

Executive Summary - Insecticide Treated Nets (ITN) Cost-Effectiveness (Nigeria 2021)

Cost-Effectiveness of ITN Distribution - Nigeria 2021

Analysis of ITN ownership, usage and impact among children under 5 across 6 geopolitical zones

Key Results

Average Cost per DALY Averted \approx \$3098

Average Cost per Case Averted \approx \$62

Total DALYs Averted \approx 27519

Most Cost-Effective Zone: North West

Least Cost-Effective Zone: South West

Cost-Effectiveness by Zone (Lower Cost = More Effective)



Insights & Implications

High usage drives efficiency: Northern zones (especially North West & North East) achieve lower cost per DALY due to stronger adoption.

Behavioural barriers: Southern zones show very higher cost per DALY implying lower usage despite access - impacting the program efficiency.

Shifting focus: behaviour change and maintenance campaigns could yield higher impact than distributing additional nets

Overall conclusion: ITN distribution remains a highly cost-effective malaria intervention for Nigeria

Data Sources

NMIS 2021: ITN ownership & usage, qualitative barriers (non-use reasons), malaria prevalence rates

UN WPP 2021: Population under 5

GBD 2019: DALY per case

Assumptions

Cost per net delivered: \$5.5 per net

Infection rate: 0.25 (25%)

Efficacy of ITN: 0.50 (1 net for every 2 people)

DALYs per case: 0.02