



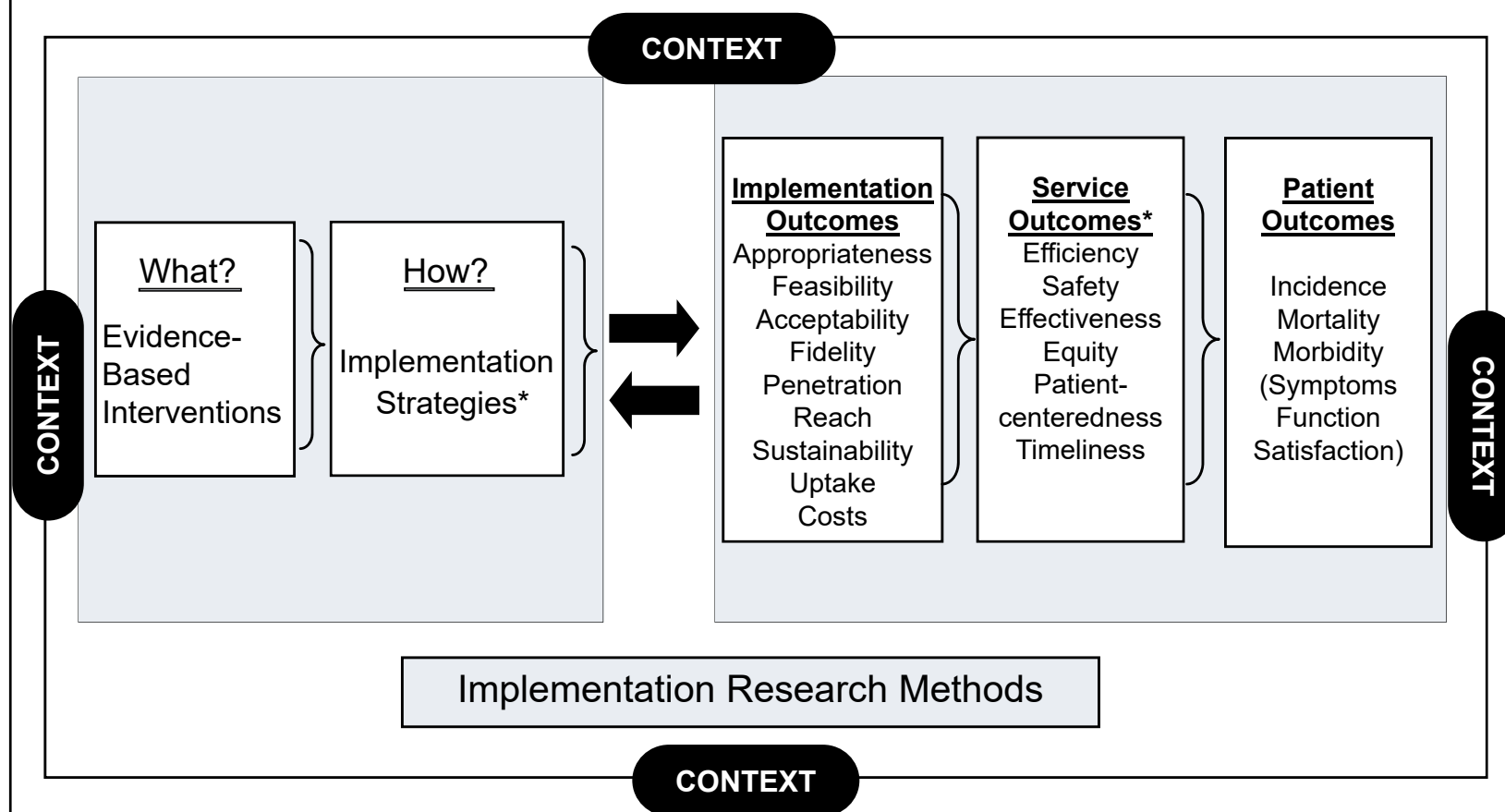
(Dissemination and) Implementation Science for Global Cancer Control

BHGI Summit 2018 **Day 2**

Anne F. Rositch, PhD, MSPH
Department of Epidemiology,
Johns Hopkins Bloomberg School of Public Health
Program in Oncology, School of Medicine

© 2008, Johns Hopkins University. All rights reserved.

Comprehensive conceptual Model

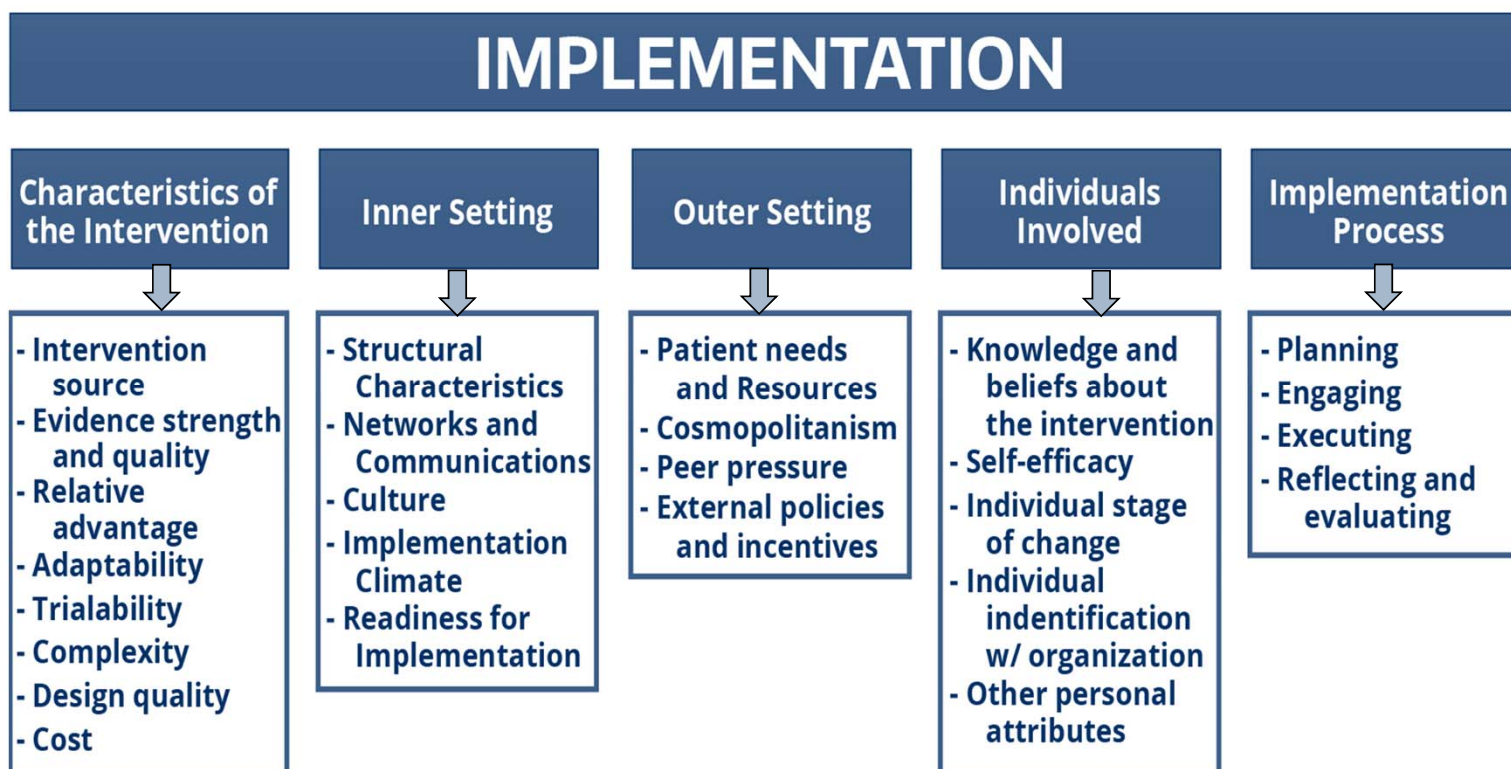


*Adaptation; Adaptation of a guideline to suit the context in which it is intended to be applied can be a key step in the implementation process.



Consolidated Framework for Implementation Research

CFIR is composed of factors shown to influence implementation processes and outcomes:



Damschroder, et al. Implement Sci. 2009;4:50.

© 2008, Johns Hopkins University. All rights reserved.



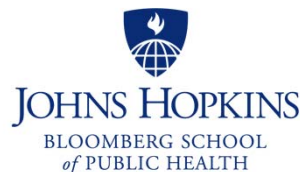
Time to ACT: Implementing strategies for breast cancer control in Tanzania

Assess (local context)

Couple (strategies to context)

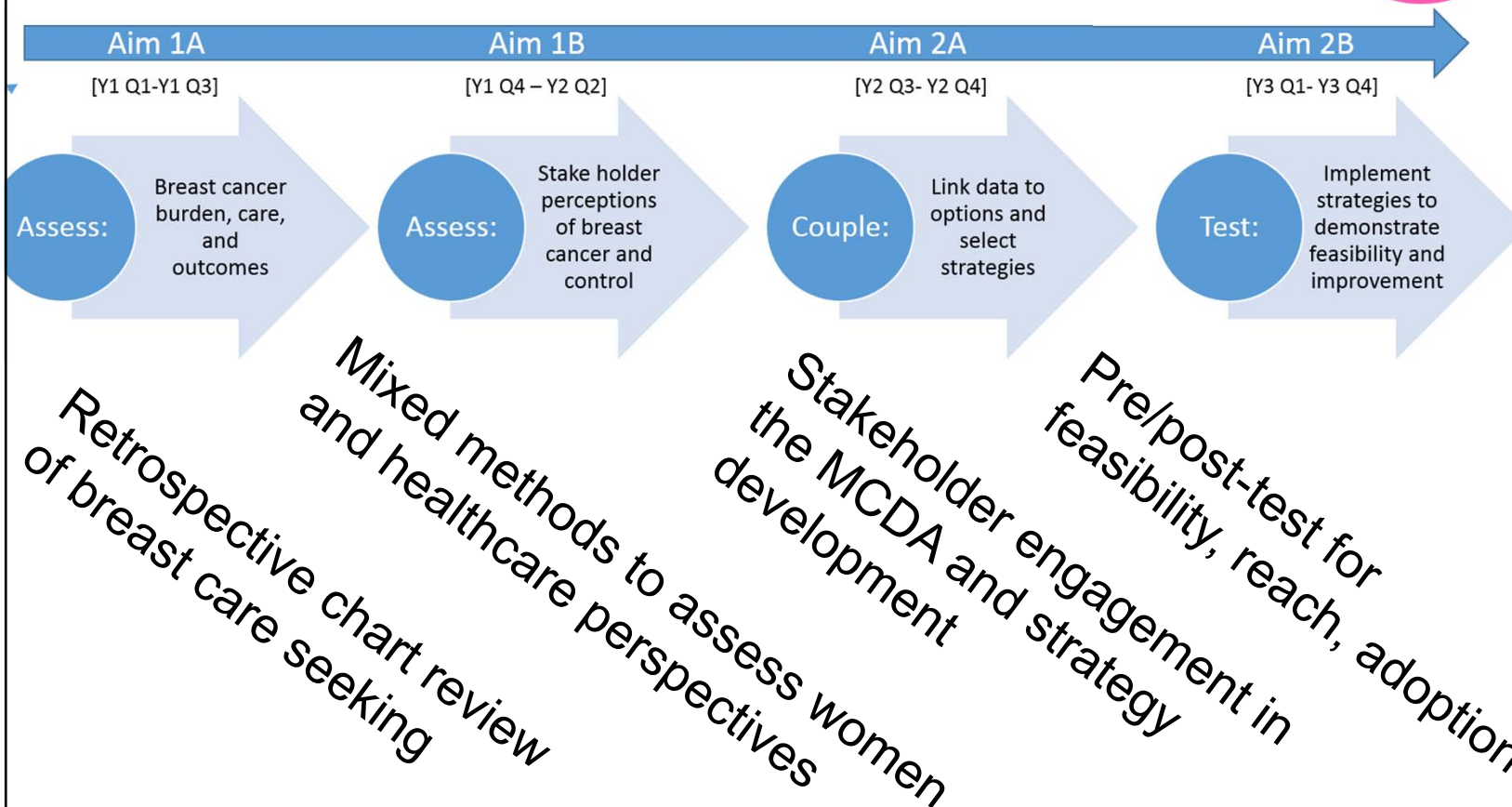
Test (implementation strategies)

The overarching goal of the study is to reduce breast cancer morbidity by developing a toolkit to design and implement contextually appropriate, stakeholder-driven, evidence-based programs for breast cancer control.



© 2008, Johns Hopkins University. All rights reserved.

Spectrum of Implementation science research methods



© 2008, Johns Hopkins University. All rights reserved.



Scenario analysis tool to facilitate intervention and implementation development

MODEL INPUT

| Model parameters | Value |
|--|---------|
| Target population screened | 25,000 |
| Screening interval | 5 years |
| CIN2+ prevalence | 0.03 |
| Percent of women screened | 0.4 |
| Percent of screen positives diagnostically triaged | 0.4 |
| Percent CIN2+ treated | 0.5 |
| Screening test sensitivity for CIN2+ | 0.5 |
| Screening test specificity for CIN2+ | 0.85 |
| Diagnostic test sensitivity for CIN2+ | 0.65 |
| Diagnostic test specificity for CIN2+ | 0.85 |

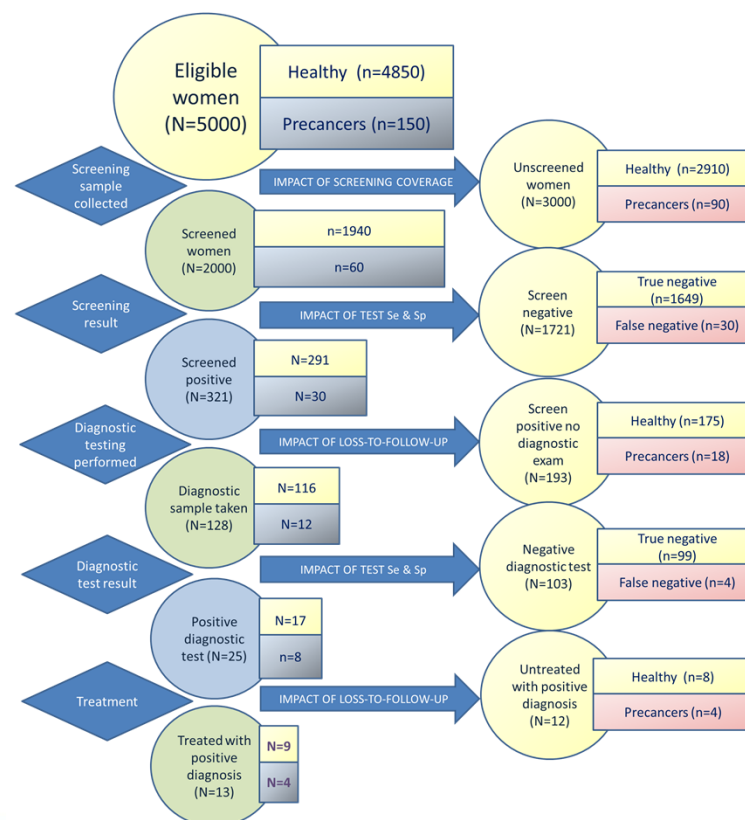
Define population

Define participation

Define test performance

**BALANCING PERFORMANCE
AGAINST IMPLEMENTATION
REALITIES IN LMIC SETTINGS
AN EXCEL-BASED SCENARIO IMPACT
ANALYSIS TOOL (SCIMAT) FOR DESIGN
OF CONTEXTUALLY APPROPRIATE
SCREENING STRATEGIES**

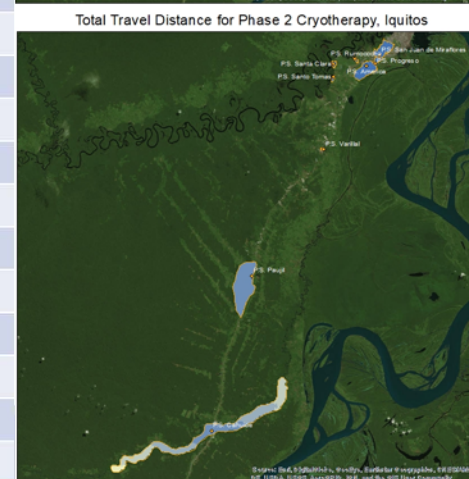
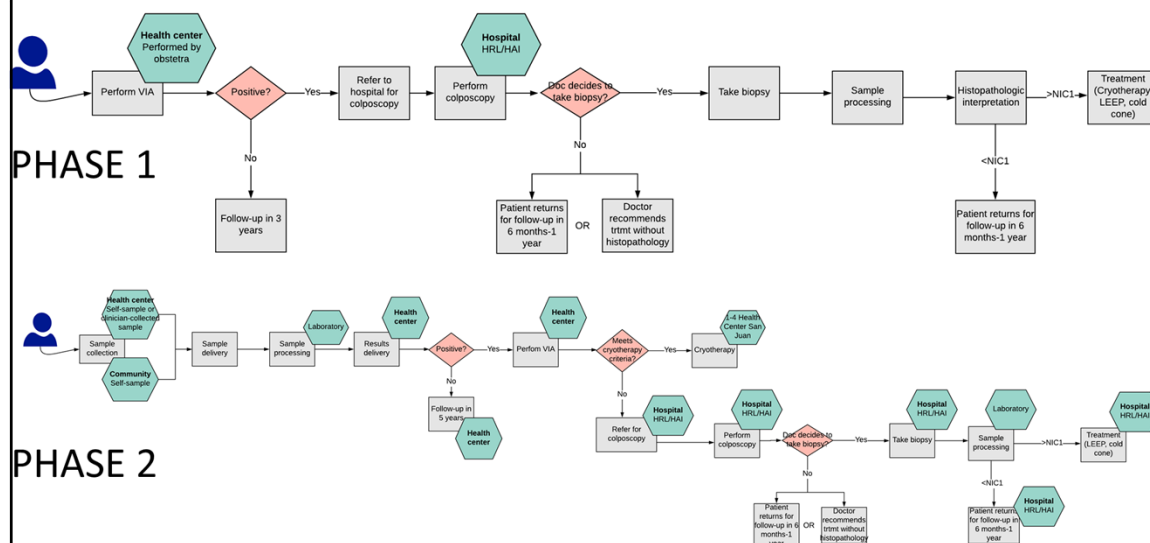
MODEL OUTPUT



© 2008, Johns Hopkins University. All rights reserved.

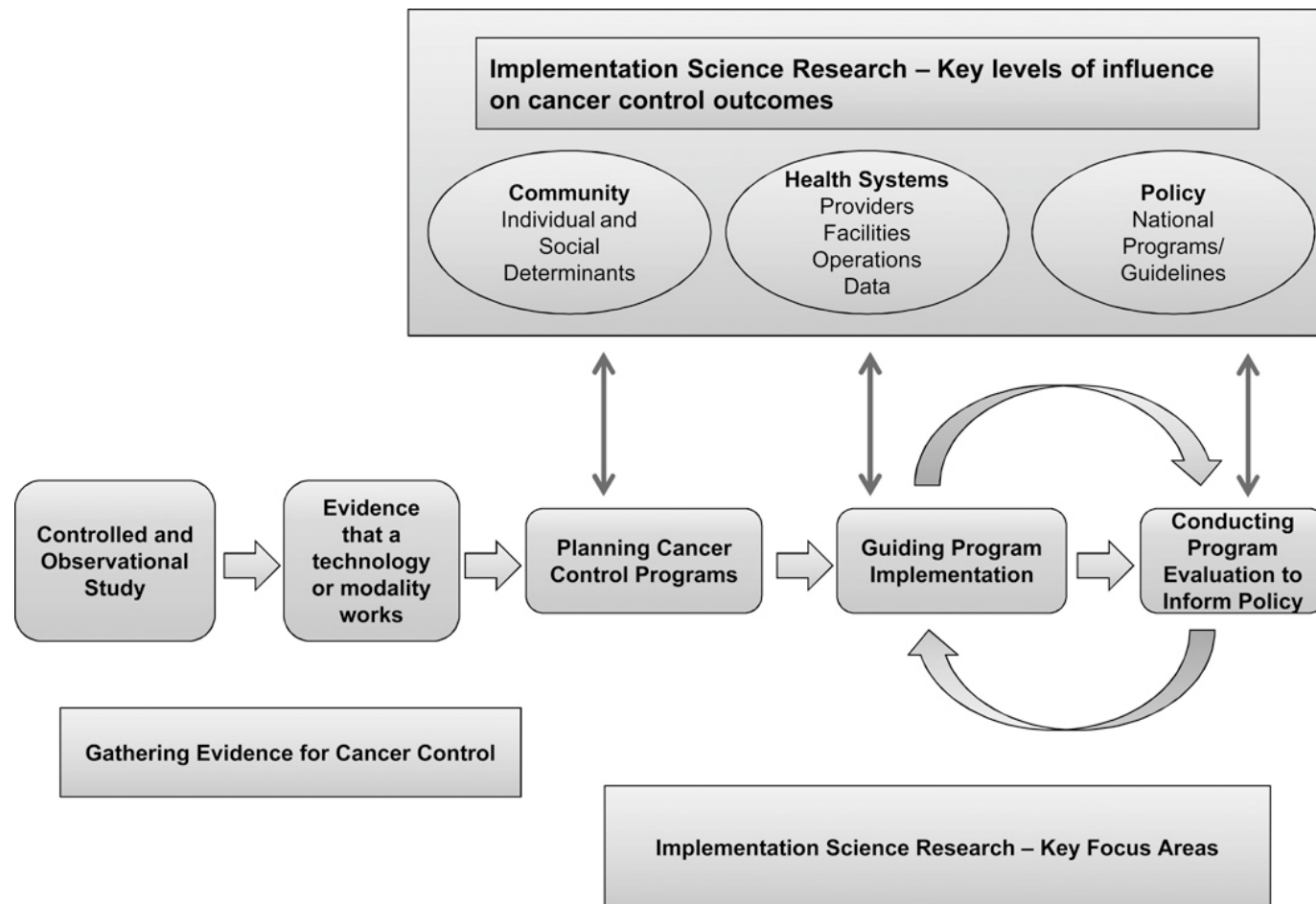


Process mapping → Patient T/C/D burden



| Phase 1: Cryotherapy | | | |
|----------------------|-------------------|---------------------|-----------------|
| Distance (km) | Active Time (hrs) | Passive Time (days) | Cost (sol) |
| 83.08 (104.52) | 14.22 (21.50) | 46.11 (79.85) | 220.97 (337.50) |
| Phase 1: LEEP | | | |
| Distance (km) | Active Time (hrs) | Passive Time (days) | Cost (sol) |
| 83.08 (104.52) | 14.22 (21.50) | 46.11 (79.85) | 300.37 (461.64) |
| Phase 2: Cryotherapy | | | |
| Distance (km) | Active Time (hrs) | Passive Time (days) | Cost (sol) |
| 17.65 (22.14) | 5.65 (9.47) | 36.23 (71.07) | 72.35 (108.90) |
| Phase 2: LEEP | | | |
| Distance (km) | Active Time (hrs) | Passive Time (days) | Cost (sol) |
| 26.21 (30.40) | 6.76 (11.01) | 36.27 (71.14) | 153.12 (234.69) |

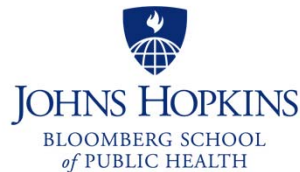
The role of implementation science



Sivaram, et al., **Cancer** Epidemiol Biomarkers Prev. 2014 Nov;23(11):2273-84



Thank you!
Merci!
Gracias!
Asante Sana!



© 2008, Johns Hopkins University. All rights reserved.



