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# Resources for examining the costs and cost-effectiveness of social and behavior change interventions for health—Slide deck

Breakthrough RESEARCH

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# **Breakthrough RESEARCH**

Resources for examining the costs and cost-effectiveness of social and behavior change interventions for health

June 10, 2021

**Avenir Health** 









# Today's webinar

- Welcome and introductions
- Importance of SBC costing
- Costing resources developed under Breakthrough RESEARCH
- Challenges in conducting SBC costing and cost-effectiveness studies
- Exploring how unit costs are defined
- Unit costs for Merci Mon Héros videos disseminated via social media
- Looking ahead

## Questions

- Please feel free to put questions in the Q&A section
- Questions can be entered in English, French,
   Portuguese, and Spanish
- The answers to questions not answered during the webinar will be posted to Springboard

### **Introductions**



Amanda Kalamar
Technical Director, Population Council
Breakthrough RESEARCH



**Avery Avrakotos**Malaria Technical Advisor, USAID



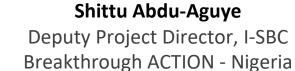
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# Importance of understanding the costs and cost-effectiveness of SBC for health



## **Breakthrough RESEARCH**

- One of USAID's flagship social and behavior change (SBC) projects aimed at the generation, packaging, and use of innovative SBC research to inform programming (August 2017 to July 2022)
- Works in close collaboration with sister project Breakthrough ACTION
- One of the technical areas under Breakthrough RESEARCH is the examination of costeffectiveness of SBC interventions



## Importance of costing

- SBC is a key component of any strategy to improve global health but little is known about the costs and cost-effectiveness of SBC interventions
- A better understanding of the costs and cost-effectiveness of SBC can:
  - Demonstrate the cost-effectiveness of SBC to advocate for continued funding
  - Elevate the prominence of SBC in budgeting and planning documents, where it is often neglected
  - Assist with budgeting and planning
  - Allow programs to consider the cost-effectiveness when planning interventions to allocate scarce resources most effectively

# Costing resources developed under Breakthrough RESEARCH

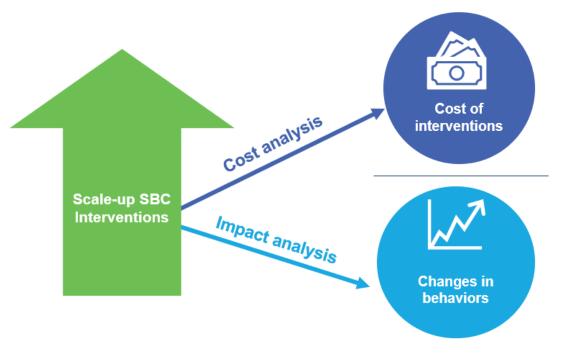


Lori Bollinger, PhD
Avenir Health

## **Definitions**

- Costing: The process of data collection and analysis for estimating the cost of a health intervention using a standardized approach based on widely accepted methodological principles.
- Cost-effectiveness analysis:

  Dividing the incremental cost of an intervention by the changes in behavior from an impact analysis resulting in an incremental cost-effective ratio (ICER).



# Two main program area objectives

# SYNTHESIZE EXISTING EVIDENCE

Literature review and repository of SBC costs

SBC business cases by health area

### **GENERATE NEW EVIDENCE**

Develop guidance for others to conduct SBC costing analyses

Conduct costing and costeffectiveness studies

## Synthesis of SBC cost literature

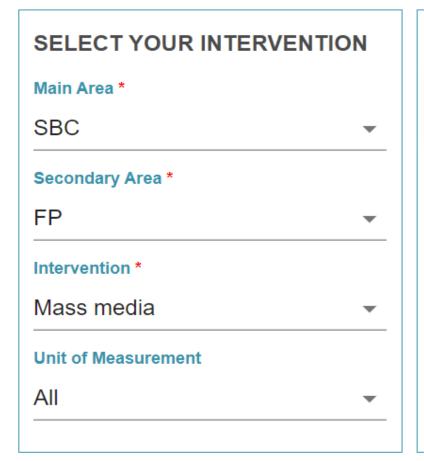
- Conducted a literature review of SBC costs and created a database from 147 cost studies containing 867 separate cost estimates
- Costs incorporated into the Global Health Cost Consortium's Unit Cost Study Repository (UCSR)
  - https://ghcosting.org/pages/data/ucsr/app/
- Full database provides details on intervention, cost components, and methodology that can be used for referencing/benchmarking and for program planning
  - https://breakthroughactionandresearch.org/creating-sbc-costrepository/

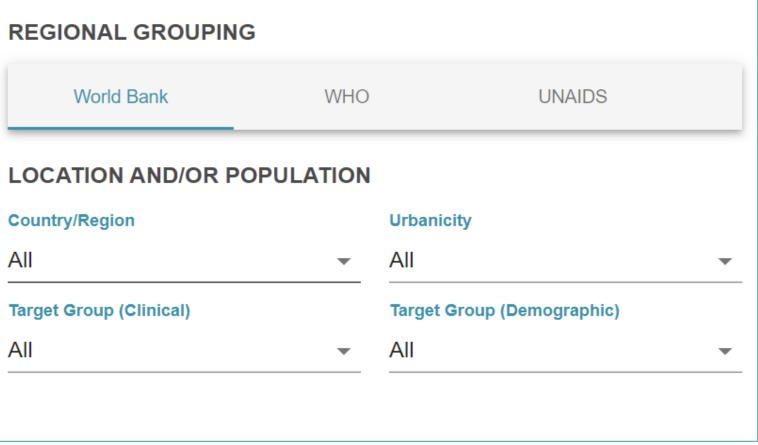
# Using the UCSR













Study	Type of cost	Cost in 2017 USD	Unit	Alerts	Unique Trait(s)
Robinson WC, 2003	Unit cost [SBC-only	\$0.13	per person		unit (per person exposed); site (PSI
Robinson WC, 2003	Unit cost [SBC- only	\$0.08	per person	•	unit (per person exposed); site (Gold
Robinson WC, 2003	Unit cost [SBC-only	\$0.04	per person	•	unit (per person exposed); site
Robinson WC, 2003	Unit cost [SBC- only	\$0.21	per person	•	unit (per person exposed); site
Schellstede W, 1984	CEA ratio	\$0.00	per outcome	•	
Vernon R, 1998	CEA ratio	\$0.00	per outcome	•	unit (per outcome- CYP) ; intervention
Vernon R, ps://ghcosting.org	CEA ratio	\$0.00	per outcome	•	unit (per outcome- CYP); intervention



#### **Details**

#### **Study Attributes**

#### Citation

Geography

Intervention

Timing and Coverage

Population

Study Design

Costing Methods

# Disaggregated Costs (2017 USD)

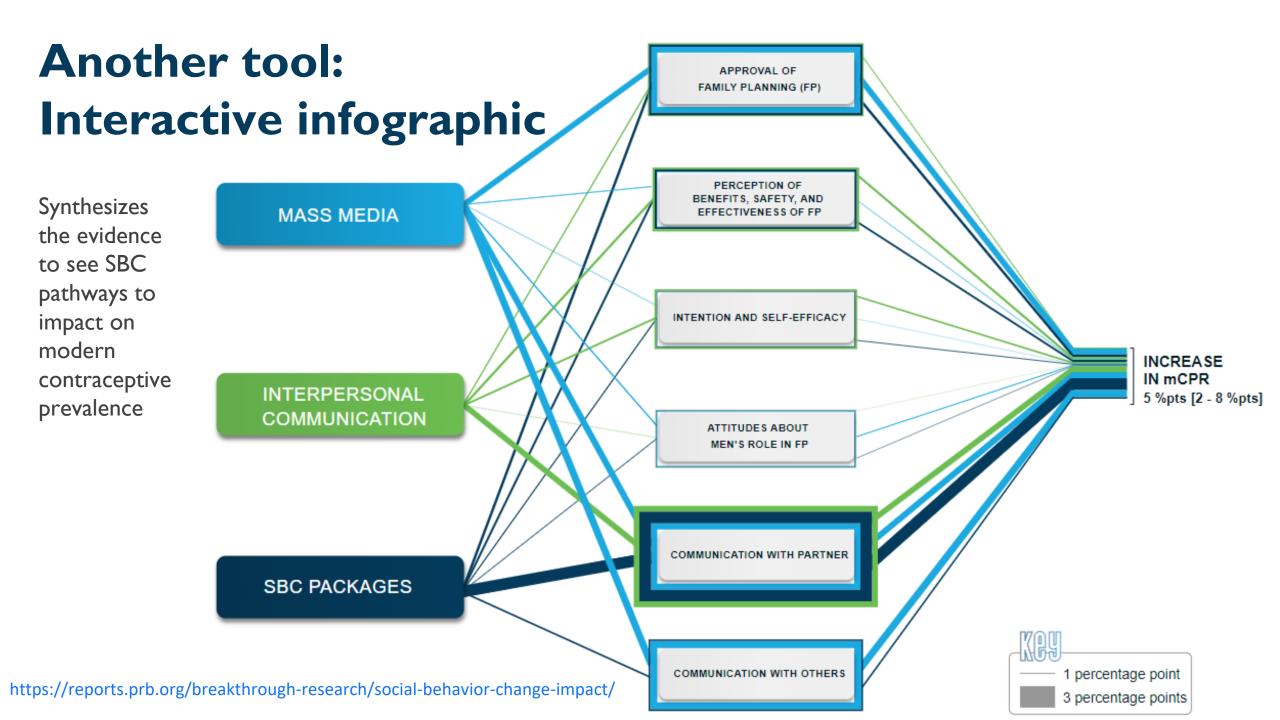
Input Categories

**Activity Categories** 

Patient Cost Categories

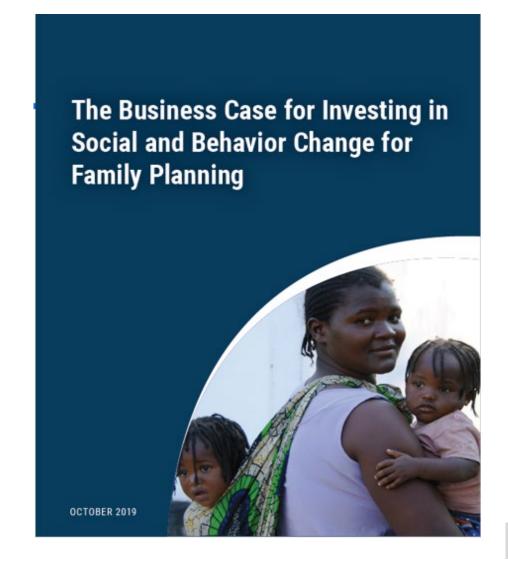
#### Alerts

Alerts

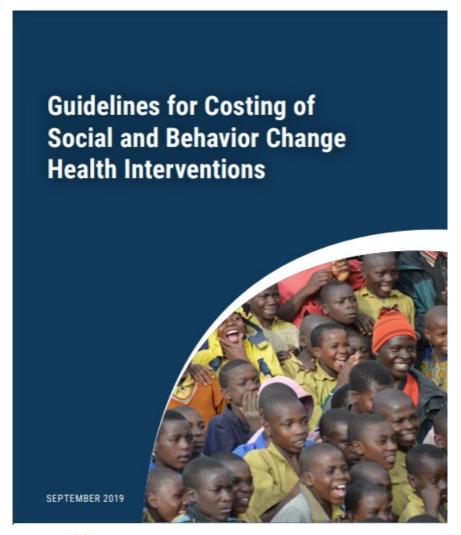


# Costs / Impact: Examining cost-effectiveness

- Synthesized literature on SBC costs and effectiveness used to build models that examine cost-effectiveness of interventions for specific health areas
- SBC business cases for family planning and malaria both found SBC investment scenarios to be highly cost-effective
- A new business case on SBC interventions for nutrition is currently in development



# Spurring new evidence with SBC costing guidelines



- Details 17 principles of conducting an SBC cost study—organized into four categories
  - Design
  - Measurement
  - Pricing and valuation
  - Analysis and reporting

# Generating new evidence on integrated SBC

- Conducting cost-effectiveness studies on integrated
   SBC approaches
  - Study examining integrated SBC program in three northern Nigeria states (Breakthrough ACTION)
  - Study examining SBC in the Resilience in the Sahel II project in Niger (Breakthrough ACTION)
- Planning for the costing and cost-effectiveness began in the early stages of the program evaluation



# Challenges from an implementer's perspective



Shittu Abdu-Aguye Breakthrough ACTION Nigeria

# Challenges of SBC costing

- Skill set for costing not typically part of the training received as SBC implementers and researchers, resulting in:
  - Lack of familiarity with standard classifications of financial costs
  - Lack of knowledge regarding how operational costs are distributed
- SBC is often embedded in other interventions, such as service delivery or systems strengthening, resulting in complexities in isolating the costs of SBC
- Program implementation phases or activities are often difficult to delineate
- Varied approaches for SBC make it challenging to find comparable benchmarks to measure ones' program against

## General concerns about cost-effectiveness studies

- Cost-effectiveness studies may not account for the effect of SBC on attitudes, beliefs and intention
- The timeframe for cost-effectiveness studies may not be long enough to see changes in health outcomes
- Cost-effectiveness studies need to be designed to compare different SBC approaches, including any SBC vs. no SBC
- Economies of scale need to be taken into consideration when evaluating results

# **Exploring how unit costs are defined**



Nicole Bellows, PhD
Avenir Health

# Developing a community of practice

- Looking to engage with the SBC community to work together in helping generate new SBC costing and cost-effectiveness evidence
- Creating briefs on specific areas of SBC costing, such as:
  - Understanding cost study approaches and the appropriate denominators
  - Social media SBC costing considerations
  - SBC costing in malaria campaigns
  - Capturing SBC design-related costs

# Understanding denominators



- SBC Costing Guidelines cover the main principles of generating the appropriate numerator (e.g., total costs)
- Community of practice brief goes into more depth about the role of the denominator in generating the unit cost
- Unit cost = the average cost of an intervention, service, or output
- Selecting the denominator is essentially determining what type of SBC costing or cost-effectiveness study one should pursue

## Types of denominators for SBC unit costs

Degree of difficulty in measurement and desirability

Program outputs

**Intermediate** determinants

Health behaviors

**Health impacts** 

Per person
exposed to mass
media campaign
about malaria
prevention

Per attitude change about insecticide treated nets (ITNs)

Per additional person sleeping under an ITN

Per malaria infection averted or per life saved

## **Program outputs**

Unit cost study

#### **PRIMARY PURPOSE**

- Budgeting and planning
- Comparing approaches of the same type of SBC intervention to improve technical efficiency

#### **EXAMPLE UNIT COSTS**

- Mass media—per person exposed
- SMS reminders—per person contacted
- Individual or group counseling—per person participating
- Provider behavior change—per provider trained

#### **QUESTIONS ADDRESSED**

- How much does the intervention cost per unit of output?
- How do unit costs compare by SBC approach, population, or geographic location?
- Which SBC approach is most costefficient in generating outputs?

#### DATA NEEDED

- Total cost of intervention
- Monitoring data on program reach (e.g., number exposed or participating)

### **Health behaviors**

Cost per behavior

#### **PRIMARY PURPOSE**

- Advocating for additional SBC investments within a health area
- Comparing the relative costs of different types of SBC interventions in achieving behavioral outcomes

#### **EXAMPLE UNIT COSTS**

- Family planning—per couple year of protection
- Malaria—per additional person under an insecticide treated net
- HIV—per male circumcision

#### **QUESTIONS ADDRESSED**

- How much does the intervention cost per desired health behavior?
- How do unit costs per health behavior compare by SBC approach, population, or geographic location?
- Which SBC approach is most costefficient in improving the behavior?

#### **DATA NEEDED**

- Total cost of intervention
- Effectiveness evaluation of health behaviors

## **Health impacts**

Cost-effectiveness

#### **PRIMARY PURPOSE**

- Advocating for additional SBC investments
- Comparing the relative cost-effectiveness of achieving health impact

#### **EXAMPLE COST-EFFECTIVENESS RATIOS**

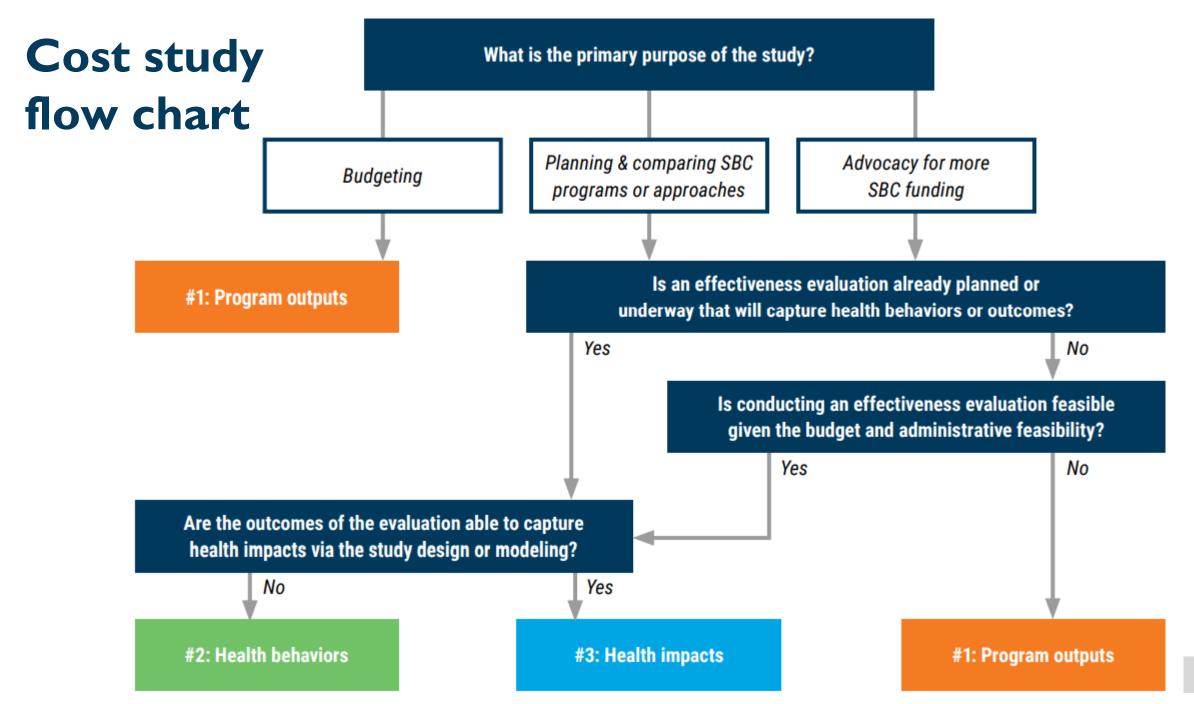
- Family planning—per unintended pregnancy averted
- Infectious diseases—cost per infection averted
- Cross-cutting—cost per disabilityadjusted life year averted

#### **QUESTIONS ADDRESSED**

- How much does the intervention cost per desired health outcome?
- How do costs per health outcome compare by SBC approach, population, or geographic location?
- Which SBC approach is most costeffective in improving the health outcome or impact?

#### DATA NEEDED

- Total cost of intervention
- Effectiveness evaluation that measures health impact or allows for modeling of health impact



# **Concluding comments**

- In a costing study, the selected denominator reflects the type of study being conducted
- More SBC costing research is needed at every level, particularly around newer forms of SBC interventions or where there are gaps in existing costing knowledge, such as social media, integrated SBC, provider behavior change, and community engagement
- When possible, it is preferred to move towards cost-effectiveness analysis by including cost studies with program evaluations looking at health behaviors and health outcomes

# Unit costs for Merci Mon Héros videos distributed via social media



Michel Tchuenche, PhD
Avenir Health

# Merci Mon Héros (MMH)



- USAID-funded multi-media campaign conducted by Breakthrough ACTION—radio, television, social media, community events
- Focuses on SRH issues, including encouraging open dialogue on SRH issues between adults and youth where cultural norms and taboos inhibit communication
- One component of MMH is a youth-led social media campaign originally conceived at the Youth Design Challenge of the Francophone Africa SBC Summit in February 2019
- Study objectives: calculate unit costs for the MMH videos disseminated via social media in two countries in the region (Côte d'Ivoire and Niger)

# Data collection and analysis

- Cost data collection instrument implemented virtually (due to Covid-19) through consultations via phone, email, and web-based correspondence
- Data on video dissemination captured via social listening reports conducted by Breakthrough RESEARCH in partnership with M&C Saatchi Intelligence
- Proportion of personnel and overhead costs attributed to the MMH videos based on interviews with staff about level of effort—with sensitivity analysis varying personnel level of effort by 5%
- Proportion of total design costs attributed to study countries based on breakdowns of video reach in social listening reports

## Three denominators

- For MMH, focus on program outputs—the # exposed to the campaign via social media
- Within this, three different options available for calculating unit costs:
  - Reach—number of screens the MMH videos entered
  - Engagements—number of times people engaged with MMH posts through reactions, comments, shares, retweets, mentions and likes
  - Views—number of views of at least 30 seconds, where each video is at least 2 minutes long

## **Total costs**

	Co		Niger		
Cost Category	Cost in U	SD Percent	Cos	t in USD	Percent
Personnel	\$ 3,10	5 10%	\$	1,072	8%
Consultants	\$ 10,20	6 33%	\$	5,422	39%
Travel and Transport	\$ 80	3 3%	\$	213	2%
Social Media Advertising and Campaign Launch	\$ 3,53	2 11%	\$	4,435	14%
Training (non-personnel)	\$ 2,51	1 8%	\$	549	4%
Project Management & Overhead	\$ 11,07	35%	\$	5,586	33%
Total	\$ 31,233	3 100%	\$	13,748	100%

- For the two countries, total cost of \$44,981
- Higher costs in Côte d'Ivoire due to higher reach and thus greater proportion of overall design and production costs allocated

## Unit costs—total cost/denominators



#### **Sensitivity analysis**

Reach: \$0.15-\$0.17

Engagements: \$1.23-\$1.36

Views: \$4.06-\$4.48

# Key take-aways

- This study addresses the gap in the literature on the unit costs associated with SBC via social media
- Substantial differences in unit costs depending on which denominator is used
- Determining the most appropriate denominator for social media requires additional insights on the level of engagement needed to generate behavior change
- Having a youth-led design and production like MMH requires more oversight but the long-term skills-building and capacity strengthening benefits of engaging youth in the design and production are important to consider

# **Looking ahead**



Amanda Kalamar Population Council

# Join the SBC costing group on Springboard

- Find all the SBC costing products discussed today
- Engage with colleagues about SBC costing resources and questions
- Additional briefs coming soon
- Follow-up event based on your interests



**SBC Costing** 

# Questions

## THANK YOU

Breakthrough RESEARCH WEBINAR
June 10, 2021







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https://breakthroughactionandresearch.org/

Breakthrough RESEARCH catalyzes social and behavior change (SBC) by conducting state-of-the-art research and evaluation and promoting evidence-based solutions to improve health and development programs around the world. Breakthrough RESEARCH is a consortium led by the Population Council in partnership with Avenir Health, ideas42, Institute for Reproductive Health at Georgetown University, Population Reference Bureau, and Tulane University.

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