Transforming IPT for Optimal Pregnancy (TIPTOP) & the Supply Side Grant

Funded by Unitaid from 2017-2022, TIPTOP was implemented by Jhpiego & the Supply Side Grant was implemented by Medicines for Malaria Venture

Background

Public Health Need
The low proportion of pregnant women receiving intermittent preventive treatment in pregnancy (IPTp) with quality assured sulfadoxine-pyrimethamine (IPTp-SP), only 17% receive three doses, leaves millions of pregnant women unprotected with malaria resulting in preventable maternal and neonatal morbidity and mortality.¹

Access Barriers
Demand & Adoption: Low demand for IPTp among providers and pregnant women partly due to perceptions that SP is a failed drug. Insufficient evidence behind alternative service delivery innovations.
Supply & Delivery: Ineffective supply chain systems, especially distribution to end users with frequent stockouts.

An Effective Preventive Treatment for Pregnant Women
The use of even one dose of IPTp among these women, could avert 45,000 children from being born with low birthweights. Three doses with up to 90% coverage could avert 206,000 low birthweights.²

Programme Description

TIPTOP focused on removing demand-side access barriers by introducing an innovative, ‘no missed opportunities’ community-based approach to increase the number of pregnant women receiving IPTp, without detracting from antenatal care utilisation in four target countries, DRC, Madagascar, Mozambique & Nigeria

TIPTOP is a Unitaid funded project, implemented by a consortium of two organisations, Jhpiego as the lead grantees, and Barcelona Institute for Global Health (ISGlobal) as the evaluation and research partner. The project was implemented from May 2017 to April 2022.

Medicines Malaria Venture (MMV) was funded by Unitaid to implement the Supply Side Grant and work alongside the TIPTOP project to improve global availability and supply of quality assured SP for IPTp.

WHO was also funded through an enabler agreement to support evidence generation and facilitate delivery of a normative guideline.

Purpose & Objectives

Unitaid commissioned the evaluation to assess the overall performance of the projects across these objectives:
1. To assess the relevance and the extent of integration of CIPTp services into the countries’ health systems (Relevance & Coherence).
2. To assess grant performance against critical access barriers and efficiency of implementation (Effectiveness & Efficiency)
4. To review the potential catalytic effect of the grants (Scalability & Sustainability)

Approach

A mixed-methods approach was adopted comprising a review of project documents and stakeholder interviews to capture both quantitative and qualitative data. Site visits in two locations – each in three project countries (DRC, Mozambique and Nigeria); and the public health and economic impact of the program was estimated through modelling.

A total of 66 participants were interviewed, either one on one or in groups, including implementers, ministries of health, funding partners, CSO, beneficiaries and Unitaid Staff.

OUTCOMES
Quality: SP is quality-assured through WHO-PDP
Innovation & Availability: QA SP products are commercially available for introduction.
Demand & Adoption:
Robust evidence available on acceptability, feasibility and effectiveness of alternate delivery mechanisms to complement ANC & increase coverage.
Improved uptake of IPTp-SP & improved ANC attendance through improved referral at the community level.
Supply & Delivery:
Supply chain systems effectively deliver adequate quantities of QA SP to CHWs and end users in a reliable & timely way.

IMPACT
Public Health Impact: Reduced maternal & neonatal morbidity & mortality
Economic Impact: Increased economic impact
Equity Impact: Equitable access to prevention, diagnosis & treatment

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1. World Malaria Report 2015
2. World Malaria Report 2021

http://www.broadimpact.org
## Findings & Conclusions

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### Relevance

The high Malaria in Pregnancy (MiP) burden in these countries; the availability of a proven and effective intervention (IPTp); the need for evidence on alternative delivery models; and a need to introduce prequalified SP products into the market are all factors that depict the relevance of the projects.

### Coherence

The projects were very coherent; the intervention was complementary to existing facility-based IPTp delivery through ANC, as it helped extend IPTp and referral services, and improved the availability of QA-SP at both facility and community levels. The TIPTOP project worked well with both global and local stakeholders. There was great alignment within the consortium, productive interactions with supportive projects-the Supply Side Grant and WHO’s enabler, and a well constituted project steering committee comprising US Government President’s Malaria Initiative (PMI), the Global Fund, MMV, ISGlobal, WHO, and Jhpiego. There was also effective engagement with PMI and GF as scale-up partners, active participation in in-country TWGs and extensive networking through CSOs in-country.

### Effectiveness

The projects were largely effective and increased coverage of IPTp and successfully overcame targeted access barriers. IPTp3 coverage increased from baselines of 21% in DRC, 28% in Madagascar, 53% in Mozambique and 11% in Nigeria, to endelines of 65% in DRC, 75% in Madagascar, 59% in Mozambique and 63% in Nigeria.

The Supply Side Grant supported the WHO prequalification process of three manufacturers (UCL Kenya, SWIPHA Nigeria and EMZOR Nigeria), with approvals expected in 2022-2023.

TIPTOP created strong ownership for the project’s interventions through consistent stakeholder engagements, increased sensitisation and awareness of IPTp through CSOs and CHWs, and strengthened linkages between health facilities and community structures. The improved IPTp-SP packaging, branded for pregnant women, also improved the acceptance of the product.

### Efficiency

TIPTOP also generated and disseminated evidence on the effectiveness of C-IPTp through its research and routine monitoring results.

TIPTOP strengthened the community health system through tailored trainings, reinforced supply chains in supported sites and improved health information systems with significant reductions in SP stockouts in project sites.

### Impact

The modelled estimates show that the projects could contribute to 2.9m [829K – 4.6m] malaria infections averted; 100,806 [27,690 -156,497] deaths averted [9,618 maternal deaths and 91,188 neonatal deaths]; and 7.9m [2.7m – 10.4m] DALYs averted [0.3m maternal DALYs and 7.7m neonatal DALYS] from 2023-2027 across the four project countries and six additional countries in Africa with the highest likelihood for adoption and scale-up. The intervention will also confer an incremental cost of US$5625m [221m, 768m] to the health system over the next five years. Despite the incremental cost, the intervention has the potential to generate cost-saving by averting treatment costs for the health system of US$59m [17m, 120m] over the next five years, with a return on investment of 31.9.

### Sustainability

The projects were largely time-efficient, delivering most activities on time. However, external challenges delayed or stopped implementation in certain project locations. The projects were also largely cost-efficient, improving their absorptive capacity annually, with TIPTOP and the Supply Side Grant expending 81% and 116% of their project budgets, respectively, by December 2021.

The intervention is poised for scale up, as the project was implemented in an integrated manner through existing MoH structures. C-IPTp has been included in National Malaria Strategic Plans in DRC, Madagascar and Nigeria. Also, the comprehensive learning systems set up by the project led to increased interest beyond the project countries to take up the intervention. There is tremendous support from PMI and GF, with some funding already made available and expectations to receive funding in future funding allocations in three countries (DRC, Madagascar and Nigeria). The main sustainability gap is limited funding commitment from domestic sources; however, the low cost of this intervention creates a higher likelihood for inclusion in country budgets.

### Factors influencing programme effectiveness

#### Success Factors
1. Integration into Existing Health Systems
2. Country Ownership & Political Support
3. Early Alignment with Partners
5. Trainings and Supportive Supervision
6. Supply Chain Strengthening
7. Data-Informed Decision-Making
8. Evidence Generation on C-IPTp
9. Adaptable to COVID-19 & other contextual challenges
10. Expertise of MMV in navigating the WHO PQP process with manufacturers new to the process

#### Challenges
1. Human Resource Gaps ranging from availability to quality and attrition
2. Other Emergencies related to health and weather conditions (Cyclone Idai in MOZ, Lassa fever & Cholera outbreaks in NGA)
3. Political Instability DRC, MOZ, and NGA.
4. Dissonance about the need for WHO guidance
5. COVID-19 and related restrictions
Lessons Learnt

TIPTOP’s “No Missed Opportunities” Approach

**CHWs Roles**
- Map pregnant women (PW)
- Educate PW
- Screen PW for IPTp eligibility
- Provide SP to eligible PW
- Refer PW to health facilities

**CSO Roles**
- Mobilise communities for C-IPTp
- Support CHWs in information dissemination & community mobilisation
- Social & Behaviour Change Behaviour Communication using a variety of platforms

**Policy Differences**
- Nigeria & DRC
- All IPTp doses (IPTp1 & follow-up) may be given by a CHW
- Madagascar & Mozambique
- IPTp1 must be given by HCW at a health facility. Only follow-up doses can be given to CHWs

**Lessons about the Intervention**

1. **C-IPTp is Effective, Cost-Effective and Equitable**
   - IPTp is a low-cost solution to a large-scale problem and it’s a proven and effective intervention. The project has also demonstrated the cost-effectiveness of C-IPTp, which also delivered the intervention to women in their homes.

2. **Community delivery of IPTp is safe and does not disrupt ANC attendance**
   - CHWs were able to distribute SP safely to women in the community with no reports of side effects or pregnant women receiving excessive doses of SP. The project’s results have shown that not only is it possible to prevent a decline in ANC attendance during community delivery of IPTp, but the intervention also increased ANC attendance.

3. **C-IPTp also doubles as additional outreach services**
   - The project’s approach to providing both IPTp in communities and aiding referral to health facilities created a dual effect, increasing both C-IPTp and facilitating access to facility-based IPTp and ANC.

4. **IPTp-specific packaging and branding for target beneficiaries increases the perception of quality and acceptability of the intervention**
   - The updated packaging of SP promoting IPTp had a positive effect on uptake of the commodity/impact of the project. It is an important part of the intervention.

5. **Early gathering of information on requirements for product registration and import waivers is critical**
   - The challenges encountered with product registration or receipt of import waivers by the project did not have a significant effect on delivery of results but created delays and additional hurdles for project teams to overcome. Country baseline assessments for introducing SP or other products should include registration/import requirements gathering.

6. **Community services are critical in navigating emergencies**
   - The project proactively organised sufficient SP stocks for CHW and health facilities in advance to mitigate disruptions in the supply chain due to emergencies (COVID-19, riots, adverse weather). Implementing during the pandemic was also somewhat easier due to the community-based nature of the intervention.

7. **CHWs can be trained to deliver IPTp**
   - CHWs successfully distributed IPTp in the communities through the provision of extensive and tailored trainings.

8. **CSOs play an important role in increasing acceptance and coverage**
   - Strong community involvement and stakeholder coordination increased acceptance and uptake of the intervention.

9. **Embedding project staff in Government offices fosters ownership**
   - Embedding project staff in government offices was a very effective initiative to increase ownership of the project’s interventions, with activities, results and decisions being discussed real-time with MoH teams.

**Lessons about the Implementation Context**

10. **Focus on program learning, improved delivery and adaptation**
    - The project had a strong learning focus. As a result, the project was able to leverage its learning for program adaptations as needed, including family decision dynamics in DRC, private sector engagement in Madagascar, and the role of midwives in boosting ANC attendance in Nigeria.

11. **Utilisation of virtual approaches increased cost savings with limited or no decline in program effectiveness in the context of already well-established implementation arrangements**
    - COVID-19 pandemic restrictions changed the ways of working, allowing many activities to be done virtually and funds utilised differently; less local travel and even fewer international trips. These created savings for the project without significantly compromising the quality of the interventions. It is, however, important to note that the project already had two years of established relationships and implementation arrangements prior to the pandemic.

**Lessons about the Actors**

12. **Program Management Lessons**
    - Extensive and tailored trainings.
    - Including family decision dynamics in DRC, private sector engagement in Madagascar, and the role of midwives in boosting ANC attendance in Nigeria.
Recommendations

For National Malaria Control Programs / National RMNCH Programs Ministries of Health

- Baseline needs assessments for country adoption should include CHWs availability/workload and training needs; ANC sites and provider readiness to incorporate C-IPTp; registration requirements for SP (plus commodity packaging requirements) and an understanding of supply chain gaps.

- Create avenues for communication and collaboration between Malaria and RMNCH programs to strengthen C-IPTp and similar cross-cutting interventions.

- Conduct tailored trainings for CHWs per country context and CHW need (maybe IPTp focused or more extensive covering MiP or other MNCH themes).

- Closely monitor SP resistance levels as countries scale up the use of IPTp-SP at ANC as well as at community level.

- Utilize TIPTOP costing and cost-effectiveness estimates for strategic planning and further advocacy to funders.

- Prioritise QA SP for IPTp with improved packaging and facilitate distribution through all delivery mechanisms. This will also contribute to creating demand for the newly prequalified manufacturers.

For TIPTOP, Supply Side Grant & Other Implementers

- Advocate to country decision-makers on the need to prioritise quality assured SP. A key enabler to having new prequalified African manufacturers catalyse the market.

- Provide access to project results for ongoing dissemination after project close out, for countries and other stakeholders to further engage.

For Donors & Policy Makers

- Sensitise national stakeholders on the interpretation of current WHO guidelines on the provision of C-IPTp.

- Prioritise prequalified SP products from local manufacturers in specific regions for future investments.

- Explore options for future replacement of SP, including existing drugs, new drug development, or breakthrough technologies. Although there are no reports of resistance, SP has had a track record of resistance in malaria treatment, C-IPTp is likely to scale the use of SP significantly, with concerns of reduced effectiveness due to resistance in the future.

For Unitaid

- Lead advocacy targeting other funders/potential scale-up partners. This is essential for the catalytic approach of Unitaid’s projects to be successful.

- Consider restructuring budget allocation within the first year (especially when less than six months) having a smaller budget dedicated to consortium and implementation partners set-up, phased personnel recruitment and research protocol development and approval. This will allow for focused activities and reduced underspend in Y1 and allow for a seamless implementation in Y2.