Results-Based Bonus

Design, Implementation & Budget

"Malipo kwa Ufanisi Bora katika Huduma za Afya" (MUBHA)

FINAL REPORT
20th FEBRUARY 2008

Report of the design team describing detailed model, implementation strategy and funding requirements

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Table of Contents

Acknowledgements & Disclaimer

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The views expressed in this report are those of the authors and do not necessarily represent the official position of the Governments of Norway or Tanzania.

Acronyms

ANC	Antenatal Care
CCHP	Comprehensive Council Health Plan
CHMT	Council Health Management Team
CMO	Chief Medical Officer
D-by-D	Decentralisation by Devolution
DCCO	District Cold Chain Coordinator
DDH	District Designated Hospital
DED	District Executive Officer
DMCHCo	District MCH Coordinator
DMO	District Medical Officer
DPP	Director Policy & Planning
FBO	Faith-Based Organisation
FY	Financial Year
HMIS	Health Management Information System
IPT	Intermittent Preventive Treatment (for malaria in pregnancy)
ITN	Insecticide-Treated (mosquito) Net
MCH	Maternal and Child Health
MEDA	Mennonite Educational Development Agency
(I)MMR	(Institutional) Maternal Mortality Ratio
MO I/C	Medical Officer In-Charge
MOHSW	Ministry of Health and Social Welfare
OPV 0	Oral Polio Vaccine (Zero)
OR	Operations Research
P4P	Payment for Performance
RAS	Regional Adminstrative Secretary / Secretariat
RBB	Results-Based Bonus
RCCO	Regional Cold Chain Coordinator
RMCHCo	Regional MCH Coordinator
RHMT	Regional Medical Officer
TA	Technical Assistance

Executive Summary

This report sets out the proposed design, budget and implementation arrangements for a "results-based bonus" scheme to commence in July 2008. The proposed design is the first step in an approach that will evolve based on experience. This point is critical - as stakeholders in the Tanzanian health system must be prepared to view this as a "living" and changing process.

The scheme is conceived as a strategy that will be mainstreamed within the work of the health facilities, CHMTs and RHMTs. It will focus on maternal and neonatal health. It is expected to complement – and magnify the impact of – the technical strategies set out in the government's Roadmap. In addition to leading to better results in the near term, it is expected to catalyze changes that will lead to a stronger and more results-oriented health system.

National coordination of RBB will be managed in the Policy and Planning Department of MOHSW with external technical support. This unit will facilitate implementation, track progress, share/disseminate best practices, undertake annual assessments and revise the model for subsequent years. This unit will compile baseline performance, targets and actual results to enable assessment of impact at a national level and to undertake comparative performance assessment across regions and councils.

RBB will ultimately cover all government and FBO facilities at the district level. This will include Regional Hospitals that serve a District Hospital function for the host council. CHMTs and RHMTs will also be eligible for performance bonuses to enhance results-oriented planning, resource allocation, support and supervision. At each level of the system, the staff eligible for performance bonus will be clearly specified. This will include all staff at dispensaries, health centres, CHMTs and RHMTs. Within hospitals, only staff contributing directly towards maternal health will be included.

A fixed maximum bonus amount per year has been determined for each type of facility. The levels are as follows:

- Dispensary T.Shs 1 million
- Health Centres, CHMTs, RHMTs: T.Shs 3 million
- Hospitals T.Shs 9 million

These bonus levels add up to approximately $7 million per annum (as a maximum if all targets are achieved), equivalent to Norway's contribution to the basket.

The facility bonus will in turn be shared among relevant staff. Facilities with below-average staff strength will therefore obtain higher individual bonuses than those with above-average staff strength.

Allocation of bonuses to individuals will vary according to grade, following the system currently used for per diems. Senior staff with greater responsibility stand to

earn a higher bonus than junior staff. For a typical facility, achievement of all targets will result in bonus payment per individual of about T.Shs 200,000/= per year. The award of maximum bonus requires a facility/team to have met its targets on each of the relevant indicators.

The indicators for each level are as follows:

Dispensary, HC	5 indicators	IPT, Deliveries, OPV-0, Infant ITN vouchers, HMIS returns
Hospitals	6 indicators	As above, plus partographs properly completed
CHMTs	6 indicators	Aggregate performance of their council on the 5 indicators above plus complete HMIS quarterly reports for all facilities
RHMTs	6 indicators	Aggregate performance of all facilities in a region; plus complete HMIS quarterly reports for all councils

For every facility / team, targets will be set for all of the indicators. The targets are set according to a rule that requires improvement over previous performance – with a larger improved needed where performance is presently low. Targets cannot be amended within the year.

Written performance agreements will be made at each level specifying roles, responsibilities and targets. A new performance agreement will be made for each financial year. Principle signatories of the agreements will be the facility/team and their respective line management and counter-signed by other relevant parties.

Reporting on performance against target will initially be on a quarterly basis. In the second year (assuming changes to the HMIS have been implemented), reporting will switch to a monthly basis. Bonuses will be calculated and paid six-monthly. An internal data audit system will verify data reported. An external data audit system will be introduced in the second year to complement the internal data audit system.

Implementation preparations need to begin without delay if the system is to be operational in July 2008. Most urgently, councils must be informed in time[7] to allocate a part of their basket funds for FY2008/9 for performance bonuses. Tools, guidelines, templates, training materials need to be developed and training itself needs to be planned and organized. Training will then be undertaken using the "cascade" approach. Regions will be trained in (zonal) groups. Regions will train CHMTs, who will in turn train facilities. Contracted support will be needed for 3 years to support the MOHSW to coordinate the scheme.

At the national level, the RBB Unit in the MOHSW (DPP) will comprise 3 MOHSW counterpart staff and 3 temporary project staff. At Regional, Council and Facility levels, the system will be operated by existing staff (principally those responsible for HMIS).

[7] Guidance must be issued before finalization of council plans and budgets

Funding for bonuses at the district level will come from the district health basket fund. Thus RBB bonuses will need to be incorporated into every council's CCHP and budget. Funding for the RHMT bonus will need to come from either the PMO_RALG or Central portion of the basket fund. Funding for implementation and training costs will be directly funded by Norway and other partners. Training should be designed and implemented to assure maximum value for money and minimum disruption to routine duties.

The total cost of bonuses (assuming budgetary provision for maximum performance) will be US$6.5 - $7 million per year. Provisional estimates of the cost of introduction, training and support for the scheme amount to roughly $4 million over five years, plus a further $3 million for external technical assistance.

Two alternative tracks have been outlined for implementation scheduling, of which Track B is considered more realistic and feasible. Track B also provides a window of opportunity for the opening of health facility bank accounts and HMIS strengthening.

Track A: **"Fast Track"**	**Track B:** **"Phased approach"**
• Decision for "go ahead" February/March 2008 • Materials developed and tested by April • RBB National Unit (incl. TA) and Roll-Out teams in place by April • Training all levels by July 2008 • Full-scale implementation July 2008 (FY2008/9)	• Decision for "go ahead" March 2008 • Materials developed and tested by June • RBB National Unit (incl. TA) and Roll-Out teams in place by June • Implementation in 1 Region in July 2008/9 • Training completed in all remaining Regions by March 2009 for full scale implementation in July 2009 .

Introduction

The maternal mortality ratio in Tanzania is 578 per 100,000 live births – equivalent to one maternal death per hour. The neonatal mortality rate stands at 32 per 1,000, amounting to 150 newborn deaths per day. No progress has been registered in the maternal mortality ratio over the past decade. In response to this situation, and in line with its commitment to MDG 4 and 5, Tanzania has resolved to place special emphasis on maternal and neonatal health in the immediate future. This priority was articulated by His Excellency, President Jakaya Kikwete in his meeting with the Prime Minister of Norway.

Following consultations between representatives of Norway, Government of Tanzania, other basket partners and other stakeholders in the health sector, it has been decided to design and implement a "results-based bonus" (RBB) scheme, to be funded through the health basket. This report represents the output of a design team, tasked with working out the detailed modalities and the steps required for implementation. The terms of reference can be found at Annex 1.

The RBB scheme is seen as a promising strategy to complement the "technical" strategies that have been developed, notably the Roadmap for Maternal Neonatal and Child Health. Through better motivation and explicit attention to results, RBB is expected to ensure that health workers and their supervisors:

- Are motivated to strive for better service delivery results
- Identify and address local service delivery constraints
- Actively seek ways to increase coverage and quality

The design team view RBB not as a "stand-alone" strategy but part of a broader effort to make the health system more results-oriented.

The team has been guided by feedback received at various consultations to date, including the SWAp Technical Committee, the Seminar conduced in November 2007 and written/verbal comments on the first draft of this report. Key principles of the design include:

- focus on maternal and newborn health at the district level
- inspire results-orientation among health workers and their supervisors
- use existing government systems and structures
- include FBOs
- design as simple as possible for ease and speed of implementation
- commence implementation in FY2008/9 and roll out as rapidly as possible

In addition to document review, interviews and joint design work, the team held a one-day consultation in Morogoro Region with a group of 20 people from health facility, district and regional level, including representatives of facility/council health management committees. A list of all people consulted is at Annex 2.

Table 1 below shows how this report is structured.

Table 1: Structure of the report

Heading	Description
Scope	Facilities / providers / levels of the health system to be included
Performance Agreements	Content of performance agreements & how these are drawn up
Indicators	Indicators to which rewards will be linked at each level
Targets	How targets will be set at each level
Measurement & Verification	How actual performance will be measured and how reported results will be verified
Rewards	Level of rewards and rules for distribution
Roles & Responsibilities	Role of facilities, CHMT, RHMT, National level, local government & health committees
Implementation	Steps involved in actual implementation: what, who, how, when
Budget	Funding requirement & flow of funds
Feasibility	Assessment of feasibility of implementation & risks
Annexes	Supporting annexes with more detailed information & description of background to design recommendations

Scope of the Scheme

The main focus of the scheme will be at the District level. It will provide financial, results-based incentives to health facilities that will, in turn, be shared among staff as individual bonuses. The scheme will include:

- dispensaries
- health centres
- district hospitals
- CHMTs, including co-opted members (eg DMCHCo, DCCO)
- RHMTs, including co-opted members (eg RMCHCo, RCCO)

In addition to government health facilities, the scheme will include all registered non-government, non-profit health providers at council level and below (dispensaries, health centres, district designated hospitals and voluntary agency hospitals). The eligibility rules for staff within these facilities will be identical to government facilities.

Regional hospitals will be included in the scheme as long as they serve a "district hospital" function for the council in which they are based, and are recognized as such by the host council (ie they receive the "district hospital" allocation from that council's health basket funds). Any regional hospital not meeting these criteria (whether government of non-government) is specifically excluded. Referral and specialist hospitals are excluded.

Other than the health personnel included above, members of the Health Facility Committees, Council Health Service Boards, Councillors, Council Administrations and Diocesean Health Offices are specifically excluded.

A fixed, lump-sum amount (maximum bonus) has been determined for each of these levels of the system. This amount will be shared among eligible staff at that level. The rules governing the allocation of performance payments are described in more detail in the chapter on Rewards.

Table 2: Facilities & Staff Eligible for Incentives

Level / Facility	Eligible Staff	Remarks
Dispensary	All full-time staff	Typically about 5
Health Centre	All full-time staff	Typically about 15
District Hospitals / DDH / VA	Staff of the hospital management team; MCH clinic; labour & maternity wards	Typically about 45
Regional Hospitals (only if also serving as district hospital)	As per district hospitals, above	Typically about 45
CHMT	All members of the CHMT, including co-opted members	Typically about 15
RHMT	As per CHMT, above	Typically about 15

Performance Agreements

For every facility, CHMT and RHMT to receive results-based bonuses, a written performance agreement will be signed. The agreements will have duration of one financial year and will be developed in advance of the performance period. The terms of performance agreements for government and non-government facilities will be identical. To assure credibility of the performance agreement, a clause will state that no renegotiation of targets will be possible during the performance period.

Written performance agreements (contracts) will specify:

1. Roles and responsibilities of facility, CHMT, and RHMT
2. Indicators and targets
3. How results will be measured and validated
4. Frequency, format & procedure for reporting
5. Payment associated with attainment of each target and frequency of payment
6. Rules for the distribution of the bonus among individual staff members
7. Penalties for late reporting
8. Procedures for resolving disputes

The majority of the above terms will be standardized. Contract templates will be developed along with guidelines about how to complete them and training will be incorporated into the RHMT and CHMT sensitization process.

Performance agreement signatories will match lines of formal management accountability under decentralization-by-devolution (D-by-D).

Table 3: Signatories for Performance Agreements

Facility / Team	Signed	Counter-Signed
Dispensary & Health Centre	Facility i/c; DMO	Health Facility Committee
Hospitals	MO i/c; DMO	Hospital Board
CHMT	DMO; DED	RHMT
RHMT	RMO; RAS	CMO (MOHSW)
FBO facilities	Facility i/c; DMO	Diocesean Health Office

Indicators

Indicators have been selected with the following considerations in mind:

- As few and as simple as possible

- Can be measured objectively and verified
- Focus on maternal and newborn health
- "Signal" indicators for Antenatal, Maternity, Post-Natal, Infant Health
- Linkage to actual service delivery results / health impact
- Public health importance / services with greatest room for improvement
- Encourage CHMTs to support their facilities in raising performance
- Avoid indicators that could adversely affect clinical judgment

Table 4: Indicators

Facility / Team	Service Cluster	Indicator
Dispensaries & Health Centres	Antenatal	IPT 2+ doses
	Maternity	Institutional deliveries
	Post-Natal	OPV zero
	Infant Health	ITN vouchers issued
	HMIS	100% timely HMIS returns
Hospitals	As above PLUS partographs correctly filled	
CHMTs	Aggregate performance of council on facility indicators above	
RHMTs	Aggregate performance of region on facility indicators above	

When the HMIS system is strengthened, additional / more complex indicators could be phased in. The inclusion of HMIS reporting as an indicator is expected to provide a solid foundation for further elaboration of the scheme, as well as allowing the tracking of indicators that are not rewarded.

Target Specification

Specific targets for these indicators will be developed for all Facilities, Councils and Regions. The targets should encourage maximum effort while recognizing that conditions vary widely across the country. The targets need to be challenging but achievable. For simplicity, target-setting will be rule-based in the first year.

The rule is based on the principle that targets should encourage IMPROVEMENT for all health facilities. It recognizes that marginal improvements are more difficult when performance is already close to maximum. These rules specify the MINIMUM LEVEL at which targets may be set. At the discretion of local CHMTs / RHMTs, targets for particular facilities / councils may be set at a higher level.

Targets will be annual, specified in writing and agreed to by all parties. Targets cannot be changed during the course of the year.

All data used to calculate population and baseline levels of performance come from routine reporting of information that currently exists and must be verified before setting targets. Methods and data sources for the estimation of denominators (eg number of pregnant women) will be made explicit.

After determining baseline performance (actual performance in the previous year), targets for each of the indicators for all facilities will be set as follows:

- If baseline coverage of the intervention / indicator lies between 0% and 50%, target must require at least 10 percentage point improvement

- If baseline coverage lies between 50% and 75%, target must require at least 7 percentage point improvement.
- If baseline coverage is above 75%, target must require at least 5 percentage point improvement.

Having determined the baseline and target levels, the target for every indicator in a particular performance agreement will be expressed as a number (rather than a coverage rate).

The exception to this target-setting rule will be prompt and complete HMIS returns, where facilities and councils will be required to make 100% prompt returns.

Example of Target-Setting

Last year Mjimwema dispensary carried out 50 deliveries. For its catchment population, this represents 25% of the expected 200 pregnancies. Current performance lies in the 0%-50% range, so the rules require coverage to be increased to at least 35% (25%+10%). This equates to 70 deliveries (35% of 200). So the target for institutional deliveries at this facility will be set at 70 deliveries. In case the CHMT – in discussion with the dispensary team - feels that a much bigger improvement is reasonably attainable, the target may be set higher.

The CHMT's reward is directly linked to the performance of the facilities they are managing. Because facility targets will be set at a level that requires extra effort but still be attainable, we do not expect facilities to meet all of their targets all of the time. Thus it would be unfair if the CHMT were only rewarded when all facilities meet all of their targets. Instead, we propose that CHMTs qualify for bonus when 70% of their facilities reach target.

The exception to this is the HMIS indicator, where 100% of returns are required from facilities to CHMT and from CHMT to RHMT according to a set schedule. Also, because most districts have only one or two hospitals, the partograph indicator for CHMTs will depend upon every hospital attaining its target (rather than a percentage of hospitals).

The following example may make the CHMT targets more clear:

Table 5: Calculation of Council Target

Indicator	Target
IPT	70% of facilities reach their respective targets
Institutional deliveries	70% of facilities reach their respective targets
OPV 0	70% of facilities reach their respective targets
Infant ITN voucher	70% of facilities reach their respective targets
Partograph	Every hospital reaches respective targets
HMIS Returns (currently form 004, quarterly)	100% of facilities submitted timely return

The indicators for RHMTs will be analogous to those of the CHMTs. In other words, RHMTs will be rewarded for each indicator when 70% of all health facilities in their region meet their targets. Again, the exception to this rule is for partographs and HMIS returns, where 100% performance is required for all facilities and councils.

Measurement & Verification

Data Sources

Source data for measuring performance will come from the routine facility HMIS registers. This data is summarized into monthly/quarterly tallies in Book 2 and into quarterly tallies in Book 10.

The number of indicators included in routine quarterly report (Form 004 of Book 10) is presently very limited[8]. Thus some data for the indicators will need to be extracted from facility registers and reported along with the quarterly return. Data sources are summarized in the table below.

Table 6: Data source for indicators

Indicator	Data Source	Remarks
IPT 2+ doses	ANC registers – presently additional column added by hand	No provision for monthly tally of this data in Book 2 or Book 10. Recommend selection of alternative indicator for ANC services
Deliveries	Book 2, Jedwali 41A	Count facility-based deliveries only, or include "born before arrival"?
Partographs completed	File of partographs & monthly tally maintained by Matron	Not presently included in source registers or tally books. Requires separate record to be kept and compared to total institutional deliveries
OPV 0	Monthly EPI returns	Good quality data, reported monthly, already subject to internal data quality audit
Infant ITN voucher	Voucher stubs (serially numbered)	Recommend counting vouchers issued rather than vouchers redeemed[9]. Note this indicator will become unreliable if infant voucher is complemented by free net distribution
HMIS	Councils & Regions will need to maintain a register recording date of receipt of HMIS returns for every facility/council	This process will be automated to generate a report on returns received/pending once the new HMIS software is introduced

Further remarks on alternative indicator selection can be found at Annex 3, based on data that is *currently* included in either Book 2 or Book 10.

The design team was informed that some of the facility HMIS registers (including ANC) have already been revised but that the new books have not yet been printed and distributed. We also note that the intention is to move from quarterly reporting (using Form 004) to monthly reporting (using a new report format derived from the current Book 2). We emphasise that the opportunity to move to alternative / improved indicators for RBB is contingent upon completing these revisions to the HMIS system. We further emphasise the importance of introducing the new software for the input, collation and analysis of HMIS data at the council and regional level. This should greatly improve the quality of HMIS data at all levels and will obviate the need for any separate spreadsheet for collating the data relating to RBB indicators.

[8] See Annex 4 for details

[9] Because issue of vouchers to infants is under health-worker control, whereas subsequent redemption of vouchers is largely beyond health worker control.

Reporting

- Facilities report quarterly to CHMT/Facility Committee
- CHMTs report quarterly to RHMT/DED
- RHMTs report quarterly to MOHSW (DPP)/RAS

At the facility level, all targets will be divided into monthly targets (1/12), without adjustment for seasonality. Simple tools, like those used for EPI, should be introduced to enable facilities to assess whether they are "on track" for target on a month-by-month basis.

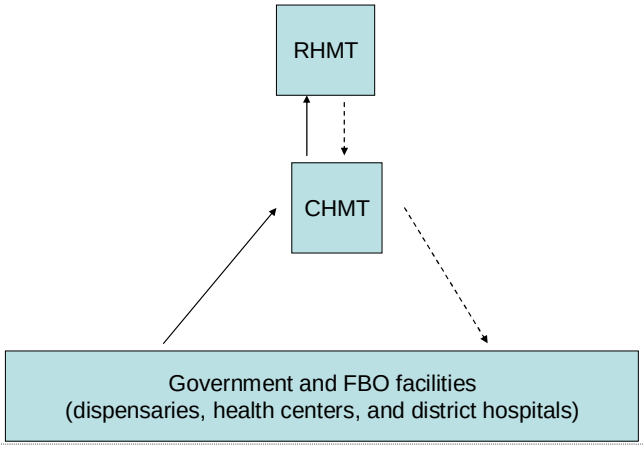
Actual reporting of indicator performance can only be done on a quarterly basis at present. This is because most tally forms[10] in Book 2 are divided into quarters rather than months. The alternative is to introduce a separate, monthly RBB report, based on data extracted from source registers. This separate return would become redundant once the new monthly HMIS returns have been put in place.

Facility data will be entered quarterly into a pre-designed spreadsheet by the HMIS focal person at the CHMT. The spreadsheet should enable easy identification of outlier / questionable data and automatically compare performance against targets.

The performance assessment for the purpose of awarding bonuses will be undertaken on a six-monthly basis. The bonus amount would then be paid out to the facility in-charge. Once facilities have opened their own bank accounts, the intention is to pay the bonus amount direct to facility accounts.

In the following figure, the solid arrows represent the flow of information that is reported and the dashed line represents the entity that will validate and check the information.

Figure 1: Data reporting and verification



[10] Including Jedwali 40 (ANC data) and Jedwali 41 (deliveries data)

The supervision team at the CHMT will validate reported performance during routine supervision visits by checking against the respective quarterly and monthly tallies in the registers. On a sample basis, these data will in turn be checked against the source registers.

In the case of deliveries the monthly/quarterly numbers will be easy to check against source registers because the numbers are relatively small. The completed partograph tally will need to be compared both to the file of partographs and to the recorded number of deliveries at the hospital. This task should be undertaken by the Council Nursing Officer during routine supervision visits. OPV zero data will be taken directly from the EPI register, that is already subject to internal audit by EPI staff. The reported number of ITN vouchers issued for infants should be easy to check against the (serially numbered) voucher stubs as well as the register.

The RHMTs will need to follow up CHMT reports by ensuring that the data reported match the reports coming from the health facilities. They may also undertake periodic random audits at the facility level to check reports against registers.

The RHMT report that collates council results will be reported to and validated by the RAS Audit Committees.

Verification

The introduction of payment for performance runs a risk that reported performance could be artificially inflated. It is therefore essential that reported performance is routinely verified. The internal audit system described above will verify reports between each of the levels. Particular attention should be paid to "questionable" data (that departs radically from previous performance) and "outlier" data (where a facility's performance differs radically from comparable facilities).

Because CHMTs will be judged on the success of the health facilities that they manage, there is also a risk that CHMTs have insufficient incentive to question/challenge inflated reports. It will therefore be the job of the RHMT to scrutinize the reports coming from the CHMT and to perform spot checks to verify data.

Ideally, this should be supplemented by some form of "external data quality audit" that can test whether internal audit arrangements are working satisfactorily as well as testing a sample of reports. This should include sample testing of the accuracy of data recorded in the source registers[11].

Experience of (external) data verification for the RBB system being operated in 5 Catholic Dioceses did find numerous errors in reporting. However, for the most part these represented clerical and arithmetic errors rather than illustrating any deliberate attempt to falsify / inflate data.

At present, source and summary data from the HMIS are far from perfect. There are likely to be many data entry and clerical errors making it hard to justify spending on an independent external audit. This design team recommends implementing and

[11] Checking of source register data would mean following up patients recorded in the registered.

strengthening the internal audit systems in the first year and additional safeguards (possibly using an external data quality audit) in the second year.

Where data is found to be erroneous (report >actual) the bonus is not paid for that indicator in the period being reported. We do not recommend introducing additional penalties for reporting errors at this stage. However, this should be considered at a later stage once HMIS has been strengthened and external audit put in place.

Rewards

Allocation of Bonus to Facilities / Teams

The level of reward has been fixed for all facilities / teams of the same type. One advantage of this is that understaffed facilities stand to gain larger individual rewards. It may also help to attract staff to move from over-staffed to under-staffed health facilities.

The maximum annual reward available to each level will be as follows. The calculation and justification of these levels is described in more detail in the Budget section below. The level of bonus for each level may be reviewed in future years based on experience.

Table 7: Maximum bonus per facility/team

Facility	Maximum Annual Bonus (T.Shs)	"Typical" maximum annual bonus per person[12]
Dispensary	1 million	200,000/=
Health Centre	3 million	200,000/=
District Hospital	9 million	200,000/=
CHMT	3 million	200,000/=
Regional Hospital	10 million	200,000/=
RHMT	3 million	200,000/=

Linkage of Reward to Target Achievement

The relationship between performance and rewards needs to be a simple as possible so that the rules are transparent and widely understood. Each of the indicators and targets carry the same weight. The level of reward for FBO facilities will be the same as for government facilities.

Dispensaries and Health Centres have 5 targets. So attainment of each target "earns" a fifth (20%) of the maximum bonus available. In case a facility does not deliver certain services (e.g. deliveries) is not eligible for that bonus unless/until the capacity is put in place to deliver those services

Hospitals, CHMTs and RHMTs have 6 targets. So attainment of each target earns one sixth (17%) of the maximum bonus available.

Bonus allocation to individuals

The distribution of a bonus earned by a health facility / team will be shared among the team members. Allocation of the amount to individuals will be governed by a rule to

[12] Actual individual bonus payments will depend upon seniority. These figures are included only to illustrate the level of individual reward attainable

avoid "capture" of the bonus, assure reward for all team members, to avoid conflicts and to promote transparency.

Our consultations reveal that health workers consider it fairer if reward is linked to levels of skill, training and responsibility[13]. The simplest way to do this is to follow the same rules and differentials as those presently applied for employment allowances[14]. This will require the application of a simple formula to calculate the distribution of bonus among eligible staff, weighted according to their salary grade.

The definition of eligible staff will be described unambiguously for each level receiving rewards and this will be checked by the next level in the reporting line. Thus the CHMT will check the list of eligible staff for every facility; the DED will check the list of eligible CHMT staff and the RAS will check the list of eligible RHMT staff.

In case one team member is absent for a part of the performance period, that staff will still be eligible for reward. This ensures that staff absent on official duties or statutory leave are not discriminated against. At the same time, peer pressure among team members is expected to reduce absence from duty.

Frequency

Ideally the performance assessment and reward should be done regularly to keep the incentive alive in people's minds. To reduce implementation complexity in the first year it is proposed to reward performance twice per year, or each 6 month period. In subsequent years this could be modified to a quarterly basis.

Bonus allocation per council

The councils receive information on the maximum budget available for bonuses for each type of health facility a given year. It calculates the district budget by multiplying the maximum RBB bonus for each facility type by number of units (including FBOs). Thus the level of council health basket funds that needs to be reserved for RBB bonuses will vary from place to place according to the number of facilities.

Table 8: Budget for bonuses – example of a typical district

Unit type	# units	Max per unit	Total budget for RBB, Tsh
CHMT	1	3m	3m
Hospitals	1	9m	9m
Health centres	5	3m	15m
Dispensaries	30	1m	30m
Total			**57 million**

Notes:
Dollar equivalent approximately $50,000 (or about $0.2 per capita in a typical council)
Number of councils approx.130, so total budget for councils' $6.5 million
Plus 21 RHMTs @ T.Shs 3m each = T.Shs 63m = approx $50,000

[13] At the consultative meeting in Morogoro, health staff were unanimous that it would not be fair for a sweeper to get the same bonus as a clinical officer in-charge.
[14] For example, a per diem for travel to town is 20,000/= for junior staff, 30,000/= for middle ranks and 45,000/= for senior-ranking officers. Thus the bonus allocation formula will give middle ranks 50% more than junior ranks and senior ranks 50% more than middle ranks.

It is essential that the budgetary requirement for RBB is communicated to CHMTs at the time budget guidelines are issued so that the requisite funds can be allocated for the coming financial year. This has not yet been done for financial year 2008/9. Formal guidelines for CHMTs to be included in year 1 implementation need to be issued as a matter of urgency.

Roles & Responsibilities

What follows is a description of the roles each "actor" in the Tanzanian health system will need to assume to effectively implement RBB. The section that describes "Implementation" will discuss training, external support for implementation, operations research, and institutionalization of a RBB Unit in the Department of Policy and Planning of the MOHSW.

Facility Level

1. Identify performance problems and develop and implement actions to improve performance.
2. Work out baseline performance and negotiate targets with CHMT.
3. Report progress on indicators to CHMT quarterly.
4. Request technical assistance to refine strategies and solve problems when needed.
5. Liaise with Facility health committee and other community members and leaders to improve outreach and achieve results.

Health Facility Committee Roles

1. Open and manage facility bank accounts
2. Counter-sign facility performance agreements.
3. Undertake quarterly review of performance and verify performance reported.
4. Ensure that bonus payment is distributed to staff according to the rules.
5. Contribute to development and implementation of action plans.
6. Liaise with community leaders to sensitize population and raise demand.

CHMT Roles

1. Training & capacity building. Explain RBB to facilities; provide support to help develop action plans, and ongoing assistance to achieve goals.
2. Formalize performance agreements with facilities. Establish written performance agreement with each facility. A performance agreement template and guidelines will be provided.
3. Record, monitor and validate data. Each quarter, facilities report the quantity of each of the RBB services provided. Input data, identify/correct errors[15], produce reports that compare facility progress against targets, determine the low and high performers, and communicate results to the CHMT.
4. Validate reported data by performing spot checks of reports against source registers during their routine supervision visits.
5. Support low performers. Provider targeted TA to identify reasons for poor performance and develop strategies to overcome them.

[15] For example, by checking for unusually high/low figures in the monthly reports

6. Assure responsive support to address shortages of equipment, staff and supplies in health facilities.
7. Sign CHMT performance agreement with DED, countersigned by RHMT
8. Make quarterly CHMT performance report to RHMT (cc DED).

RHMT roles

1. Train CHMTs to implement RBB. Provide ongoing support and quality control in the roll-out of training at the district level.
2. Advise and assist in the negotiation of CHMT targets with their respective Council Administrations.
3. Counter-sign performance agreements with all CHMTs.
4. Aggregate and analyze performance data for the region and provide feedback to every CHMT/Council Administration.
5. Verify that payment for targets achieved per facility reflects targets specified in performance agreements
6. Identify performance problems and provide targeted supervision and support.
7. Provide technical support and supervision to all hospitals to reduce maternal deaths.
8. Convene meetings to share lessons across districts and provide support.
9. Sign RHMT performance agreement with RAS, countersigned by CMO
10. Provide quarterly RHMT performance reports to RAS, cc CMO

National Ministry of Health and Social Welfare Roles

1. Establish national unit under DPP to oversee the implementation of the RBB strategy.
2. Develop guidelines, training materials, implementation tools and templates.
3. Receive quarterly reports from Regions
4. Monitor RBB implementation, identify problems / lessons and refine model for subsequent years
5. Institute ongoing comparative performance assessment to identify high/low performing councils and regions for each indicator.
6. Conduct annual program review to assess implementation of program, consider refinements to the model, evaluate progress on reaching targets and communicate lessons about effective strategies.

PMO-RALG Role

1. The DED and the RAS will have a key role to play in monitoring performance of their respective CHMTs and RHMTs
2. Ideally, a full set of performance indicators (including, but not limited to those rewarded) needs to be put in place and harmonized with the Local Government Monitoring Database[16]. This will allow automatic generation of performance reports that are equally useful to the health sector and to PMO-RALG

[16] The current list of 20 council health service indicators (Annex 12 of CCHP guidelines) have some problems since some cannot be measured through routine data systems and most councils do not report on them anyway. The Local Government Monitoring Database has compiled a list of (annual) health sector indicators which is incompatible with the CCHP indicators and also contains indicators not obtainable from routine information systems. We recommend that these indicator sets be reviewed and harmonized.

3. PMO-RALG (Council Administrations) will also have a key role to play in enabling the opening of facility bank accounts, and oversight / audit of the same.

Implementation

This proposed RBB design is guided by the need for a simple approach that can be implemented at national scale as rapidly as possible, commencing in July 2008.

Indicators were chosen based on relative ease of measurement and reporting as well as their relevance to improving maternal, neonatal and child health. Rules to set targets and allocate performance payments are standardized in order to eliminate time that might be spent debating choices if more flexibility was incorporated. As time is limited, a clear implementation plan is needed to put the building blocks in place, develop tools, templates and guidelines, train the relevant actors, determine baseline performance, formalize performance agreements and assume new roles. This section will describe the building blocks that need to be developed to enable national roll-out.

Phasing

While it would be ideal to lay the groundwork for implementation in the entire country before July 1, the design team recognizes that this may not be possible if there are any delays. To allow for the possibility of some delays, the design team is proposing two "tracks: with different timetables for national roll out.

Track A: This is the "fast track" preparation and implementation that will be feasible if decisions are made according to an ambitious timetable, technical assistance is hired and put in place, materials are developed and tested, and training at all levels can occur before July.

Track B: This timetable allows for part of the country to begin implementation on July 1 and phases in additional parts of the country throughout the fiscal year so that RBB is implemented nationwide by July 1, 2009.

As well as being a more realistic timeframe, Track B allows for refinement of the model before roll-out to remaining Regions. It also allows time to undertake the requisite HMIS strengthening and the opening of facility bank accounts.

Track A: **"Fast Track"**	**Track B:** **"Phased approach"**
• Decision for "go ahead" February/March 2008 • Materials developed and tested by April • RBB National Unit (incl. TA) and Roll-Out teams in place by April • Training all levels by July 2008 • Full-scale implementation July 2008 (FY2008/9)	• Decision for "go ahead" March 2008 • Materials developed and tested by June • RBB National Unit (incl. TA) and Roll-Out teams in place by June • Implementation in 1 Region in July 2008/9 • Training completed in all remaining Regions by March 2009 for full scale implementation in July 2009 .

Tasks

The tasks required for successful implementation of the scheme are summarized below:

- Reach consensus on the scheme design and decision made to proceed
- Notify councils to reserve a portion of their CCHP & budget for RBB payments
- Include RBB guidance in next issue of CCHP guidelines and budget guidelines for 2009/10
- Develop and pre-test all templates, forms, guidelines, tools, training materials
- Put in place National RBB Unit (long-term technical assistance plus MOHSW counterparts)
- Put in place RBB Roll-Out team(s)
- National level trains Regions (in zones)
- Regions train Councils
- Councils train Facilities
- Develop and implement programme of operations research to monitor impact, identify best practice, document results
- Ongoing operational support and monitoring
- Disseminate information on comparative performance and on the impact of the scheme
- Include scrutiny of RBB payments in TOR for future Basket Fund audits.

In parallel with this process, HMIS strengthening and the devolution of budgetary authority to health facilities (facility bank accounts) should be underway.

In the interest of brevity, the more detailed narrative description of the tasks and their timing is based on the "fast track" scenario. In case the "phased approach" is selected, the timeframe would need to be adjusted accordingly.

Phase 1: Preparation (March through July 1, 2008)

The four months that precede the operationalisation in July, 2008 will be the time to start recruitment of the RBB International Expert & support team to be located in the MOHSW, assign the Ministry counterpart to work with this team, assign the members of the RBB Roll Out team, train the many actors that comprise the health system, establish the performance agreements and tracking and monitoring system, develop the necessary materials, and assign the roles at each level to implement RBB.

Establish RBB unit in the DPP

Coordination of RBB will be needed at the national level. Although responsibility for RBB will be placed in the Policy and Planning Department in MOHSW, experiences show that the multitude of technical, operational and managerial tasks during implementation will require additional support. The design team proposes that three *temporary resource people* should be placed in the Policy and Planning Department for *up to three years* with the aim of *making themselves redundant* by transferring skills to their counterparts. In due course, these counterparts should be able to assume the RBB co-ordination role.

The following temporary resource people will be needed to staff the RBB Coordinating Unit:

- One International RBB Expert (international hire)
- One Financial Expert (local hire- external to the MOHSW)
- One Administrative Officer (local hire- external to the MOWSW)

The Policy and Planning Department should assign a fully dedicated counterpart who is a Policy and Planning Expert with in-depth knowledge of the health sector to work with a donor-funded team that works in the MOHSW to build a RBB Unit. If possible, two additional assigned counterparts to assume the tracking, coordination, and administrative roles would help assure that the capacity is institutionalized within the MOHSW. This unit will track progress for the country, oversee annual assessment of progress and impact. It will commission targeted operations research to study impact on performance (both rewarded and non-rewarded indicators) and to identify, document and disseminate best practices. The Unit will also assemble national data that permits comparative performance assessment across Councils and Regions.

If possible, the following counterparts from the MOHSW should be assigned to assume the functions of the RBB Coordinating Unit of the Policy and Planning Department.

- One Policy and Planning Expert.
- One Operations Research Coordinator
- One Administrative Officer

Materials needed to implement RBB

While plans for training are underway, the following materials will be developed by a small team of consultants:

1. Written guidelines that specify the roles and responsibilities of the RHMT, CHMT, and facilities.
2. Performance agreement templates for the RHMT, CHMT, hospitals, health centres and dispensaries.
3. Guidelines for how to determine baseline performance levels.
4. Guidelines for how to develop facility level action plans and a template.
5. Guidelines on how to open & operate facility bank accounts.
6. Data forms for quarterly (or monthly) reporting on the rewarded indicators. Formats to track performance indicators will be incorporated into revisions of the MTUHA in subsequent periods.[17]
7. National, regional and district level performance monitoring and tracking tools (excel spread sheet tool).
8. Training materials for the TOT programs that will include:
    - PowerPoint presentation to describe the new model
    - Stylized case study to use in hands-on group work to help understand how to develop an action plan and what facilities might do to achieve results
    - Menu of potential strategies to increase performance.
    - Guidance on where resources might come from to finance the interventions needed to attain results (existing funding sources)

[17] These forms would report on the 5-6 indicators that are part of the performance based bonus system. Reporting on progress quarterly will enable district and regional teams to track progress, identify facilities that are off track, and enable them to provide support to improve results early enough to make a difference.

- Training on how to use performance monitoring and tracking tool to identify low performers, and assess district and region progress toward achieving performance targets.

Training to implement RBB

The training will follow a cascade approach. RHMTs will be trained in zonal groups. Using a training of trainers (TOT) model, regional teams will learn to train the CHMTs in their region to roll out the model. CHMTs will organize training of the facility-level staff. ***Effective training is critical- if people don't understand the new system they won't be motivated to achieve results. At the same time, training should be designed and implemented to assure maximum value for money and minimum disruption to routine duties.***

The training approach proposed has been substantially revised based on comments received earlier. The costs of training presented here are based on:

- 7 zonal training sessions for regions; 2 day training, 5 participants from each region
- 130 councils trained (in their respective regions); 1 day training, 10 participants from each council
- Approx 40 facilities per council trained (in their respective councils); 1 day training for 2 participants per facility.

On the basis of comments from MOHSW, the design team understands that all training costs, including contracted staff and trainee per diems, will need to be met from donor funds.

1. Establish national "RBB Roll-Out Team" by March 15 to develop the training approach and to implement the TOT model. This team will be comprised of two teams of five people who understand RBB, have demonstrated commitment to maternal health, and believe that changing incentives through RBB will make a difference. Each team will comprise:
    - 1 Medical expert
    - 1 with expertise in HMIS
    - 1 with expertise in the financing mechanisms used in Tanzania at the district level
    - 1 from the FBO sector.
    - 1 from external entity contracted to facilitate roll out and implementation.

    In addition to meeting above requirements, the team members need to be good trainers. Profiles of members of the RBB Roll Out team will be developed to help the Government identify appropriate people to assign, with help from the International RBB Expert. Each member of the RBB Roll Out team will be expected to dedicate 25 days per quarter to support effective implementation of RBB.

2. The RBB Roll-Out Team will train RHMTs at the zonal training centers where regional health teams will learn about RBB and how to train the CHMTs in their region to implement the model in their facilities. This training will be completed by the end of April, 2008.

3. CHMTs will train facilities with support from RHMTs. This will include establishing baseline performance levels and targets, signing performance agreements, and developing action plans to achieve results.

   Track A: CHMTs will train all facilities, operationalise action plans and finalize performance agreements by the end of June, 2008.

   Track B: Training of 1 Region only by June 2008. Phased training of all remaining regions completed by March 2009.

Operations research

Identify selected districts in two Regions to follow the design and implementation process closely. Qualitative research can be concentrated in these areas (complemented by nationwide quantitative research).

A structured program of operations research will be needed to document what is effective in the training and roll out process and what might need to be revised in the approach to training in subsequent years.

The newly formed RBB Unit in the Policy and Planning Department will craft a program of operations and impact research with the International RBB Expert that might include:

Track baseline performance levels and targets and monitor national progress: A top priority for this national RBB unit will be to assess performance and progress toward improvement. The RBB unit will collect baseline performance levels by district and monitor progress toward attainment of targets.

Effect of RBB on the distribution of human resources: One hypothesis is that providing a fixed maximum bonus sum per facility type will encourage health workers to be posted at under-staffed facilities. Assessing whether this reallocation occurs and the impact on performance in both the facilities they leave and the facilities they move to will be one priority area for OR.

Assessment of the quality of data reporting and data verification: In the first year, line supervisors (CHMT for facilities and RHMT for CHMTs) will be responsible to validate data and verify performance. Since line supervisors also benefit from attaining performance targets, incentives may result in supervisors "looking the other way" if high but incorrect performance is reported. A program of OR is needed to assess the challenges with this approach to data verification and to propose refinements for subsequent years.

Document what facilities, CHMTs and RHMTs actually do in response to altered incentives: Qualitative assessments of the responses to changed incentives and the impact perceived by health system actors on results need to be documented. Through interviews and focus groups, a group of successful and failed innovations can be documented and shared.

Assess the impact of RBB on services that are not being rewarded: One of the dangers of RBB is that services that are not being rewarded might be neglected. Care was

devoted to choosing indicators for this first phase that reach each priority group with the goal of mitigating against this potential adverse effect. It will be important to monitor overall production to determine if there are positive (likely) or negative spillover effects on the system.

Assess the degree of civil society engagement: The proposed design includes a specific role for Health Facility Committees to hold facilities accountable for results and to help achieve results. Understanding whether facility committees become more involved and documenting the success stories will be one important area for OR.

Phase 2: Implementation (July 2008 onward)

Once RHMTs and CHMTs are trained, facilities have action plans, and performance agreements are signed and in place, operationalization can begin. As described in earlier sections, RHMTs and CHMTS will track progress toward attaining targets and identify low performers for focused technical assistance. Both qualitative and quantitative Operations Research will be conducted, involving the health system research unit in DPP department, teaching & research institutions in the country, to "get the stories behind the numbers" as well as to track national progress. By November, 2008, plans will begin to revise the approach for the fiscal year beginning in July 2009. Lesson learned through implementation in the first year and progress on development of the HMIS will be incorporated to refine the approach.

Ongoing Implementation Support

In each quarter, 10 regions will be randomly selected to receive focused assistance from the RBB Roll out team (each team will work with 5-6 regions and each region will receive 5 days of intensive assistance). This team will begin with the RHMT to assess their understanding, to answer questions, address concerns, and provide needed assistance to strengthen understanding. The RBB Roll out team along with the RHMT will visit a select group of districts (either randomly chosen or identified as poor performers) to provide additional support. They will then provide targeted assistance to a select group of facilities. Through this process, the RBB Rollout team will provide ongoing assistance to strengthen understanding and support implementation in an ongoing way throughout the first year.

Monitoring

The new RBB unit established in the Department of Planning of the MOHSW will receive quarterly reports from CHMTs and RHMTs on performance achieved throughout the country. This unit will manage a national data base that tracks ongoing progress toward attainment of targets. This ongoing monitoring process will identify what is working and areas of the approach that could benefit from future refinements.

Communication of Performance Information

The design team recommends that performance data from health facilities should be in the public domain. This will help Health Facility Committees and Council Health Service Boards to play an effective oversight role. It will assist the MOHSW and PMO-RALG to undertake comparative performance assessment across regions, councils and facilities. Public / media access to performance comparisons should offer a powerful incentive for under-performers to raise their standards.

Refinements to RBB for Year 2:

The RBB Unit of the MOHSW will have the responsibility to advise and recommend changes to the RBB approach. Guided by the International RBB Expert and by the RBB Roll Out Team, they will analyze national performance data, examine results of operations research, and suggest refinements to the year 1 model. In particular, scope for refinement of the model will depend upon progress in the opening of facility bank accounts and on the strengthening of the HMIS system and a broader emphasis on "results-based management".

Annual Review

Incorporated into the annual review of the SWAP will be an assessment of the impact of RBB. This assessment will draw on the data monitoring system managed by the RBB unit of the MOHSW and will incorporate results of both qualitative and quantitative operations research described above.

Document implementation experiences through video

To complement quantitative and qualitative research, visual documentation of implementation of RBB will be a powerful means to capture the behavioral responses of the many actors in the health system in Tanzania. This design team recommends that interviews to capture the responses to new incentives would be a powerful tool to inform further scale up, communicate to civil society in Tanzania, and to share experiences on a global scale.

Budget requirements

As the RBB scheme will be operated within existing systems and structures, the majority of the costs are already covered by the Government and Development Partners through the different financing channels of the system. However, there are *additional* or *marginal costs* that need to be identified and funded in one way or the other. These additional costs of introducing and implementing the RBB scheme are categorised and elaborated below. It is important to acknowledge that these will be *estimates* based on existing knowledge, unit costs and exchange rates.

Ongoing operational costs are challenging to estimate because they will be affected by factors such as how well the introduction has worked, how well it is understood, and the obstacles that occur. They will also be affected by whether future refinements progressively incorporate additional indicators and the capacity of the HMIS that will be strengthened in the coming years.

Some of the costs presented in the following table are one-time costs of design and implementation, while others will be recurrent costs that will be eventually assumed as part of government operations if the approach is successful and becomes institutionalized.

The following table summarises estimated costs to design, roll out, implement and monitor RBB.

Table 9: Summary of Implementation Budget, excl. Bonus payments (US$ '000s)
Note: Budget schedule based on "Fast Track" approach

Cost Element	2007/08	2008/09	2009/10	2010/11	2011/12	Total
RBB Coordination Team	$300	$900	$900	$900	0	**$3,000**
Materials	$150	$50	$50	$50	$50	**$350**
Initial Training	$90					**$90**
Ongoing training support		$45	$45	$45	$45	**$180**
Operations Research		$100	$100	$50	$150	**$400**
Other operational costs	$50	$50	$50	$50	$50	**$250**
Communication/ documentation	$50	$50	$50	$50	$50	**$250**
Other TA	$100	$100	$100	$100	$100	**$500**
TOTAL (excl. per diems for all levels)	**$740**	**$1,295**	**$1,295**	**$1,245**	**$445**	**$5,020**
Per diems for training	$880	$250	$250	$250	$250	**$1,880**
Total 2	**$1,620**	**$1,545**	**$1,545**	**$1,495**	**$695**	**$6,900**

The design team understands that plans are underway to strengthen the HMIS. A more robust system to track and report on health information will enable additional indicators to be included as RBB evolves. It will also remove the necessity for any additional reporting tools; improve data quality and timeliness and allow routine comparative assessment of all performance indicators – not only those that are rewarded.

At the same time, the introduction of RBB is expected to add impetus to the strengthening of the HMIS because bonuses cannot be earned without reports; because full HMIS reporting is one of the indicators; and because it will pioneer a "results-based management" culture.

The design team strongly advocates the prompt implementation of HMIS strengthening efforts as a mutually reinforcing strategy. We also envisage potential economies of scale if the introduction and training on the revised HMIS can be combined with RBB roll-out.

Value for Money

Tanzania has not made progress in reducing maternal mortality. It is clear that continuing with "business as usual" is not working. Experience from other countries has demonstrated the potential of pay-for-performance to leverage rapid improvements in service delivery results. By promoting a results-orientation at all levels, RBB is expected to encourage more efficient utilisation of health resources, with a primary focus on achieving better service delivery, particularly with regard to maternal and neonatal health.

Additional benefits that are difficult to quantify will likely be a strengthening of the health system from the bottom up as the many health system actors become empowered to implement interventions that lead to improved maternal and child health outcomes. This strengthening of the health system will likely have spillover effects that will benefit other health priorities.

It will take several years to fully assess whether the benefits will be worth the up-front investments and ongoing costs of implementation. Operations research will provide information along the way and more rigorous evaluation of impact will provide the evidence.

Assessment of the Feasibility for the Next Fiscal Year

This design team believes that it will be feasible to implement RBB nationwide. As the previous chapter described, there is a great deal of work involved in preparation and implementation. Much of this is time sensitive since the design of the scheme relies upon Councils planning and budgeting for bonuses, and obtaining their training in time for implementation in the coming financial year. ***It should be noted that the timeframe and the cost of implementation will be largely unaffected even if the RBB design were further simplified (e.g. by adopting a single indicator instead of multiple indicators).***

Track A (Fast track) involves an extremely short timeframe for preparation and implementation. Any delay over the coming months will inevitably mean that implementation could not be achieved on a national basis in time for July 2008. Even without delays, the timescale looks to us to be too ambitious.

Track B (Phased approach) would still require very rapid mobilization of human resources and training implementation. However, the task is more manageable if it is confined to a single region in year 1. This permits training for the remaining regions to be scheduled over a more realistic timeframe. It would allow the model to be refined before national roll out. It would also provide time for mutually reinforcing strategies (opening facility bank accounts, strengthening of HMIS) to be undertaken. Depending on the timing (and donor support), there may be a possibility of combining RBB training with HMIS training, thus providing a double benefit.

Preparation, roll out, and institutionalization in the MOHSW will require commitments of funding and determination of the mechanisms used by the different donors who agree to support implementation. For example, if donor procedures mandate competitive processes to procure assistance, extra time would need to be factored in. If this process can be streamlined and needed technical assistance can be put in place rapidly, this potential source of delay can be minimized.

Results-Based Bonus

Design, Implementation & Budget

Volume II: Annexes

Annex 1: Terms of Reference

Terms of Reference and Itinerary for P4P Design Task

Introduction

The vision for *Norway-Tanzania Partnership Initiative (NTPI) to Achieve the MDG 4 and 5 in Tanzania 2007-2012* is that through additional flexible and performance based funding to the district health services, together with the identification of key catalytic opportunities through action-oriented research, maternal, newborn and child health prevention and care will be recognized, integrated and scaled-up on a national level. The partnership will endeavor to help achieve MDG 4 and MDG 5 nationally and globally through a shared vision and aim to use the NTPI specific experiences from Tanzania as a model of best practices which can serve as national and global benchmarks that could be multiplied for application elsewhere in the world.

NTPI will be developed around a few selected entry points building on existing financing mechanisms for the health sector, including the Comprehensive Council Health Plans (CCPHs), and will focus on implementing the strategies and interventions delineated in the National Roadmap Strategic Plan for Accelerating the Reduction of Maternal and Newborn Morbidity and Mortality (the roadmap) which was developed with input from the National Partnership for Maternal Newborn an Child Health.

The NTPI will entail the use of result-focused approaches to the area of maternal newborn and child health through the pooled basket fund mechanism, simultaneously as making more funds available for districts health services. To facilitate this, funding for performance based financing scheme development, and operational research in the area of community- and facility-based newborn and maternal care are earmarked within NTPI. In addition, strategic support to strengthen HMIS will contribute to support district planning, monitoring and management processes. NTPI will also build on the particular strength of some selected NGOs in adopting innovative, mainly community oriented/outreach approaches.

- The funds from Norway would be channeled through several modalities. Approximately 80 percent of the funds within NTPI will be channeled through the pooled health fund to support district health services; including payment of performance bonuses for delivered MNCH services according to agreed scheme(s). Under its Norway-Tanzania Partnership Initiative, Norway will be providing financial assistance over a five-year period 2007-2012.

Background

The first step in exploring the opportunity for performance-based funding for health in Tanzania was the feasibility study carried out in 2007. This report and its recommendations have been discussed at a variety of forums, including a detailed briefing for MOHSW; discussions at the SWAp Technical Committee, and a 2-day technical meeting (Seminar) held in late November. Having reached broad consensus

on the desirability of some form of performance-based financing, the next step is now to spell out the detailed design of the scheme, including how it will be implemented and managed.

Guiding Principles

The areas where there was broad consensus during the late November work shop will act as guiding principles for the consultancy. Among these were:

- the scheme should care providers
- it should raise quality as well as quantity
- more autonomy (control over resources) at the facility level is essential
- an effective monitoring system is essential
- the system should from the start encompass the whole country
- therefore, the system should be extremely simple from the start
- operations research should guide the development and adjustments of the scheme
- care should be taken to avoid withdrawal of personal incentives at a later stage, implying that incentives given to institutions and/or to districts, and not individuals, might be the first step.

Scope of Work

The consultant team will undertake the following tasks:

1. Familiarize themselves with the Feasibility Study report and the records of subsequent briefings and discussions on the subject of P4P.
2. Undertake an initial "inception meeting" including stakeholders from Norway Embassy, Ministry of Health and Social Welfare and Basket Partners.
3. Undertake meetings with key stakeholders (government, development partners and non-state actors at National, Regional and District levels) to gather views on specific design preferences.
4. Develop proposals for the detailed design modalities, including the following:
    - levels (facility and/or district) at which the scheme will be applied
    - how to include faith-based institutions
    - selection of performance indicators, including discussion on indicators on quality of care
    - proposed means (and locus of responsibility) for setting performance targets/standards to be met
    - precise payment-performance linkage, including level and periodicity of payment as well as relationship to other flows of funds (and specifically to cost sharing funds such as NHIF and CHF)
    - analysis of financial implications of provider incentives for deliveries, taking into account where deliveries take place, number of deliveries and possible size of monetary incentives
    - means of internal data quality audit
    - means of external data quality audit
    - describe in detail (including specification of individual tasks/duties) the management arrangements at district, regional and national level, including detailed specification of staff to cover the administrative needs of the scheme

- detailed recommendations on implementation timetable and phasing
- estimated (marginal) costs of implementation arrangements
- calendar for the implementation
- assessment of the feasibility for next calendar year.

5. Undertake a short "debriefing" meeting at the end of the mission (31st January)
6. Set out all of these findings in a final report, to be submitted to Norway Embassy Comments to the draft will be sought by Norway, and feed back given to the team. The final report should be completed not later than Friday 15th February 2008.

Draft Itinerary

21st January team members read background documentation / travel to Dar es salaam
22nd January initial team meeting to go through TOR, specify detailed tasks and agree on division of labour between team members. Attend "mission inception" meeting with key stakeholders as required
23-26th Consultations with key stakeholders at national level and initial drafting of proposed design features
27th Travel to Morogoro Region (tbc) for 1.5 day workshop with selected regional, district and facility level staff to present, debate and fine-tune proposed scheme design.
29th (pm) return to Dar es Salaam
30th-31st Production of draft report and debriefing with key stakeholders as required. Draft report to be circulated by the Royal Norwegian Embassy to the stakeholders for feed back
11th-15th February: Finalization of the report
15th February: Final report submitted to the Royal Norwegian Embassy

Annex 2: People Consulted

Director Local Government, PMO-RALG
Regional Commissioner, Morogoro Region
Municipal Director, Morogoro Municipality
Regional Medical Officer, Morogoro
Morogoro Working Group (19) comprising staff from clinics, CHMTs, council health service boards, RHMT.

Annex 3: Background Info for Design Parameters

Basic Background information

Deliveries

Total deliveries expected in Tanzania in 2008 are approximately 1.7 million. Of these, around 83% occur in rural areas. For the country as a whole, 47% of deliveries occur in health facilities (around 800,000 institutional deliveries per year in total). Delivery in a health facility is much rarer in rural areas (38%) than in urban areas (81%). Thus the problem of unattended / home births is overwhelmingly a rural one.

Government is by the main provider of institutional deliveries. Out of total facility-based births, government facilities account for 80%, voluntary facilities 6% and private facilities 13%.

The majority of institutional deliveries are conducted by dispensaries, health centres and district hospitals. Regional and referral hospitals account for just 1/3 of total deliveries in health facilities. For rural women, a smaller proportion of facility deliveries are conducted in referral facilities, and a larger proportion at the lower level facilities.

	% of deliveries	number of deliveries
Referral Hospitals	7	111,746
Regional Hospitals	6	101,077
District Hospitals	10	174,539
Health Centres	10	165,323
Dispensaries	14	232,606
Other/missing	1	12,942
Home	53	889,914
Total	**100**	**1,688,000**

By applying the total number of deliveries, the distribution of deliveries by facility and the number of each facility type, we can estimate the volume of deliveries presently being performed at each level, as follows:

Dispensary – around 1 delivery per week
Health Centre – around 1 delivery per day
District Hospital – around 5 deliveries per day
Regional Hospital – around 15 deliveries per day
Referral/Specialist – varies a lot by hospital – in the order of 50+ per day

Raising institutional deliveries to (say) 60% of all pregnancies would require around an additional 200,000 deliveries in facilities, most of these being in rural areas.

Antenatal Care

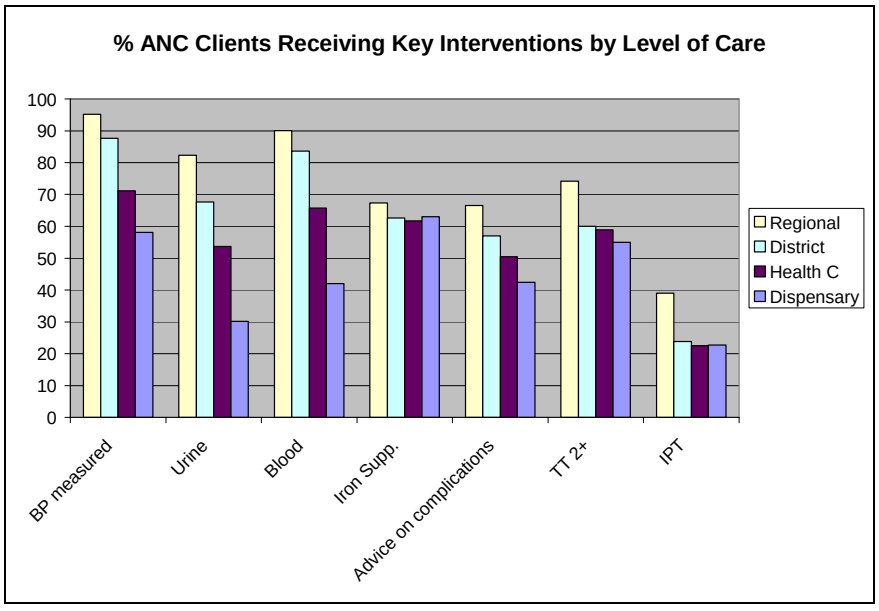
The vast majority of pregnant women do attend ANC at least once during their pregnancy. The median number of ANC visits is around 4.5. Most women do not make their first visit until more than 20 weeks pregnant.

	as % of all women, including those not attending ANC			of women attending ANC
	At least 1 ANC visit	4+ ANC visits	Mean No. Visits	No. months pregnant at first visit
Urban	97	71	5.1	4.8
Rural	96	59	4.3	5.1
All	97	61	4.5	5.1

More than 90% of ANC clients get there services at district level and below. About 80% get their ANC from dispensaries and health centres.

	% of ANC Clients by Provider Type		
Provider	Urban	Rural	All
Dispensaries	36%	61%	55%
Health Centres	33%	22%	24%
District Hospitals	17%	9%	11%
Regional Hospitals	9%	1%	3%
Referral Hospitals	5%	3%	3%
Missing/Other	2	4%	4%

In spite of apparently high levels of utilization of ANC, not all clients are receiving the interventions that they are supposed to. A majority have their blood pressure measured, receive iron supplementation and tetanus toxoid. However, other key elements of ANC including blood/urine analysis, advice on complications and intermittent presumptive treatment for malaria are not received by many women. The quality of ANC services (in terms of interventions delivered) tends to be worse for lower level health facilities. IPT is especially low, although the figure has no doubt improved since the time of the 2004/5 DHS survey. The challenge with ANC is not so much to attract more clients, but to attract them earlier in pregnancy and ensure that key interventions are delivered to all.



Financing District Health Services

Funding for district health services comes from two main sources – the government block grant for health (payroll and other costs) and the basket fund. In addition, there are some funds for capital investment, notably the "joint rehabilitation fund" (a portion set aside from the total health basket) and the Local Government Capital Development Grant (shared between all sectors). Apart from these budgetary sources, districts raise additional money from the Community Health Fund (user fees plus CHF premium), from the National Health Insurance Fund and ad hoc project funds from various donors. No definitive national estimates exist for the contribution of the latter two sources to district health financing.

Approximate estimates of the respective size of these sources is summarized below (for fiscal year 2007/8) for all 130 councils combined (US$1 = 1,200/=)

Source	Amount (T.Shs Billions)
Government Block Grant for Health	138
Payroll costs	110
Other recurrent	28
Basket Fund (recurrent)	44
Basket Fund (capital)	13
Local Govt. Capital Dev. Grant	15 (approx. estimate)
Community Health Fund	??
National Health Insurance	??
Other ad hoc project support	??
Total (excl. unknown components)	**210 billion**

Service Level Agreements

Since the 1960s the mission hospitals have been funded by the Ministry of Health on a grant basis. Some of these hospitals serve as the "designated district hospital" (DDH), others as "voluntary agency" hospitals (VA). In 2007/8 VA hospitals were budgeted to receive 10.6 billion shillings and DDH hospitals 12.4 billion. The DDHs receive a payroll grant plus a bed grant. The VAs receive a bed grant only. In addition to this grant, voluntary providers are expected to receive about 15% of CHMT's basket funds, although this is at the discretion of the local CHMT.

Around 5 years ago it was proposed to move away from this "input" related grant that bore some relation to the actual services performed. Subsequently, this developed into a proposed "service agreement" contract, based upon a fee for service. The service agreement relies upon the capability of hospitals to cost (and bill) all of their services. Until now, the proposed service agreement has not been implemented and the grant system continues.

It should be noted (particularly for VA hospitals) that the grant does NOT cover the cost of services delivered and probably represents only about 20%-30% of the actual funding required by these hospitals. Most of the financing gap is covered by user fees. VA hospitals are not obliged to follow government's user fee policies (which exempt pregnant women from all user fees and provide delivery for free).

The recent hikes in government salary levels have outpaced pay rates in the voluntary sector, causing a significant number of health staff to migrate from the voluntary sector to government employment.

Potential sources for transport assistance

Pregnant women do not presently receive any support towards transport. The exception is that they may (rarely) be collected and brought to hospital by ambulance. Government has constructed maternity waiting homes adjacent to some hospitals so that women are close to the facility at the time of delivery. There is no obvious source of funding under government control that could presently be used to assist women with transport to facility at the time of labour. This situation could only change if a policy guideline were issued to make such assistance possible.

Some projects have experimented with encouraging communities themselves to make "emergency transport arrangements". This entails identifying the transport to be used and the collection of a local cooperative fund to cover the costs in the event of use. So far, the experience does not seem to be sustainable without external assistance and encouragement.

Rationale on Design Parameters

Scope

Most maternal and neonatal care is being delivered by district health care facilities (district hospital and below). It therefore makes sense to focus improvements in productivity particularly on this level.

According to DHS stats, the voluntary sector provides rather a small share of ANC and delivery care. However, stakeholders were unanimous that FBOs must be included in the design from the start.

Inclusion of higher levels of care (regional, referral and specialist hospitals) would greatly increase the number of staff eligible for reward, dilute the available resources, and reduce the value of the reward. We therefore recommended focusing on district level and below only.

Councils that host regional capitals usually also have a regional hospital. Most of these towns do not have a district hospital. Thus the regional hospital serves a local district hospital function. In most (?all) cases, the local council recognizes this fact by allocating to the Regional Hospital the portion of their block grant/basket fund that in other districts goes to the District Hospital. We therefore recommended including the Regional Hospitals where they serve a district hospital function.

CHMTs control all of the budgetary resources at district level. They produce the plan and budget. They allocate human resources to facilities. Resource allocation decisions by the CHMT will make a major difference to the capability of facilities to deliver essential services. Thus the CHMT must be included in the reward scheme in order to provide incentive to make "results-oriented" planning and management decisions.

The RHMT also provides a key role in supporting and supervising districts – particularly with regard to planning, budgeting, performance monitoring, training and quality of care. The RHMT It is CHMT plans and budgets that allocate funds to specific purposes. MOHSW cannot possibly monitor (or quality assure) planning and management for 130+ councils. The key role of the RHMT in this process is the basis for our recommendation to include them. The numbers are relatively small (15 staff x 21 regions).

We do **not** recommend inclusion of the private for profit sector. Overall, they are a minority provider of maternal and neonatal services. Their services are overwhelmingly located in urban areas (where coverage is already quite high). The government does NOT presently provide financial support to private providers and has no control over their charging practices or staff remuneration practices. It is not apparent that provision of a (rather small) monetary incentive in relation to sales revenue would make a significant difference to their productivity. Most private for profit providers do not provide service delivery statistics to the MOHSW and it would be difficult or impossible to verify reported performance.

Incentive: Individuals or Institution?

The rationale underlying results-based payment or performance-based payment is that it motivates individuals and teams to focus on results. A reward for an institution does convey some recognition of achievement but entails no monetary reward for the individual. The rationale of P4P is that the individual DOES make a financial gain for achieving results – whether personal results, the results of their team, or institution. This is not to say that other means of recognition should be neglected. It is equally important that staff are actively managed, that other aspects of health plans have clear targets and are monitored, that good performance is recognized and that poor performance triggers scrutiny / remedial measures.

Indicators: one or many?

A single indicator (eg delivery) has the obvious advantage that it is simple to understand. Do x and you get paid y. But it also has several important disadvantages.

- If a simple "payment per delivery" were adopted, the amount would be $7 million (funds available) divided by number of expected deliveries (currently about 800,000). This implies a payment rate of nearly $10 per delivery.
- Most of this money would be paid out for achievement of "business as usual". For example if performance rises to from 0.8m deliveries to 1m deliveries, a $10 per delivery rule would pay out $8m for existing deliveries and only $2m for the marginal improvement achieved. This ***highlights the importance of attaching bonus payment to marginal improvement*** rather than per unit of service delivered.
- Spotlight (and reward) on a single service runs the risk of crowding out other services. Eg more deliveries done but other services neglected. This risk higher with single indicator than with multiple indicators
- Deliveries unevenly distributed across facilities. If pay per delivery, regional hospital would get 5x reward of district hospital; district hospital 3x health centre; health centre 7x dispensary. With 1 delivery per week, reward for dispensaries would be too tiny to be motivational.
- Urban areas do more deliveries than rural – because easier to access facilities, higher levels of education and income. So urban staff get more bonus than rural. Will not be seen as fair. Urban areas rewarded more – but rural area is where the problem is. May exacerbate urban/rural staff imbalance.
- If P4P expected to evolve, set precedent of high reward for single service. Would be unaffordable if similar bonus attached to additional services.
- Sets precedent of using P4P to pursue "single-issue donor interest". Risk of future distortions if many other donors offer similar reward for their "pet

interest". Government mandate is to deliver comprehensive essential health care.

Alternatively, multiple indicator model is more "holistic", offers reward for balanced "package" of services rather than single service. Less likely to divert human/financial resources to single issue *at expense of* others.

Yet too many indicators make the system more complicated and the linkage between action and reward too difficult to understand (cf Rwanda model). P4P best practice suggests maximum 10 indicators. In our model we go for fewer still. Believe this model will be simple enough to be easy to operate and understand.

Selection of Indicators

Indicators must be objectively measurable. Must be simple enough to measure (ie can easily be tallied from source registers and/or already included in monthly/quarterly tallies).

We recommended 4 core indicators (dispensary and health centre) – one each for:

- Antenatal care
- Deliveries
- Post-natal / Neonatal
- Infants

We added a quality indicator (partographs) for hospitals only. At lower level the partograph is on the back of the mother's health card and no record kept at the facility. At hospitals, expect proper maintenance of partograph to help identify obstetric risk/emergency and trigger appropriate action.

For facilities, councils, regions we added HMIS reporting. This to help put in place a BROADER performance management culture, not only limited to the indicators that are rewarded. Should provide powerful incentive for reporting compliance – the major weakness of the current HMIS. Should allow monitoring of non-rewarded indicators to check that these do not suffer as a result of P4P. Will help to put in place a credible information base, without which P4P unlikely to work. Incentive to make HMIS system work properly provides prospect of full integration of indicator tracking within the HMIS rather than requiring separate reporting.

Alternative Indicators

For antenatal care, the problem is not attendance but the ANC interventions received (see above). Ideally, it would be good to have an indicator that measures the proportion of ANC clients who receive ALL INTERVETIONS IN THE FOCUSED ANC PACKAGE. This indicator does not exist at present / cannot be measured. So have to choose among the indicators that are measured/reported. Options summarized below with remarks.

# ANC clients	Already at 97%. Not much to be gained
# women making first ANC visit <20wks	Good to encourage earlier attendance. But 20 weeks too late? MOH advise that no. weeks pregnant not consistently known/recorded. So not recommended.
# with TT	Important ANC element. Currently <60%. Potential indicator.

# with one or more risk factor	Not amenable to health worker action. Not recommended.
# syphilis test (+ve, -ve, total)	Possible indicator. Current coverage ? low?

Note. No other ANC interventions currently included in the Book 2 (monthly/quarterly tallies). When new ANC register introduced it should be possible to select alternative indicators.

IPT is currently recorded by adding an extra column in the ANC register (or not at all). Although IPT a very important intervention, recommend dropping it in favour of one of the options above (preferably TT 2 or more) unless/until the registers and monthly/quarterly tallies are revised.

In case MOH adopts routine misoprostol administration as a preventive measure for post-partum haemmorhage, this would be a very good indicator since PPT is the leading cause of maternal deaths. A policy that handed out misoprostol at last ANC visit for self-administration would save even more lives since majority of births in rural areas are at home, chances of getting to facility in time are slim and only hospitals currently have blood transfusion capability.

Deliveries

Facility-based delivery and skilled attendance at delivery are effectively synonymous in TZ context. Almost no home births with skilled attendance. So counting facility-based births is the simplest and most relevant option. Other possibilities summarized below:

# babies born before arrival (BBA)	
# babies born at health facility (normal delivery, vacuum, C-section, other); # miscarriage/abortion	
# with delivery complications (hemorrhage, retained placenta, tear, other)	
# live births, still births (fresh/macerated)	
# babies <2.5kg	

Note: prefer to measure deliveries as BBA plus babies born at facility. Still important for woman to reach facility even if baby born on the way. This recorded in Book 2 as "total who delivered = BBA plus facility"

Partographs

Recommended at Seminar as the best indicator of effective management of 3rd stage labour. Use of partograph should identify risks and emergencies, prompting emergency obstetric care. Routine use of partographs and scrutiny of these by supervisors expected to trigger better management of obstetric emergencies hence more maternal deaths averted in health facilities.

Not currently measured in delivery register or Book 2. But in hospitals a separate partograph form is used and retained by hospital. This indicator will need partographs to be filed and number of partographs to be compared to total number of deliveries undertaken. Target is to have partograph filled out for 100% of facility-based births. Opinions varied as to whether mistakes / incomplete partograph should be penalized. Medics thought it should. But 100% partograph record, complete and without error is

too difficult a target. Also introduces element of subjectivity in measuring performance. Therefore recommend (at first) a simple count of partographs. Hospital matron should be i/c of maintaining partograph file and council nursing officer should review these (and count them) during routine visit. At typical district hospital expect these to be about 150 per month. Number is small enough to be feasible. Recommend including "partograph completed" in maternity register when it is revised.

Post-Natal Care

At present the % babies who have had some kind of post-natal checkup is almost the same as those born in facilities. Very few babies brought in for post-natal check up if born at home. Ideally, want a measure that encourages post-natal check up as soon as possible (within first few days). This currently not available in the registers (until they are revised). ***Only*** indicator presently included is Book 2 Jedwali 40C "attendances after delivery (postnatal) from FOMU YA MUOANISHO YA KAWAIDA F203. MOHSW recommend against using this indicator because it is inconsistently recorded and does not discriminate how soon after birth the post-natal checkup is done.

Some vaccinations done immediately after birth (BCG and OPV). BCG is also done at first visit to health facility no matter how long after birth. So counting BCG vaccinations has no relevance to the number of babies who received post-natal check-up. However, OPV zero is given only to children in first 2 weeks of life – ie those born in health facility PLUS those brought in to health facility under 2 weeks old. After 2 weeks they are given OPV1. So OPV zero should be an effective proxy of all babies who are born in health facility PLUS those born at home but brought to facility within 14 days. This is the only indicator presently recorded (pending revision of the registers) that could serve as a proxy for post-natal care. EPI data is of high quality because it is already monitored monthly and subject to internal audit. Hence recommendation to use OPV0 as a proxy indicator for post-natal care, at least until a better indicator becomes available.

The only other indicators that relate to neonatal health (but not services delivered) are low birth weight (only recorded for children born at facility) and the number of babies who die within 24 hours or after 24 hours (only recorded for children born at facility). Neither of these suitable for use as an indicator because only relates to facility-based births and measures factors that are partly/largely beyond health worker control.

Infant Health

We recommended ITN voucher because uptake has been disappointingly low and because malaria is leading cause of under-1 and under-5 deaths. However, it is likely that this indicator will be misleading because of mixed delivery strategies. Some districts will distribute free nets (instead of vouchers). So this measure will become misleading / invalidated. We now recommend considering an alternative indicator. Possibilities below:

Vitamin A	Administered along with measles
BGC	
Polio	
DPT 1,2,3	
Measles	
Weight at time of measles vaccination	<60%, 60%-80%, 80%+, total weighed

Any of these is a possible substitute measure. ***But we would recommend DPT3*** because a) it is commonly used as a proxy for full vaccination b) because it is an indicator used for performance monitoring at the national level (PRSP monitoring matrix). If this measure is to be used, a fixed target should be adopted. The national target is for 90% of districts to achieve 90% coverage. For the purpose of performance bonus we would recommend a fixed coverage rate of 90% or more.

Target Setting

When P4P was first discussed there was a widespread concern that it should not be "competitive" in the sense that one facility's gain was another's loss. The idea should be to bring all up to standard rather than to simply reward the best performers. Underlying this concern is the problem that facilities have very unequal situations. Some are better staffed or equipped than others. Some have better physical infrastructure than others. Population density varies. Physical access (roads) varies. Level of income, education and burden of disease in catchment population varies. For all these reasons MOHSW recommend against using a uniform "target level", particularly for services (like deliveries) that are so dependent on access/demand/staffing/equipment.

We have therefore recommended as follows:
For indicators where there is no reason not to achieve uniformly high performance (eg compliance with HMIS reporting obligation; partograph used for every hospital delivery) the targets should be set at a fixed, high hurdle rate – preferably 100%.

For other indicators (IPT, deliveries, OPV0, ITN vouchers) we recommend that the target should be ***situation-specific and should aim to encourage improvement in performance, no matter what the current standard of performance***. There should, nonetheless, be an upper-level to this target whereby reward is automatically earned. This is to avoid the situation that high performing facilities must achieve ever-more or fail to get reward. For example, if a facility already has OPV0 rate of 90%, should they be required to raise this still further (to 95%) to qualify for reward? The setting of "upper performance limits" where reward is earned for maintaining high performance is one of the details that needs to be worked out before implementation commences.

Having agreed that the targets should be facility specific, should it be left up to the council to set? We thought not, because councils have an implicit incentive to set targets that are too easy (since they are rewarded on the basis of facilities meeting targets). We also thought that the "standards" set may vary considerably across the country, with some being given "easier" targets than others. We therefore recommended a "rule" for target setting.

Our rule could propose a simple % increase in the volume of work eg 10% increase year-on-year in number of deliveries. The problem with this is that it results in absurdly low targets for facilities that are already performing very poorly. For example, if a dispensary presently does 20 deliveries per year (vs norm of 50), it would have to do only 2 extra deliveries to qualify for reward! This is the reason for the "tiered" rule to target-setting that requires a bigger improvement from those with low coverage.

We also recommended that targets should be translated into numbers (rather than % or coverage targets). This is because it is easier to track/measure. It also removes the possibility of dispute/confusion/inaccuracy over the correct denominator.

Allocation of Reward

Unlike *individual* performance-based pay, this scheme measures objectively verifiable and quantifiable service delivery outputs. This P4P scheme rewards the performance of health service TEAMS. It recognizes that it is difficult (or impossible) to objectively attribute services delivered to any one particular individual. It recognizes also that provision of effective health care requires effective team working. It is designed to reward and encourage that team working by allocating rewards based on HEALTH FACILITY achievement.

We propose that ALL members of dispensary, health centre, CHMT and RHMT staff are included in the bonus scheme. For hospitals, we recognize that only some staff directly contribute directly to the achievement of the indicators being rewarded. Moreover, inclusion of all district hospital staff in the scheme would make it far too expensive and/or dilute the available resources too thinly. In a typical district, the number of staff working in the hospital is equivalent to the whole of the rest of the health staff (dispensaries and health centres put together). This is the basis for our recommendation on *eligible staff*.

Allocation of bonus to individuals could be done on a simple per capita basis. If this is the case, the more staff in a health facility, the greater the total amount of the bonus payable to that facility. This system is a possibility, although the design team felt that it was unfair (overstaffed facilities get more bonus than under-staffed facilities).

We therefore propose an amount PER FACILITY. This system is also clear and transparent. It also has the merit of providing greater reward per person in facilities that are under-staffed than those that are over-staffed. If the reward is significant enough, it may encourage relocation of staff from over-staffed to under-staffed facilities.

To share the facility bonus among staff, we initially recommended a flat rate distribution (equal share for all). This is certainly the easiest method for calculation. Some staff also thought that it was fairer.

Others felt that it was not fair to provide equal reward to an attendant as compared to a nurse-midwife. We therefore adopted a rule that individual shares will be adjusted in line with the system of per diems (middle rank staff get 50% more than juniors; senior staff get 50% more than seniors). This will require the application of a formula to calculate individual performance payments. This aspect of the design should be monitored carefully to ensure that it is practicable and is not causing error and confusion. The alternative is to switch back to equal share for all eligible staff (eg if bonus for dispensary is 1 million per year and there are 5 staff, they get 200,000/= each. If they are 4 staff they get 250,000/= each.

Annex 4: Indicators Collected in the HMIS

Book 10: Quarterly Report

Name of Post
Facility Code
District
Quarter
Year

Section 1: Management & Supervision
Date of facility management committee meeting this qtr
Date of DHMT supervision visit this qtr
Date and names of villages that held Village Health Cttee meeting this qtr

Section 2: Drug & Equipment Stock-Outs
by item

Section 3: Drugs & Supplies in Stock
by item

Section 4: Cold Chain Follow-up
No. polio vaccines discarded due to cold chain failure
Total polio vaccines received by the facility

Section 5: Receipt of Drug Kit
No. delays that receipt of kit was delayed this qtr

Section 6: Village/Mtaa Statistics
Total infants <1yr in this qtr
No. infants reported ill/died
Total women age 15-49
Infant ill/deaths caused by neonatal tetanus

Section 7: Attendance
OPD
Total OPD attendance
Total dental clinic attendance
Total dental clinic repeat attendance for complications
REGISTRATION OF CHILDREN
Total children under 1yr registered
No. infants whose mother was vaccinated for TT before birth
DIARRHEA TREAMENT CENTRE
Total patients treated at diarrhea treatment centre
Total diarrhea patients with mild/serious dehydration
ANTENATAL SERVICES
Total ANC clients
Total syphilis tests
Total syphilist tests +ve
Total who received TT doses 2-5
BIRTHS
Total who gave birth at facility
Total delivered by trained TBA
Total delivered (facility+trained TBA)
CHILD VACCINATION

Total vaccinated for BCG under 1yr
Total vaccinated for DPT under 1yr
Total vaccinated DPT3 under 1yr
Total vaccinated Polio3 under 1yr
Total vaccinated measles under 1yr
Total children weighed when receiving measles vaccination
Total children weight <60 at measles vaccination

VITAMIN A SUPPLEMENTATION

Total post-natal Vitamin A
Total children receiving Vit A during measles vaccination

FAMILY PLANNING

Total new and continuing FP clients
Total new clients

Section 8: Facility Indicaors

OPD attendance per working day
ANC clients as % total expected births this qtr
% ANC clients vaccinated TT 2-5 doses
Total assisted deliveries as % expected deliveries
Registration of infants as % of target for qtr
DPT3 coverage rate
Measles coverage rate
% children <60% weight at measles vaccination
New FP clients as % women 15-49

Section 9: Stats needed by district but not national level

Blank rows: amount

Section 10: Notifiable Communicable Diseases: for each OPD/IPD cases; <5/5+; deaths

Acute flaccid paralysis
Cholera
Dysentry
Louse-borne typhus/relapsing fever
Measles
Meningitis
Plaugue
Typhoid
Neonatal Tetanus
Rabid Animal Bites
Rabies

Section 11: Steps to be taken to improve services; any other comments

blank space

Name of head of facility
Signature
Date of report
Date of dispatch
Date of analysis