A pooled economic evaluation of Intermittent Preventive Treatment of Malaria in Infants (IPTi)

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Aims and Objectives:
This paper focuses on the economic evaluation of IPTi (Intermittent Preventive Treatment of Malaria in Infants). IPTi is the delivery of a treatment dose of an antimalarial drug during the first year of life when receiving EPI (Expanded Program on Immunization) vaccines. This paper aims to undertake a pooled economic evaluation of IPTi, part of the IPTi Consortium (www.ipti-malaria.org). IPTi trials were undertaken in several sub-Saharan African countries (Mozambique, Kenya, Tanzania and Gabon) and in a South-Pacific country (Papua New Guinea).

Methods:
A range of cost effectiveness and implementation issues were investigated using efficacy results from the various sites. Information on provider and household costs averted (both inpatients and outpatients), together with data on the potential absorption capacity of IPTi into the existing health system were analysed. Sensitivity analysis was conducted on the different characteristics of the trial settings and how these influenced costs. Such issues included the different antimalarial drugs used; different malaria incidence levels; and the different levels of capacity of EPI to accommodate IPTi.

Results:
Previous results of two trials delivering SP in Manhiça, Mozambique and Ifakara, Tanzania have shown efficacy and safety of IPTi and the economic evaluation of the two sites also appeared highly cost-effectiveness. Further analysis suggests that this cost effectiveness extends to a wide range of other scenarios and settings.

Key Findings:
Early results show the potential of IPTi as a health intervention. As a preventive intervention, its implementation is cheap because of its delivery alongside EPI; this allows minimisation of household opportunity costs, and the increase in health system costs is, in many cases, marginal.