



Improving child health through bundled health innovations in rural India:

The Norway India Partnership Initiative Phase II



Summary

The Evaluation Department has initiated an evaluation of the Norway India Partnership Initiative, Phase II to establish the effects of health innovations for beneficiaries.

The Norway-India Partnership Initiative (NIPI), is a bilateral programme between the Governments of Norway and India aimed at improving child and maternal health in rural areas of the Indian states of Bihar, Madhya Pradesh, Rajasthan and Odisha.

Given the wide array of methods used in this evaluation, and the importance of context for interpreting the findings, this brief summarizes findings and discusses programme context, and evaluation limitations. It is aimed at informing and assisting policy makers, programme managers and researchers interested in NIPI health systems innovations.

The main conclusion from the evaluation indicates that while NIPI appears to have been successful in terms of implementation of health system-strengthening interventions, outreach interventions have proven to be

more difficult in terms of reaching high levels of coverage. This is not necessarily a weakness of NIPI given the limited time period between implementation and the endline data collection. However, it does make decisions about scaling up interventions more challenging.

This brief argues that more information is needed about the effects of interventions on health outcomes, and on how coverage of outreach activities can best be increased.

1. BACKGROUND

Ensuring survival, better health and development of children is essential for sustainable social and human development. With a diverse population of 1.3 billion spread across different cultural, economic and geographical boundaries, India faces significant challenges to provide equitable, affordable and quality health services to improve and sustain maternal and child health outcomes, particularly for those from economically and socially disadvantaged communities.

The National Rural Health Mission was launched in 2005 by the Government of India to improve access to healthcare services to under-served and vulnerable populations in rural areas. The National Rural Health Mission had a focus on eighteen states including the Empowered Action Group states¹. The poor performance of maternal and child health indicators in these states was also a reflection of India's moderate or slow progress towards achieving the UN Millennium Development Goals² 4 and 5 (Government of India 2017).

1 These included the eight Empowered Action Group (EAG) states of Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttaranchal and Uttar Pradesh with very high neonatal and infant mortality rates (Arokiasamy and Gautam 2008).

2 MDG Goal 4 was to reduce child mortality by two-thirds between 1990 and 2015 and Goal 5 was to reduce the maternal mortality ratio by three-quarters during the same period (www.un.org/millenniumgoals/)

In 2006, the Governments of India and Norway through a bilateral partnership agreement established the Norway-India Partnership Initiative (NIPI) to provide strategic and catalytic support for the National Rural Health Mission. The logic of NIPI was to strengthen existing health system resources and capacity through evidence-based health innovations that could be tested, implemented and then scaled up through the National Rural Health Mission, subsequently unified to the National Health Mission since May 2013. NIPI health innovations are designed as responsive intervention strategies for not only improving the survival chances of newborns but also ensuring better physical and mental health outcomes and wellbeing during the early years of child development.

Since its establishment NIPI has gone through two phases, and started a third phase in 2018. The focus of this evaluation brief is on phase II which ran from 2013-2017. Phase II implemented a set of bundled health systems innovations, continuing its focus on maternal, newborn and child health issues in all the same thirteen districts³ of Bihar, Madhya Pradesh, Rajasthan and Odisha⁴.

3 Jehanabad, Nalanda and Sheikhpura (Bihar); Hoshangabad, Betul, Narsingpur and Raisen (Madhya Pradesh); Alwar, Bharatpur and Dausa (Rajasthan), and Angul, Jharsugada and Sambalpur (Odisha).

4 NIPI phase I had a budget of NOK 500 million with actual spending of NOK 385 million. NIPI Phase II had a budget and spending of NOK 250 million, and NOK 75 million has been budgeted for Phase III.

The specific goals⁵ of NIPI Phase II were to: (i) *test, implement and scale up innovative and sustainable continuum of care interventions at the health systems and community levels;* (ii) *establish a mechanism to facilitate sustainable collaboration between Indian and Norwegian institutions engaged in MNCH/FP [Maternal, newborn, child health/Family planning] programmes and (iii) share experiences and facilitate global health knowledge exchange between India and Norway* (NIPI 2013). The details of NIPI Phase II health innovations are available elsewhere (NIPI 2016). Box 1, next page, provides further details on NIPI management.

The main message of this brief is that more information is needed about the effects of interventions on health outcomes, and on how coverage of outreach activities can best be increased.

2. EVALUATION OF NIPI PHASE II

The Evaluation Department engaged Oxford Policy Management (OPM) in collaboration with Sambodhi Research and Communications who coordinated the data collection activities, to undertake an evaluation of health innovations that were part of NIPI phase II (Norad 2013). The aim of the evaluation was to inform the

5 The evaluation findings discussed in this brief focus on the first goal.

Norwegian public, NIPI partners and the international global health community about what works and what does not work (and why) of the interventions supported through NIPI Phase II. This was in part motivated by a previous evaluation of phase I that had concluded that: NIPI had ‘largely achieved its objectives in terms of being strategic, catalytic, innovative and flexible...’ (Norad 2013:xix), but that ‘there is a need for greater documentation and dissemination of good practices and results, to ensure evidence-based scale of interventions’ (Norad 2013:xxi).

The evaluation was not designed to capture the overall effectiveness of the NIPI programme, nor its policy or advocacy activities.

The evaluation methodologies included an impact evaluation using quantitative techniques, a cost-effectiveness analysis and a qualitative component aimed at analysing the effectiveness of interventions targeting the health system, and contextualising the impact evaluation findings. As the costs could not be broken down per intervention, the evaluation team was not able to perform the cost-effectiveness analysis.

Given the time period of three years between baseline and endline it was not in the remit of the evaluation to measure changes in population-based health outcomes, such as morbidity or

BOX 1 // COORDINATION, MANAGEMENT AND IMPLEMENTATION OF NIPI II (2013–2017)

Under the NIPI framework, the Government of Norway provides funding and techno-managerial support to the existing health systems in NIPI districts.

NIPI central coordination unit mobilised resources and provided managerial support to the NIPI project team at the state level responsible for overseeing the implementation of health systems innovations in NIPI districts. Other stakeholders at the state and district levels included: State Health Societies, District Health Societies, Panchayati Raj Institutions, and District and Village Administrative Units.

NIPI’s governance structure included a Joint Steering Committee, Programme Advisory Group and State Coordination Committee (SCC). The joint steering committee was chaired by the Secretary of the Department of Health and Family Welfare under the Ministry of Health and Family Welfare of the Government of India, and co-chaired by the Norwegian Ambassador to India. This committee was responsible for approving budgets and overseeing the planning, implementation and dissemination of NIPI activities. The Additional Secretary and Mission Director, Ministry of Health and Family Welfare, Government of India, as Chair of the programme advisory group, provided advice and support to joint steering committee. The main functions of the programme advisory group included coordinating stakeholder dialogues, reviewing progress, resolving technical issues, developing proposals and advising the joint steering committee on programme-related matters. The coordination committees in each state provided routine progress reports and updates on programme activities to the programme advisory group. They were responsible for liaising with state National Health Mission leaders and stakeholders in terms of developing strategies and integration of NIPI into National Rural Health Mission activities.

A central secretariat for NIPI was established to coordinate and execute the functions on behalf of the joint steering committee, and to provide support for programme advisory group and state coordination committees. The terms of reference documenting the roles and responsibilities for each committee/group are available elsewhere (NIPI 2013). The process evaluation of NIPI Phase I indicated room for improvement in the way the programme was governed with respect to clarity of roles, coordination and financial management (Norad, 2013). While the impact evaluation of NIPI II interventions has not assessed the effectiveness of NIPI’s governance structures in its second phase, NIPI has since created a central coordination unit to improve the overall management and coordination of activities.

mortality. Nevertheless, the evaluation attempted to detect difference in behavioural practices, for example knowledge and practice of exclusive breastfeeding, growth monitoring, handwashing and adherence to age-appropriate immunisation. Positive changes in the latter would make consecutive changes in health outcomes

plausible. Only one of the five health innovations was evaluated using quantitative impact evaluation methods. See Box 2 for an overview of methods.

Cross-sectional quantitative and qualitative data were collected through December

2013–January 2014 and endline data through January–March 2017. The cross-sectional surveys collected data from mothers of children aged below two years. In addition, the NIPI evaluation used data from healthcare workers surveys, follow-up surveys of children discharged from Sick Newborn Care Units, facility-level service availability and readiness assessments, focus groups with mothers, in-depth interviews with healthcare workers and structured assessment of training centres. Box 2 provides an overview of the design and methodology.

2.1 Key findings, interpretation and reflections

The interventions assessed included homebased care for children, follow-up of sick newborns, postpartum family planning and pre-service education in nursing and midwifery. Below each intervention is presented, including findings, conclusions and reflections on limitations.

2.2 Home-based Newborn Care Plus (HBNC+)

Home-Based Newborn Care Plus (HBNC+) targeted families with children between three and 12 months of age at home, and was an extension of NIPI phase I intervention Home-Based Newborn Care (HBNC). The main delivery mechanism was community health workers, called Accredited Social Health Activists (ASHA). HBNC targeted newborns and had been scaled up by the government. The new intervention

BOX 2 // NIPI PHASE II EVALUATION APPROACH AND STRATEGY: FIVE COMPONENTS

| Programme component | Impact | Methodology/design |
|------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Home-based Newborn Care Plus (HBNC+) | Population level | Quasi-experimental method, cross-sectional population surveys (baseline and endline), provider surveys, in-depth interviews and direct observation (ASHAs), focus groups with mothers |
| Sick Newborn Care Unit Plus (SNCU+) | Population level | Repeated cross-sectional surveys, provider surveys of ANMs and ASHAs, in-depth interviews with mothers and ANMs, direct observation of ANMs |
| Facility Based Newborn Care (FBNC) | Service provision (facility) | Data from district service provision, availability, and readiness assessments of Newborn Care Corners and Newborn Stabilisation Units |
| Postpartum Family Planning (PPFP/PPIUCD) | Population level | Data from district service provision, availability, readiness assessments, knowledge tests of health providers, focus groups with mothers, in-depth interviews and direct observation of ASHAs |
| Pre-service Education (PSE) in Nursing and Midwifery | Service provision (facility) | Standard checklists to Nursing and Midwifery Schools, key informant interviews |

included structured home visitation by ASHAs also after the newborn period, at 3, 6, 9 and 12 months. It was designed to promote exclusive breastfeeding, provide information on diet, routine immunisation, growth monitoring, prophylactic distribution of oral rehydration solution (ORS) and iron and folic acid (supplementation), handwashing, hygiene, and early childhood care and development. ASHAs were trained to monitor child development through a range of tasks performed at home including language communication, stimulation, learning

and playing with toys for cognitive development, and monitoring physical growth. They were provided with incentives for each visit, with routine monitoring and supportive supervision. The intervention focused primarily on health promotion and interpersonal communication between ASHAs and new mothers.

Key findings and interpretation: The evaluation tested whether altering and adding teaching material for ASHAs and incentivising ASHAs to undertake four scheduled visits to households

with children aged between three and twelve months, led to improved maternal practices at the population level in NIPI districts.

The findings show that ASHA training for HBNC+ was universal, and that almost all ASHAs knew when to undertake home visits. However, the evaluation highlighted the need for further improvement in the thematic knowledge of ASHAs. For example related to iron-folic acid usage, vaccination and handwashing⁶. The evaluation found that although the absolute level of coverage of ASHA home visitation remained low (39%), the absolute number of HBNC+-related visits increased significantly in NIPI districts, with 68.7% of eligible households receiving at least one visit in the endline survey. Aside from increased iron-folic acid consumption, these visits had no other noticeable impact on outcomes such as improving maternal practices. An accompanying correlation analysis suggested, however, that four visits were correlated with more growth monitoring.

Reflections: While the intervention had an impact on coverage rates, the difficulty in identifying effects on outcomes merits more discussion, as the evaluation cannot explain why effects

⁶ For details, see Table 5, section 2 of the full evaluation report. In some areas, ASHAs had a high level of knowledge already at baseline. In other areas, knowledge improved but not more than it did in control areas.

are not observed. Possible explanations include: effectiveness of HBNC and spillover, measurement error and socio-economic context, which may have made implementation demanding.

The intervention's predecessor HBNC had already been scaled up in both NIPI and non-NIPI districts⁷. Through the use of quasi-experimental methods where trends were compared between treatment and control districts, the evaluation of the NIPI Phase II intervention in effect aimed to measure the effect of expansion of HBNC to HBNC+. The training material for HBNC+ was comprehensive and bundled with age-appropriate interventions for each visit, and ASHAs acting under both HBNC and HBNC+ visits had children below age two in their target group. The newborn health promotion messages and related counselling services such as exclusive breastfeeding and ORS supplementation were part of both HBNC and HBNC+. It is possible that HBNC had become more effective, which could make it difficult to pick up any additional effect of HBNC+. In addition, the evaluation has not looked at implementation. If control districts became more effective in implementing HBNC, this could lead to an underestimation of HBNC+.

⁷ In addition, according to guidelines published in 2010, the National Rural Health Mission also encouraged community health workers to visit families with children below the age of two regularly – albeit without offering incentives.

The evaluation juggled a wide array of methods and measured a wide array of indicators. It is possible that some indicators, such as early childhood care and development, should have been measured using observation methods.

It is also equally important to reflect on the social and political context of the intervention in Empowered Action Group states, especially in relation to poor thematic knowledge of HBNC+ components. In Rajasthan and Bihar, only one in four children aged 12–23 months received four or more visits, compared to about three in four in Odisha. The relatively better coverage of HBNC+ visits in Odisha is attributed to the state's high-level political support, greater investment and resource mobilisation for National Health Mission priorities, which may have had a catalytic effect on NIPI interventions.

While the evaluation team did not find a correlation between four visits and other outcomes apart from growth monitoring, a more in-depth analysis could examine whether a specific visit (for example at six months) is correlated with changed behaviour targeted by messages given at six months. Future research could also try to measure a reduction in common illnesses such as diarrhoea and respiratory infections, which this evaluation was not powered to do. An analysis of impact on

morbidity or mortality, however, would probably not be able to disentangle the effects of different NIPI interventions implemented in the same districts.

In conclusion, while the intervention did increase coverage, more work is needed to understand how the use of ASHAs can be utilised in the follow-up of infants/children after the newborn period. ASHAs are frontline community health volunteers with only minimum secondary level education and hence it would take time for them to fully understand and implement HBNC+ thematic protocols, and perhaps also to translate knowledge into behavioural practices. It is also important to investigate the sociocultural, financial, systems and spatial barriers, if any, that could have impeded the uptake and expected number of ASHAs' home visitations. For example, one in four ASHAs reported not receiving HBNC+ incentives because of administrative delays. There are also reports that the incentives were rather too low to recompense their expected workload.

2.3 Sick Newborn Care Unit Plus (SNCU+)

Sick Newborn Care Unit plus (SNCU+) was established, interlinking health systems and community, to provide continuum of care to discharged small, low-birth-weight and sick

newborns. SNCU+ was aimed at extending the continuum of care to sick newborns through home visits by Auxiliary Nurse Midwives (ANM) and ASHAs within the first 42 days after birth. The services offered under SNCU+ included educating mothers about discharge instructions and follow-up, early identification of danger signs and symptoms of infant sickness, quality optimal feeding of low-birth-weight babies, kangaroo mother care, information about early childhood care and development and referral services. The sick and small infants discharged from SNCU+ were particularly monitored for ensuring survival, optimal growth, and early childhood care and development including kangaroo mother care uptake, breastfeeding practices and compliance with essential facility follow-up.

Key findings and interpretation: The evaluation found high health worker (ANM) knowledge of SNCU+ protocols. However other than ASHA visits, the ANM follow-up home visits after discharge were low, probably due to heavy workload at the facility, removal of incentives and long commuting distance to targeted communities. ASHA visits were correlated with mothers' practising kangaroo mother care and exclusive breastfeeding but had no perceptible effect on related knowledge. Furthermore, ASHA visits were not correlated with an increase in referral of sick children to facilities, possibly

attributable to their lack of specialised knowledge and skills, as well as lack of ANM follow-up in the community.

Reflections: While the evaluation demonstrated low ANM coverage, the ANM survey was collected only at endline and should be interpreted with care, given the low sample. Thirteen ANMs responded to the question on knowledge of SNCU indicators and protocols, which does not allow for generalisation. Both ANMs and ASHAs are trained through the existing system to detect common symptoms of newborn and childhood illness such as convulsions, skin sores, breathing difficulties and other visible conditions. In addition to this, ANMs and ASHAs in NIPI districts were trained to counsel for danger signs. However ASHAs were not clinically trained and, in most cases, they may not comprehend facility discharge instructions or detect or diagnose problems requiring clinical attention.

Due to the nature of the intervention, a before and after design was employed. Hence the result, which highlights a significant decline in the percentage of newborns discharged from SNCUs, should be interpreted with caution and needs further investigation.

2.4 Facility-Based Newborn Care (FBNC)

At the facility level, NIPI established regional resource centres for improving the quality of facility-based newborn care (FBNC), where at least one sick newborn unit was identified to function as the regional resource centre in each state. The logic of establishing these centres is to tackle the high rates of neonatal deaths in NIPI states – where more than two-thirds of all infant deaths are concentrated in the early neonatal period. Facility-based newborn care is a comprehensive care system, which encompasses all Newborn Care Corners and Newborn Stabilising Units in the district, for tackling emergency cases, complications and fatal conditions. The care corners are available at all delivery points, whereas the stabilisation units are available only in selected community health centres. The regional resource centre is both a training and treatment centre, designed to provide quality clinical care, hands-on training and supportive supervision to providers from the care corners and stabilising units. The training is focused on enhancing supportive supervision and maintaining critical skills for newborn essential care at birth. The regional resource centre in each state is essentially an upgraded sick newborn care unit (SNCU) treatment and training centre, established based on the availability of space, manpower and willingness of the system to sustain better quality of care.

Key findings and interpretation: The evaluation acknowledged the positive contributions and support from NIPI on the service provision and quality of care at sick newborn care units in the regional resource centres. In addition, NIPI provided catalytic support for improving case-management practices. Although Newborn Stabilisation Units and Newborn Care Corners were providing standard routine basic emergency and comprehensive emergency newborn care services, those in the sample did not meet the Indian Public Health Standards requirements⁸. Overall, the regional resource centres were operationally functional and received adequate resource support from NIPI.

Reflections: The evaluation used contribution analysis and did not collect information at baseline, hence results information on change should be treated with care. A regional resource centre is a training and treatment centre designed to provide essential care and supportive supervision to providers at Newborn Stabilisation Units and Newborn Care Corners. The quality of care in these units and care corners should be evaluated separately to assess the adherence to Indian Public Health Standards. Further investigation, including a systematic analysis

⁸ It should be noted that while meeting the Indian Public Health Standards is the responsibility of the state government, it could be argued that NIPI intervention fulfils a supporting role towards meeting these standards.

of monitoring data, is needed to understand the treatment decisions, referral and follow-up mechanisms. It is also important to consider the overlap and contribution of other components of NIPI interventions to Family-Based Newborn Care. In the absence of a counterfactual, it would be appropriate to conduct a population-level assessment of key newborn health and survival outcomes comparing districts that directly benefited from regional resource centres with those control or non-NIPI districts.

2.5 Postpartum Family Planning

The revitalisation of postpartum family planning focused on strengthening the service provision and quality standards, particularly promoting awareness and demand for postpartum intrauterine contraceptive device (PPIUCD) services. The revitalisation and expansion of postpartum family planning were oriented towards enabling families to make informed reproductive choices and decisions, and could therefore improve both maternal and newborn/child health outcomes. The programme components included service delivery standards protocol and health promotion materials such as posters, pamphlets and videos for facilitating Information, Education, Communication (IEC), and Behavioural Change Communication. ANMs were trained to provide family planning counselling services during pregnancy and after birth, and

ASHAs were trained to provide informed choices about postpartum family planning methods and related services to women and new mothers, with a focus on PPIUCD.

Key findings and interpretation: During the three-year evaluation period, the use of postpartum family planning increased significantly for mothers who had given a birth in the last year, from 15% to 23%. Intrauterine contraceptive use (IUCD) increased from a very low 0.5% to 2%, accounting for an approximately 8% contribution to overall method mix. ASHA knowledge of intrauterine contraceptive and condom as a method of postpartum family planning increased from 59.4% and 65.2% respectively in the baseline to 82.4% and 92% respectively in the endline, but mothers had little knowledge of other methods. Mothers had relatively high levels of knowledge of postpartum family planning, and in particular the knowledge of intrauterine contraceptive increased significantly from 74.8% in the baseline to 79.5% in the endline survey. One in two mothers reported not receiving any counselling on the benefits of intrauterine contraceptives. Very few mothers received counselling on potential side effects. Service providers reported a positive impact of postpartum family planning training on their knowledge and counselling skills, although the level of specific knowledge about postpartum

family planning varied amongst providers. Overall, despite concerns about the facility infrastructure and equipment shortage, the evaluation found that the NIPI intervention had a positive effect and contributed to improving the availability of postpartum family planning in general and postpartum intrauterine contraceptive services in particular. Infrastructure is an important component of quality, not directly targeted by NIPI. If not in place, this may render NIPI's targeted services less effective.

Reflections: While it is difficult to attribute effects to NIPI due to changes in the evaluation design, the significant increase in several indicators at population level is promising. From baseline, there is a 53% increase in postpartum family planning, a low but significant increase in the use of postpartum intrauterine contraceptives from 0.5% to 1.7%, and a reduction in the unmet need for postpartum family planning over the period of the intervention. Overall, intrauterine contraceptives are some of the least preferred methods among women in India for various reasons including misconceptions, side effects, experience of complications, personal and family factors related to gender preferences for children, and other supply-related factors including clinical assistance for insertion and removal. There was a significant improvement in the knowledge of postpartum

IUCD and benefits of birth spacing. There is a need to further improve quality of care in postpartum family planning service provision, especially counselling and routine follow-up services.

3. PRE-SERVICE EDUCATION (PSE) IN NURSING AND MIDWIFERY

The education programme focused on strengthening the capacity of state nursing councils and pre-service education (PSE) in nursing and midwifery for improving nursing curriculum standards, infrastructure and clinical skill development in public General Nurse Midwifery (GNM) and ANM schools. NIPI established State Nodal Centres (SNCs) for facilitating nursing training, teaching skills, family planning, maternal newborn and child health knowledge and clinical skills through a customised six-week training programme, as well as developing guidelines by harmonising child health training packages for the Ministry of Health and Family Welfare of the Government of India.

Key findings and interpretation: The evaluation found that the state nodal centres established under NIPI were 'meeting or very close to meeting' the Government of India standard thresholds to support ANM and general nurse-midwife (GNM) schools. While there were improvements in educational process indicators including teaching methods, supervision capacity, assessments and

teaching evaluations, and training infrastructure including computer and skills labs, libraries and clinical practice sites, nearly half of all ANM and GNM schools were slightly behind in terms of meeting the government standards. That said, the NIPI intervention did contribute to an increase in clinical supervision, better infection prevention and biomedical waste management practices, and improvement of practice sites.

Reflections: The evaluation used contribution analysis and did not collect information at baseline, hence there was a limit to how far the evaluation could go in terms of assessing effects. Furthermore, the evaluation, by design, was not aimed at assessing the effects of teaching or internship outcomes such as learning outcomes, knowledge and skills of trained graduates or the faculty members. Instead, the evaluation focused on the five domains of educational processes, clinical practices, faculty capacity, training infrastructure and leadership capacity. The assessment was based on key informant and in-depth interviews, and observations based on a structured checklist reflecting on the government guidelines.

4. LIMITATIONS

The evaluation of NIPI Phase II faced several challenges. The Government of India was proactive in adopting and scaling-up NIPI Phase

I interventions elsewhere in India including the control districts, around the same time that NIPI Phase II interventions were tested or implemented. This could have possibly contaminated or influenced some of the findings of the Phase II evaluation.

Due to the nature of the interventions and other constraints, the evaluation team employed quantitative impact methods to assess the effects of NIPI's flagship intervention: Home-Based Newborn Care Plus. For other interventions, contribution rather than attribution was assessed. This matters for the degree of certainty with which NIPI can be said to cause the findings. While the use of impact evaluation methodologies makes claims about attribution more credible, it would have been an advantage had the evaluation been able to establish why it was difficult to observe changes in behaviour.

More information on the processes underlying the implementation of NIPI intervention components would also have been useful. The procurement process for skills and information services in nursing schools was initiated only in the second quarter of 2017, which suggests that the endline assessment has possibly not captured all the essential infrastructure and services.

Some of the key questions asked in the evaluation surveys could perhaps have been refined to better capture the intended behavioural change. There were also changes to a few questions between baseline and endline surveys which led to revision of estimates, and these could affect the estimation of output indicators. For example, the evaluation failed to highlight evidence of programme impact on handwashing with soap; however, the baseline survey had no comparable indicator. Further investigations are required to understand the discrepancy in the finding that ASHA visits had an effect on kangaroo mother care and breastfeeding practice but appeared not to be associated with increased maternal knowledge.

5. CONCLUSIONS

This evaluation has focused on one of NIPI's three goals aimed at testing, implementing and scaling up innovative and sustainable continuum of care interventions at the health systems and community levels, and while it is too early to assess health outcomes, NIPI Phase II has managed to achieve this goal in terms of mobilising resources, providing catalytic support and building technical capacity, and implementing health innovations for enhancing the quality and continuum of maternal, newborn and child health care and related health outcomes in thirteen districts across four empowered action

group states of India. A distinct feature of NIPI was the packaging or bundling of health innovations integrated into the ongoing National Health Mission activities, and extending the services of frontline community health workers, ASHAs, with essential multiple follow-up home visits and supportive supervision. It is reassuring to note that the Government of India has embraced NIPI health innovations as a benchmark for formulating and revising national child health guidelines.

The improvements in postpartum family planning knowledge, counselling and use, and those related to pre-service education in nursing and midwifery were positive and reassuring, especially given that some of these components had received little attention in the national or state level health programmes. Another significant achievement of NIPI is the evidence showing improvement and strengthening of overall service standards and diagnosis/treatment protocols, technical competence, systems infrastructure and resource mobilisation.

While it is too early to assess the full impact of NIPI Phase II on health outcomes at the population level, the evaluation results show that the interventions have proved successful in implementing the health innovations targeting the health system, while full coverage of

outreach activities proved to be more demanding. This is not surprising given that NIPI operates through government channels and as such does not have full control over the entire implementation chain. Clearly, changes involving a national health system will take time to materialise. This means that pilots and innovative projects may need to run for a longer period to demonstrate effects on health outcomes. For HBNC+ the evaluation could not establish the effect of the intervention for most of the maternal behaviours investigated. This does not necessarily mean that the intervention was not effective, only that effects could not be documented, possibly due to the level of coverage at the time of the endline survey.

Furthermore, coverage was not uniform across all thirteen districts because of the heterogeneous mix of the population in different states with different social, cultural, economic and geographic characteristics. For example, findings from the individual (mother) survey showed that the coverage of the intended four home visits by ASHAs under HBNC+ varied considerably between states. The evaluation approach did not, however, allow for further analysis of between-district variations. The findings from focus groups and in-depth interviews highlighted financial barriers such as administrative delays in processing incentives for ASHA workers, and the low

incentives did not recompense for their workload and performance. For SNCU+, the ANM follow-up was poor in communities for various reasons including high workload in the facilities, removal of incentives and long commuting distance to communities. It would take time to improve and sustain ASHAs' knowledge and skills for better counselling and referral services for components such as the detection of disease symptoms.

In conclusion, while findings from the evaluation indicate that NIPI has been successful in terms of implementation of health system-strengthening interventions, outreach interventions have proven to be more difficult in terms of reaching high levels of coverage. This is not necessarily a weakness of NIPI given the limited time period between implementation and the endline data collection; however, it does make decisions about scaling up interventions more challenging given that it has proven difficult to establish effectiveness. More information is needed about the effects of interventions on health outcomes, and on how coverage of outreach activities can best be increased.

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The Evaluation Department, located in Norad, initiates evaluations of activities financed over the Norwegian aid budget. The Department is governed under a specific mandate and reports directly to the Ministry of Foreign Affairs. The evaluations are carried out by independent evaluators, and all evaluation reports are made public.

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www.norad.no
post-eval@norad.no

EVALUATION OVERVIEW

This evaluation brief draws on the 2018 evaluation: The Norway India Partnership Initiative Phase II: Impact Evaluation of Five Interventions. The evaluation was commissioned by the Evaluation Department and carried out by Oxford Policy Management Ltd in collaboration with Sambodhi Research.

Purpose of the evaluation: The purpose of the evaluation was to inform the Norwegian public, NIPI partners and the international global health community about what works and what does not work (and why) of the interventions supported through NIPI Phase II.

The brief is written by Sabu Padmadas from the University of Southampton in collaboration with Ida Lindkvist, with important contributions from Siv Lillestøl also from the Evaluation Department. We acknowledge useful comments from NIPI partners to a previous version of this brief.

This brief is the product of its authors, and the responsibility for the accuracy of data included in this brief rests with the authors alone.