

Social and Behavior Change Costs Associated With Insecticide Treated Bed Net Distribution for Malaria Prevention

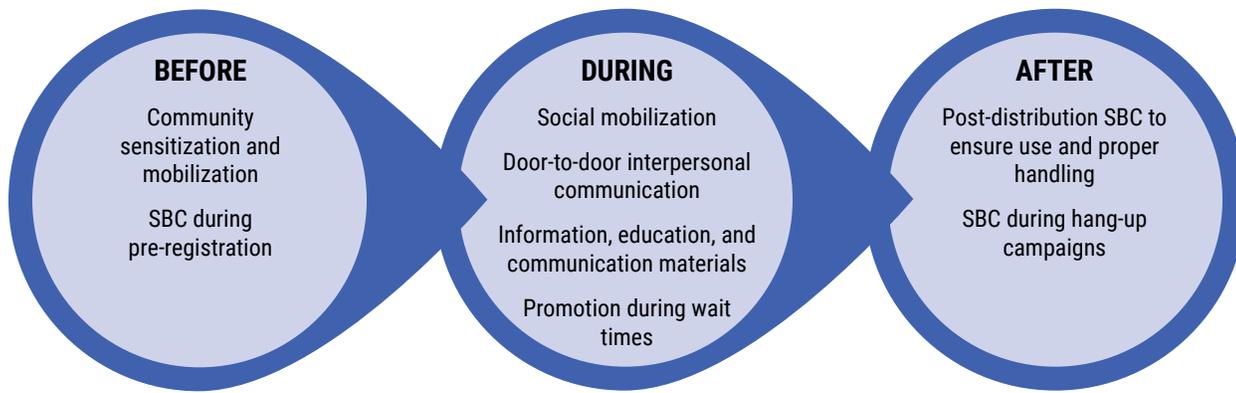


Breakthrough RESEARCH is gathering, analyzing, and sharing evidence on the costs and impact of social and behavior change (SBC) interventions to support the case that investing in SBC is crucial for improving health and advancing development. A review of the SBC costing literature identified 147 studies on SBC costs, methodological shortcomings, and knowledge gaps that can be addressed in new SBC costing studies.¹ To address these gaps, Breakthrough RESEARCH issued the *Guidelines for Costing of Social and Behavior Change Health Interventions*,² which lay out 17 principles for conducting high-quality costing studies. This is the fourth in a series of brief reports intended to complement the guidelines and support a *Community of Practice around SBC costing* by highlighting important issues and practices for SBC costing.

Ensuring access to malaria prevention, such as insecticide treated bed nets (ITNs), is an important pillar in the global strategy to eradicate malaria.³ By promoting the uptake and continued and correct use of ITNs, social and behavior change (SBC) interventions play a critical role during ITN distribution, whether it is a mass distribution campaign or continuous distribution. Understanding the SBC costs embedded within the broader program costs is useful for program planners to ensure that enough funding is allocated for SBC. This costing Community of Practice brief reviews the existing knowledge on SBC costs within ITN distribution campaigns and provides guidance for future costing studies.

There are several SBC activities that can accompany ITN campaigns before, during, and after ITN distribution (Figure 1, page 2). Before distribution, SBC can involve meeting with community leaders to sensitize them on the upcoming campaign as well as promoting the campaign through various channels, such as radio, television, and community announcements. Once the campaign is underway, SBC often involves continued social mobilization as well as providing interpersonal counseling and educational materials on the dangers of malaria and the importance of ITN use as well as how to appropriately use and care for an ITN. Finally, after the campaign, SBC can continue to ensure appropriate use of ITNs, with continued emphasis

FIGURE 1 SBC INTERVENTION STAGES



on the importance of ITN use and net care in the weeks and months following distribution, which may be budgeted as part of the original campaign or separately, depending on the program.⁴

Existing data on SBC costs per ITN distributed

The [first Community of Practice brief](#) discussed the importance of defining the denominator in a unit cost when conducting an SBC costing study. For ITN campaigns, one frequently used denominator is the cost per ITN distributed. Table 1 (page 3) shows existing literature on the SBC cost per ITN distributed in various countries, with costs adjusted to 2020 USD. Among the 11 studies shown, the financial cost of SBC per ITN distributed ranged from \$0.02 to over \$3.00 per ITN distributed, with a median cost of \$0.23 per ITN distributed. Additionally, the table shows the proportion of the total ITN campaign costs attributed to SBC activities; this ranges from less than 1% to 24% with a median of 3% of the total cost per ITN distributed devoted to SBC activities (including the cost of the ITN).

While a review of the prior literature is useful for approximating SBC costs for similar programs, the wide range in unit costs makes comparisons challenging, as no clear patterns emerge by distribution strategy or program scale. When reviewing individual studies, the variation in SBC costs appears to be largely a function of what costs were included in the analysis and/or the time period for reporting. For example, two reports on the SBC costs for the same ITN distribution program in Malawi had substantially different unit costs (\$0.14 vs \$0.37 per ITN in 2017 USD) due to different time periods reported, where the unit costs decreased over time due to program efficiencies gained during a longer time period.^{8,9}

Components to include with malaria SBC costing

A complete costing of SBC interventions for ITN distribution is important for future campaigns to properly budget and plan for SBC. When only a subset of the SBC costs is included in the budget, e.g., IEC materials only, there may be missed opportunities to maximize the effectiveness of other SBC strategies that promote the uptake of and proper utilization of ITNs.

A checklist provided in Table 2 (page 4) specifies the different costing components to include in a costing of SBC in malaria ITN campaigns. The personnel cost components associated with SBC intervention development and implementation will largely depend on the way SBC is embedded within an ITN distribution approach (e.g., interpersonal communication during household visits or mass media prior to fixed point distribution). However, all SBC costing studies should include the personnel time associated with project management, SBC intervention design, monitoring and evaluation, and partner coordination, as well as support staff (e.g., accountants or receptionists). Beyond personnel costs, other cost components are travel and transportation, meetings and trainings, capital, and other recurrent costs.

Finally, as noted in the third Community of Practice brief, a costing study can examine either the financial costs or the economic costs. The financial costs focus on the financial expenses associated with the development and implementation of SBC, while the economic costs also include the value of donated time and goods and the opportunity costs of investing funds elsewhere.

TABLE 1 SBC FINANCIAL COSTS PER ITN DISTRIBUTED

Country (Time period)	ITNs distributed	Program and SBC costing components	SBC financial cost per ITN distributed* (USD, 2020)	SBC as % of total cost per ITN distributed
Burkina Faso (2006–2007) ⁵	15,000	Social marketing strategy with information, education, and communication (IEC) materials costed only	\$0.03	0.3
Democratic Republic of Congo (2014) ⁶	3,467,974	Mass campaign with door-to-door and fixed-point delivery; IEC materials costs only	\$0.15	2.1
Ghana (2010–2012) ⁷	3,664,028	Door-to-door campaign; costing includes social mobilization, IEC materials and other SBC activities	\$0.02	0.3
Malawi (2005) ⁸	1,471,941	Social marketing with costing including advertising and promotion, brand creation and market research	\$0.39	6.6
Senegal (2000–2005) ⁹	750,000	Commercially available ITNs with promotion and subsidies; costing includes advertising and promotion	\$3.23	24.0
South Sudan (2011–2012) ¹⁰	28,696	Voucher for free ITN for qualifying households; costing includes engagement with political and faith-based leaders and social mobilizers delivering messaging	\$2.64	12.1
Tanzania (2002–2005) ⁹	6,383,805	Social marketing and vouchers; costing including IEC and promotion	\$1.22	15.0
Tanzania (2007) ¹¹	8,753,438	National catch-up plan to distribute ITNs to all kids under 5; costing includes before and during registration and prior to distribution with activities including sensitization to district medical officers and other key roles, community sensitization, community media, advertisement and print media	\$0.36	4.2
Tanzania (2010–2011) ¹²	16,622,251	Household distribution; costing includes social mobilization, television, radio, newspaper, films, cultural shows, brochures, posters, t-shirts, and public meetings, and announcements	\$0.11	1.7
Tanzania (2016–2017) ¹³	793,320	Free ITNs to pregnant women and children receiving routine immunizations in public health centers and dispensaries; costing includes “health education” but no further details given	\$0.23	2.9
Uganda (2007) ¹⁴	44,560	Stand-alone campaigns and one on-going routine delivery through antenatal care clinics; costing includes sensitization of local leaders, health educators, practical demonstrations, and print materials	\$0.22	2.7

*Inflated to 2020 costs using US GDP deflator

TABLE 2 CHECKLIST FOR SBC COMPONENTS TO INCLUDE IN COSTING STUDY

PERSONNEL COSTS	
All SBC interventions	Personnel time for project management, intervention design and planning, implementation, partner coordination, and support personnel (e.g., supply clerks, accountants and finance, legal staff, receptionists, data and information and technology staff, drivers, gardeners, security guards, kitchen staff, and custodians).
Additional for mass media and IEC materials	Content writers, layout and graphic designers, performers, sound and/or video technicians, and editors. SBC personnel needed for printing or distributing IEC materials.
Additional for community media and mobilization	Actors and directors for live dramas, outreach workers, peer support workers, community mobilizers engaging with community leaders and facilitating community meetings, and coordinators for community sensitization.
Additional for interpersonal communication	Training for and delivery of counseling by SBC professionals implementing in-person SBC, including peer support workers, home visitors, medical professionals, and others.
OTHER COST COMPONENTS	
Travel and transport	Any travel or transport needed for design or development of campaign, including travel/transport for design-related meetings, for SBC production (e.g., video shoot location), training, and SBC delivery. Travel expenses can include: flights, buses, car hire, fuel, parking fees, lodging, visas, and per diems.
Meetings and trainings	Any non-personnel costs or travel/transport costs associated with meetings and trainings associated with the development of SBC interventions and training of SBC personnel. Meeting and training expenses can include: location hire (e.g., meeting rooms), catering, supplies (e.g., pen, notepads), equipment rentals (e.g., audio system).
Capital	Any purchased buildings or equipment with a useful life greater than one year (e.g., furniture, vehicles, computer equipment, software).
Other recurrent costs	Office supplies, rent and maintenance for buildings and/or equipment, utilities (e.g., water, electric, gas, internet), insurance, use of copyrighted materials, television and radio airtime, and text-messaging costs for digital interventions.
Additional costs related to economic costs	Volunteer time, any items listed above that are donated, and forgone interest on SBC investments if not spent on SBC.

By using the checklist provided and the *Guidelines for Costing of Social and Behavior Change Health Interventions*, those working in on SBC campaigns around ITN distribution can have a more complete picture of the budget necessary to successfully implement SBC, maximize the appropriate use of ITNs, and improve health through reduced malaria incidence.

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