Data-Informed Platform for Health

Outline of a pilot study in West Bengal, 2015-17

A. Background

In low-resource settings, the use of local health data for planning is usually limited. It is typical for diverse health-providers – relevant local government departments, NGOs, private providers– to work in parallel with no formal mechanism for sharing their data or planning their services collaboratively. If mechanisms for data-sharing were improved, there would be opportunities to reduce duplication, make better use of resources and meet community health needs more fully.

In India, multiple sources of data exist at the district level: the Health Management Information System (HMIS) reflects health facility utilisation and performance; programme staff report on human and physical resources; relevant government departments (e.g. women and family welfare, agriculture) have information on nutrition, social welfare and food security; and non-governmental organisations report on community-based activities. This information could be shared by programme managers working together, with catalytic technical support. Access to shared data could empower local decision-makers to make better decisions predicated on a broader base of evidence, and deliver health services on the basis of available resources.

B. The Data Informed Platform for Health – improving data-sharing for maternal and newborn health?

We propose the "Data-Informed Platform for Health" (DIPH) as a framework to guide coordination and bring together district-level data. Our focus is maternal and newborn health (MNH), although the DIPH concept has broad applicability. Data for the DIPH would come from the diverse public sector and private health organizations. The primary objectives of the DIPH are to promote the use of local data from programmatic activities for: 1) decision-making, priority-setting and planning at the district health administration level; and 2) appraisal of maternal and newborn health services and programmes.

A district is considered to be the operating unit for the DIPH, based on the assumption that this is the lowest effective administrative level of decision-making in a health system in India. The DIPH concept has its roots in the "District Evaluation Platform" approach[i] (Victora, *Lancet* 2010).

The DIPH approach will bring governmental and non-governmental service providers to a common forum on a regular basis, in order to share data according to an agreed plan and to use the resulting information as a tool in priority-setting for resource allocation and needs-assessment for the further acquisition of funds.

C. Piloting the DIPH in West Bengal

We propose an implementation research study to pilot the Data-Informed Platform for Health in two districts of West Bengal. The overall aim of this work is to develop and test mechanisms for enabling district-health stakeholders to share data and make use of it in decision-making and planning for community health.

Value of a DIPH in West Bengal

West Bengal (WB), with more than 90 million people, is the fourth most populous of India's 29 states. The Health and Family Welfare Department of the State Government is responsible for maintaining and developing the health-care system, whose challenges are similar to those faced by the rest of the country. A major gap in data quality and utilisation is recognized in the HMIS Report (2014-15)[ii], the State National Health Mission (2015) and the Programme Implementation Plan for West Bengal (PIP 2014-15)[iii], each of which highlights measures for strengthening data-management as a priority concern. The gap analysis conducted in association with PIP in the South 24 Parganas district found that there were serious concerns over record-keeping and data-maintenance. As a consequence, the PIP 2014-15 pointed out key areas that require priority attention, among them:

i. **Inter-sectoral convergence**, through effective coordination with key departments to address health determinants, including water, sanitation, hygiene, nutrition, infant and young-child feeding, gender, education, woman empowerment, and Integrated Child Development Services etc.;

ii. **Multi-sectoral data-sharing**, which is limited, despite the fact that a considerable proportion of health care in WB is delivered by NGOs and private-sector players;

iii. **Strengthening data quality**, aiming for the effective registration of births and deaths; data-collection on key performance-indicators; rationalizing HMIS indicators; and reliable health-data/data-triangulation mechanisms; and

iv. **Accountability and planning**, through regular meetings of the State/District Health Mission/Society dedicated to periodic review and a future road map; such meetings having a clear agenda and follow-up action with regular, focused reviews at different levels.

We will start the work with a situational assessment of data-capture, data-management and data-sharing in the health service sector in WB. In initial discussions with the Government of WB in March 2015 we found enormous interest in and support for a DIPH. There is already a felt need to strengthen the existing HMIS and integrate with other departments: our proposed study will facilitate this by linking associated departments and bringing them onto a common data-sharing platform, thus strengthening health system data-capture and quality in the long-run. (Letter of Support from the Health Principle Secretary of WB is attached, Appendix I).

Feasibility of DIPH in West Bengal

In the context of the National Health Mission (NHM), West Bengal, the District Health and Family Welfare Society (DH&FWS) facilitates joint planning between the district health administration and other key stakeholders. The DH&FWS is responsible for managing all health and family-welfare programmes in the rural and urban areas of the district. They are entrusted with ensuring inter-sectoral convergence and integrated planning. Our proposed DIPH activities fit well with the purpose of the DH&FWS[iv].

Pilot districts

The DIPH will be piloted in two districts of West Bengal - South 24 Parganas and North 24 Parganas - provisionally selected in consultation with the Government of West Bengal. These two districts have a combined population of over 18 million people and are considered priority districts for improving RMNCH services[v], based on the district dashboard index - periodically compiled by the Federal Ministry of Health and Family Welfare – for comparing districts across the country. Details of selected maternal and child-health indictors and health-system infrastructure in the proposed districts are given in appendices II and III.

Due to their large size, the administrative districts of South 24 Parganas and North 24 Parganas have been further divided into 2 health districts each. Each health district has a Chief Medical Officer; and each administrative district has a National Health Mission and a District Magistrate.

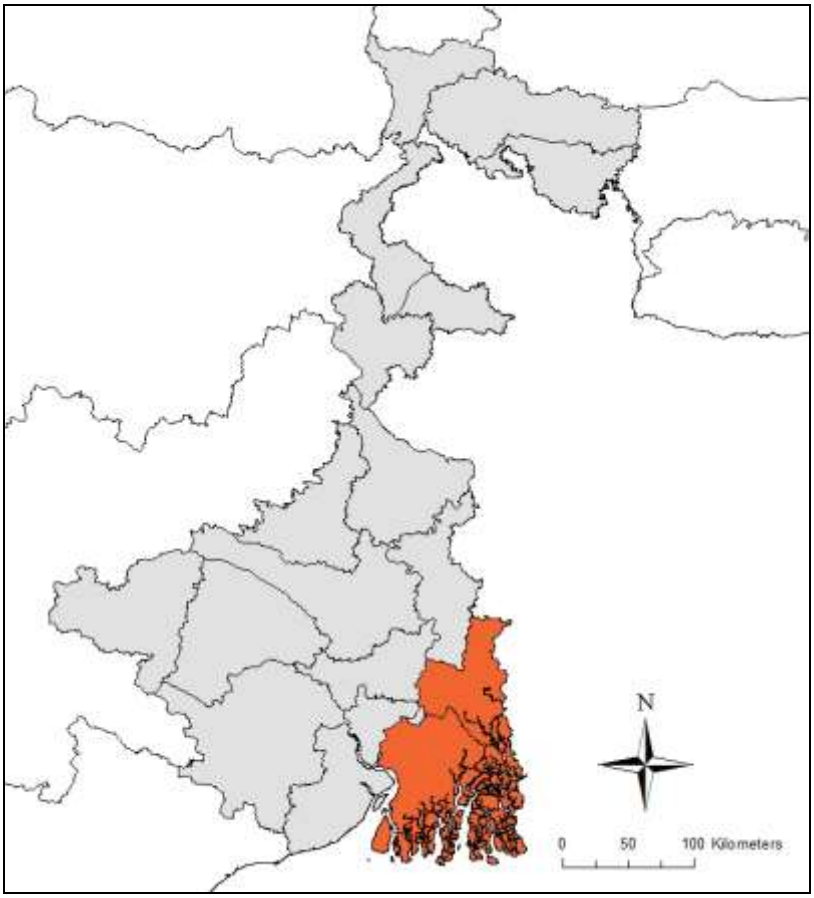


Figure 1: State of West Bengal, showing location of pilot districts, South and North 24 Parganas.

D. Study outline

In 2013 we completed feasibility research for DIPH in the state of Uttar Pradesh. The experience and knowledge gained means that formative research in WB can be both rapid and efficient, and lead swiftly to implementation and evaluation, as described below:

a. Formative work [May-September 2015]

- Identify key MNCH services and programmes from the selected districts, and document DH&FWS operations;
- To form a core working-team in collaboration with DH&FWS and the district health administration;
- Identify and engage with key health stakeholders and data-sources across the districts;
- Develop and pilot-test mechanisms/tools for using data on which decision-making by the district-level administration will be based;
- Explore opportunities for private-sector research within the remit of DIPH implementation in West Bengal.

b. Implementation of DIPH [October 2015-December 2016]

This will be led by two district coordinators, whose key responsibilities are:

- To facilitate the transfer of compiled data to the district health administration;
- To facilitate five quarterly meetings at the DH&FWS: hence a set of 3-monthly activities, concluding with the DH&FWS meeting, will be labelled in the DIPH cycle;
- To provide on-going support to the district health administration on how best to use the data for health-services planning and course-correction;
- To document the health system changes and decision-making process in the implementation districts.

c. Evaluation of DIPH pilot [January- March 2017]

The evaluation of DIPH implementation will be according to the criteria of:

- Whether, and by what means, data was used in district-level planning and progress monitoring;
- Mechanisms identified for data-sharing and consensus-building among the range of health-service stakeholders at the district level;
- The extent to which health data was used for planning and delivering health services.

E. Proposed Timeline

Below is a tentative timeline for the DIPH pilot, based on the preliminary discussion with health-system stakeholders in WB.

	2015	**2016**					**2017**
	May - Sept	**Oct - Dec**	**Jan-Mar**	**Apr-Jun**	**Jul-Sep**	**Oct - Dec**	**Jan-Mar**
DIPH Model	Formative Work	DIPH Cycle 1	DIPH Cycle 2	DIPH Cycle 3	DIPH Cycle 4	DIPH Cycle 5	Wrapping up
Key activities	• Team formation & relocation to WB, • Situational analysis of health services data and stakeholders, • Documentation of DH&FWS operations and health system performance indicators, • Development and presetting of decision-making tool.	• Technical support to DH&FWS in its engagement with the key health stakeholders and the use of health data, • Implementation of decision-making process to use data for district-level heath planning, • Process evaluation					• Document the changes in DH&FWS operations and health-system performance indicators.

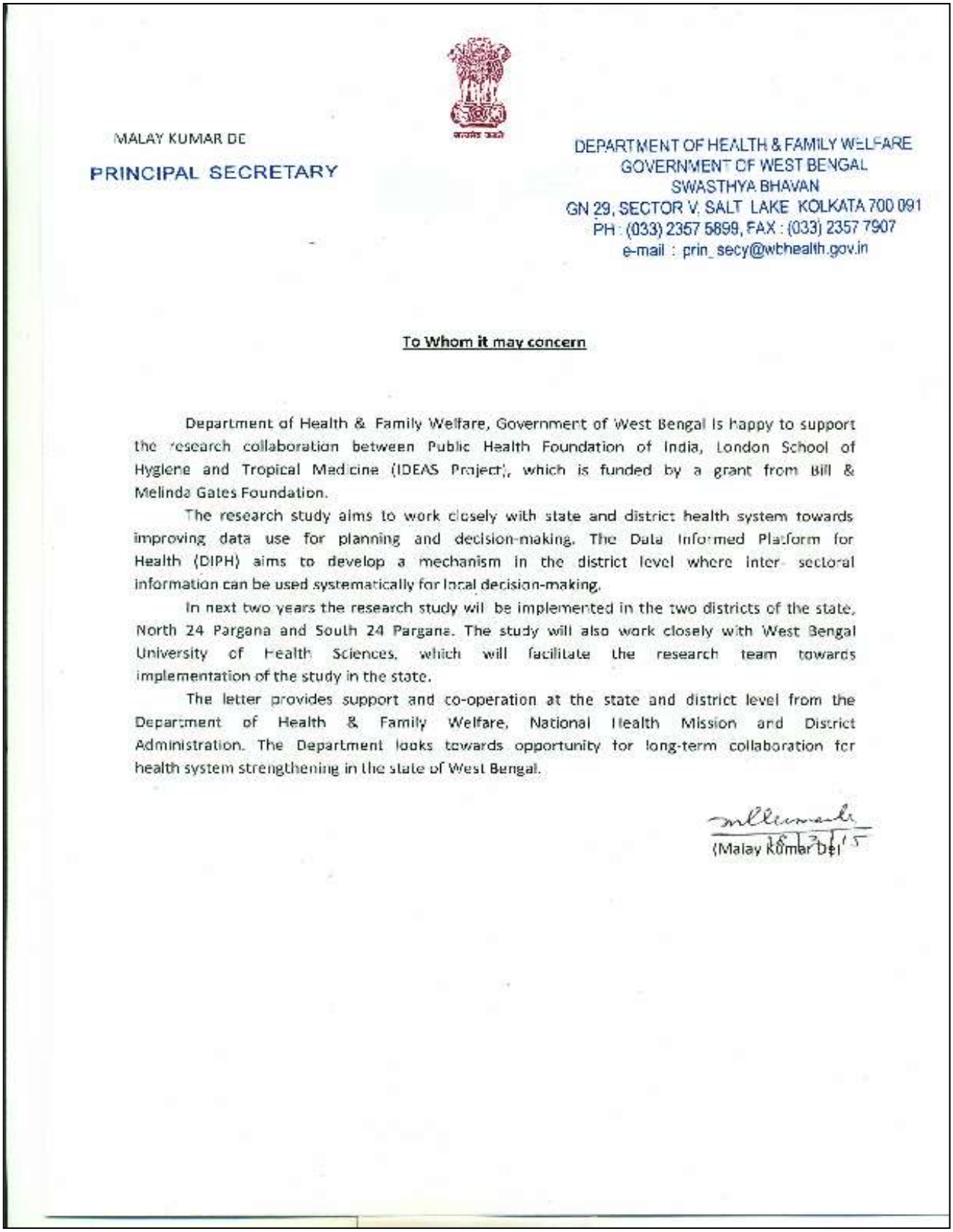
F. Study team

This study is a collaboration between the Public Health Foundation of India (PHFI) and the London School of Hygiene & Tropical Medicine (LSHTM) under the remit of the IDEAS (Informed Decisions for Actions in Maternal and Newborn Health) Project.

The IDEAS-PHFI team will take responsibility for the DIPH development, and for monitoring and evaluating its implementation, in active collaboration with the Government of WB. Two IDEAS-PHFI district coordinators will lead the implementation of the DIPH pilot, with supervision from academic and project management staff, including the IDEAS Country Coordinator and PHFI Principal Investigator.

G. Appendices

Appendix – I: Letter of support from the Principal Health Secretary of WB state



MALAY KUMAR DE

PRINCIPAL SECRETARY

DEPARTMENT OF HEALTH & FAMILY WELFARE
GOVERNMENT OF WEST BENGAL
SWASTHYA BHAVAN
GN 29, SECTOR V, SALT LAKE KOLKATA 700 091
PH : (033) 2357 5899, FAX : (033) 2357 7907
e-mail : prin_secy@wbhealth.gov.in

To Whom it may concern

Department of Health & Family Welfare, Government of West Bengal is happy to support the research collaboration between Public Health Foundation of India, London School of Hygiene and Tropical Medicine (IDEAS Project), which is funded by a grant from Bill & Melinda Gates Foundation.

The research study aims to work closely with state and district health system towards improving data use for planning and decision-making. The Data Informed Platform for Health (DIPH) aims to develop a mechanism in the district level where inter- sectoral information can be used systematically for local decision-making.

In next two years the research study wil be implemented in the two districts of the state, North 24 Pargana and South 24 Pargana. The study will also work closely with West Bengal University of Health Sciences, which will facilitate the research team towards implementation of the study in the state.

The letter provides support and co-operation at the state and district level from the Department of Health & Family Welfare, National Health Mission and District Administration. The Department looks towards opportunity for long-term collaboration for health system strengthening in the state of West Bengal.

(Malay Kumar Dey)

Appendix- II: Selected Maternal and Child Health Indicators for West Bengal

Indicators	North 24 Parganas	South 24 Parganas
Total population[vi]	10,009,781	8,161,961
Antenatal care		
Total number of pregnant women registered for ANC	86,383	82,239
Mothers who had at least 3 ANC check-ups (to total ANC registered) (%)	68.7	86.3
Institutional deliveries		
Total institutional deliveries (as % of total reported deliveries)	88.8	61.5
Deliveries at public facilities (as % of total reported institutional facilities)	91.0	87.3
Proportion of women discharged within 48hrs of delivery at public facility (%)	20.6	26.8
JSY beneficiaries		
Proportion of mothers paid JSY incentive for delivery at public facility to total public facility deliveries (%)	24.2	28.3
Postnatal care		
Post-partum check-up within 48 hrs of delivery (as % of total reported deliveries)	79.2	57.6

Source: HMIS (2015b)[vii]; *cited from SRS (2013); **cited from SRS (2010-12)

Appendix - III: Health system – Infra structure

Particulars	North 24 Parganas		South 24 Parganas	
	Facilities	No. of beds	Facilities	No. of beds
Medical college hospital	1	500	0	0
District hospital (DH)	2	900	2	925
Sub district hospital (SDH)	3	600	3	318
State general hospital (SGH)	7	796	4	524
Other hospitals	2	8	0	0
Rural hospitals (RH)	18	580	21	730
Block primary health centres (BPHC)	4	60	9	110
Primary health centres (PHC)	52	408	61	429
Sub centres (SC)	742	0	1,068	0
Further Classifications				
Under state government	6	603	1	300
Under local body	11	324	6	108
Under central government	3	272	1	143
Under NGO/private	238	4063	170	1534
Total	1089	9114	1346	5121

Source: SBHI 2013[viii]

References

[i] Victora CG1, Black RE, Boerma JT, Bryce J. Measuring impact in the Millennium Development Goal era and beyond: a new approach to large-scale effectiveness evaluations. Lancet. 2011 Jan 1;377(9759):85-95

[ii] HMIS (2015b). Fact Sheets – Maternal and Child Health Indicators (2013-14 & 2014-15) – West Bengal, MoHFW.

[iii] National Health Mission (2015) Approval of Program Implementation Plan 2014-2015 - West Bengal, Department of Health and Family Welfare, Government of West Bengal. Available at http://nrhm.gov.in/nrhm-in-state/state-program-implementation-plans-pips/west-bengal.html

[iv] Government of West Bengal (2014).Notification No. HF/SPSRC/112/2013/384, dated 29-09-2014, Department of Health and Family Welfare, Kolkata.

[v] Ministry of Health and Family Welfare (2015a) Health Management Information System District Dashboard Indicators – West Bengal, Statistics wing, MoHF, Government of India, New Delhi. Available at https://nrhm-mis.nic.in/hmisreports/analyticalreports.aspx

[vi] Census of India (2011) District level data, Registrar General and Census Commissioner of India, New Delhi. Available at http://www.censusindia.gov.in/pca/Searchdata.aspx

[vii] HMIS (2015b). Fact Sheets – Maternal and Child Health Indicators (2013-14 & 2014-15) – West Bengal, MoHFW.

[viii] State Bureau of Health Intelligence (2013). Health on the March 2012-13, Directorate of Health Services, Government of West Bengal.