8295931741
7	Rajwanti	ANM	CHC Badkhalsa		8295931702
8	Sudesh	Staff Nurse	CHC Badkhalsa		9467106387
9	Satpal Singh	Lab Technician	CHC Badkhalsa		9253173723
10	Rajkumar	Pharmacist	CHC Badkhalsa	rajkumar385@gmail.com	9996181454
11	Dr Dara Singh	MO I/c Kundli	CHC Badkhalsa	darasingh6666@yahoo.com	9468494900, 9873402199
12	Amit Sharma	Accounts Assistant DHQ	Dist. Sonipat	damsonipat@gmail.com	8295936593
13	Mr. Harish Kaushik	DPM	Dist. Sonipat		8295936587
14	Dr Nidhi Munjal	MO	Civil Dispensary Sonipat		9315467772
15	Kavita Rani	ANM (RCH)	PHC Halalpur		8295929895
16	Sonu	Lab Technician	PHC Halalpur		9728172673
17	Parminder Singh	Pharmacist	CHC Badkhalsa	parmindersingh442@gmail.com	9812440133
18	Inderjeet	Pharmacist	PHC Halalpur	inderjeet.damiya75@gmail.com	9896141451
19	Dr. Anup Singh	MO I/c Halalpur	PHC Halalpur	anupsingh156@gmail.com	8685977532
20	Dr. Richa Malhan	MO I/c Jakholi	PHC Jakholi	richamalhan16@gmail.com	9999344095
21	Surekha	Staff Nurse	CHC Badkhalsa	surender.dhaka1973@gmail.com	8398980300
22	Inoshi Sharma	Director Administration, NHM Haryana	NHM, HQ		8283066666

S. No.	Name	Designation	Facility	E-mail ID	Contact Number
23	Kavita Sharma	Documentation Specialist	HFG/ USAID	kavita_sharmark@hotmail.com	9958336239
24	Mudeit Agarwal	HRH Consultant	HFG/ USAID	mudeit.hfg@gmail.com	7087233709
25	Amit Paliwal	Senior Advisor - HRH	HFG/ USAID	amit_paliwal@abtassoc.com	9891110083

ANNEX E: LIST OF POTENTIAL PBI INDICATORS

TABLE E-1. POTENTIAL PBI INDICATORS – CHC

#	Indicator	Target population	Include? If no, why?	Which data can be used to verify this indicator?	Comments
1	# of pregnant women receiving TT2 or booster	Pregnant women		Stock registers ANC register Patient medical card MCTS follow-up calls	
2	% of pregnant women received 3 ANC check-ups to total ANC registrations	Pregnant women		ANC register Patient medical card MCTS follow-up calls	
3	# of pregnant women given full course of 100 IFA tablets	Pregnant women		Stock registers ANC register Patient medical card MCTS follow-up calls	
4	# of pregnant women delivered at facility initiated on calcium in the reporting month. (Include albendazole, Vitamin B12, and Vitamin C into a combined indicator?)	Pregnant women		Stock registers ANC register Patient medical card MCTS follow-up calls	
5	# of pregnant women having severe anemia (Hb<7) treated at institution	Pregnant women		ANC register Hb test results	
6	% of complicated pregnancies treated with IV antihypertensive/ Magsulph injection to total women with obstetric complications attended	Deliveries / PNC		Register of facility and home deliveries Partographs	
7	# of women receiving first postpartum check-ups within 48 hrs of facility delivery (CHC & PHC) or 48 hrs of home delivery by ANM & ASHA (SC)	Deliveries / PNC		Delivery register (facility delivery) MCTS follow-up calls (home delivery) Patient medical card?	
8	# of newborns receiving first postnatal check-up within 48 hrs of facility-based birth (CHC & PHC)	Deliveries / PNC		Delivery register (facility delivery) MCTS follow-up calls (home delivery) Patient medical card?	
9	# of children between 9 and 11 months fully immunized (BCG+DPT123+OPV123+measles)	Children		Immunization cards Vaccine stocks MCTS follow-up calls	

#	Indicator	Target population	Include? If no, why?	Which data can be used to verify this indicator?	Comments
10	% of children given Vitamin A Dose 1 to reported live births – revise this (specify children of what age) OR # of children under 5 yrs given Dose 9 of Vitamin A (may be better indicator if it also captures Doses 1-8)	Children		Patient medical card Register of facility and home deliveries	
11	# of severely malnourished children referred and received by Nutrition Rehabilitation Centers (NRCs) (applies to facilities without NRCs)	Children		Referral registers – how are referrals currently tracked? Need a way to ensure that only appropriate / necessary referrals are incentivized	
12	# of adolescents attending ARSH (Adolescent Reproductive and Sexual Health) clinics	Adolescent		ARSH attendance registers Client survey	
13	# of people attending family planning counselling sessions	Reproductive health		Family planning counselling registers Client survey (particularly for measuring perceived quality)	

TABLE E-2. POTENTIAL PBI INDICATORS – PHC

	Indicator	Target population	Include? If no, why?	Which data can be used to verify this indicator?	Other comments
1	# of pregnant women receiving TT2 or booster	Pregnant women		Stock registers ANC register Patient medical card MCTS follow-up calls	
2	% of pregnant women received 3 ANC check-ups to total ANC registrations	Pregnant women		ANC register Patient medical card MCTS follow-up calls	
3	# of pregnant women given full course of 100 IFA tablets	Pregnant women		Stock registers ANC register Patient medical card MCTS follow-up calls	
4	# of pregnant women delivered at facility initiated on calcium in the reporting month. (Include albendazole, Vitamin B12, and Vitamin C into a combined indicator?)	Pregnant women		Stock registers ANC register Patient medical card MCTS follow-up calls	

	Indicator	Target population	Include? If no, why?	Which data can be used to verify this indicator?	Other comments
5	# of pregnant women having severe anemia (Hb<7) treated at institution	Pregnant women		ANC register, Hb test results	
6	% of complicated pregnancies treated with IV antihypertensive/ Magsulph injection to total women with obstetric complications attended	Deliveries / PNC		Register of facility and home deliveries Partographs	
7	# of women receiving first postpartum check-ups within 48 hrs of facility delivery (CHC & PHC) or 48 hrs of home delivery by ANM & ASHA (SC)	Deliveries / PNC		Delivery register (facility delivery) MCTS follow-up calls (home delivery) Patient medical card?	
8	# of newborns receiving first postnatal check-up within 48 hrs of facility-based birth (CHC & PHC)	Deliveries / PNC		Delivery register (facility delivery) MCTS follow-up calls (home delivery) Patient medical card?	
9	# of children between 9 and 11 months fully immunized (BCG+DPT123+OPV123+measles)	Children		Immunization cards Vaccine stocks MCTS follow-up calls	
10	% of children given Vitamin A Dose 1 to reported live births – revise this (specify children of what age) **OR** # children under 5 yrs given Dose 9 of Vitamin A (may be better indicator if it also captures Doses 1-8)	Children		Patient medical card Register of facility and home deliveries	
11	# of severely malnourished children referred and received by Nutrition Rehabilitation Centers (NRCs) (applies to facilities without NRCs)	Children		Referral registers – how are referrals currently tracked? Need a way to ensure that only appropriate / necessary referrals are incentivized	
12	# of adolescents attending ARSH (Adolescent Reproductive and Sexual Health) clinics	Adolescent		ARSH attendance registers Client survey	
13	# of people attending family planning counselling sessions	Reproductive health		Family planning counselling registers Client survey (particularly for measuring perceived quality)	

TABLE E-3. POTENTIAL PBI INDICATORS - SC

	Indicator	Target population	Include? If no, why?	Which data can be used to verify this indicator?	Other comments
1	# of pregnant women receiving TT2 or booster	Pregnant women		Stock registers ANC register Patient medical card MCTS follow-up calls	
2	% of pregnant women received 3 ANC check-ups to total ANC registrations	Pregnant women		ANC register Patient medical card MCTS follow-up calls	
3	# of pregnant women given full course of 100 IFA tablets	Pregnant women		Stock registers ANC register Patient medical card MCTS follow-up calls	
4	# of pregnant women delivered at facility initiated on calcium in the reporting month. (Include albendazole, Vitamin B12, and Vitamin C into a combined indicator?)	Pregnant women		Stock registers ANC register Patient medical card MCTS follow-up calls	
5	% of complicated pregnancies treated with IV antihypertensive/ Magsulph injection to total women with obstetric complications attended	Deliveries / PNC		Register of facility and home deliveries Partographs	
6	# of women receiving first postpartum check-up within 48 hrs of facility delivery (CHC & PHC) or 48 hrs of home delivery by ANM & ASHA (SC)	Deliveries / PNC		Delivery register (facility delivery) MCTS follow-up calls (home delivery) Patient medical card?	
7	# of newborns with more than one danger sign and referred to higher facility	Deliveries / PNC		Sub-center referral register	
8	# of children between 9 and 11 months fully immunized (BCG+DPT123+OPV123+measles)	Children		Immunization cards Vaccine stocks MCTS follow-up calls	
9	% of children given Vitamin A Dose 1 to reported live births – revise this (specify children of what age) OR # of children under 5 yrs given Dose 9 of Vitamin A (may be better indicator if it also captures Doses 1-8)	Children		Patient medical card Register of facility and home deliveries	
10	# of adolescents attending ARSH (Adolescent Reproductive and Sexual	Adolescent		ARSH attendance registers	

	Health) clinics			Client survey	
11	# of people attending family planning counselling sessions	Reproductive health		Family planning counselling registers Client survey (particularly for measuring perceived quality)	
12	# of people with high BP or other risk factors for diabetes or hypertension referred to PHC for treatment	Non-communicable diseases			

BOLD THINKERS DRIVING
REAL-WORLD IMPACT