Discovery to Scale Up
Implementation Science in Global Health

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Ariel Pablos-Mendez, MD, PhD, Robert Clay, MPH

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Goal of Implementation Science:

To accelerate the adoption and integration of evidence-based interventions to change practice patterns, health behaviors, and inform public health policy decisions that ultimately will lead to lasting health impact at scale.
(One) definition of implementation science

The application of systematic learning, research and evaluation to improve health practice, policy and programs.
Implementation science helps decision-makers to:

– Synthesize and organize information
– Develop, evaluate and select interventions
– Identify who can benefit most
– Understand context
– Adapt or adopt interventions
– Address barriers
– Assess fidelity
– Assess the global health impact
Paradigm for a “Discipline of Development”

Figure 1. Implementation Science Three Legged Stool

Generating knowledge
Using knowledge
Managing knowledge
Generating Knowledge: Implementation Research

REASONISTS?

THEY BELIEVE IN AN EVIDENCE-BASED WORLD, SOMETHING CALLED RATIONALISM. BUT IT'S A TINY GROUP, NOT SO INFLUENTIAL.
A typology of implementation research

• Research intended to create knowledge that is useful in many contexts

• Research on problems, solutions and delivery processes particular to a given country or place

• Research on the translational steps linking research results to adaptation and adoption in the field, to scale up
Using Knowledge: Knowledge Translation & Scale Up

Knowledge is power but Action gets things done
Knowledge Translation

The synthesis, exchange and application of knowledge by relevant stakeholders to accelerate the benefits of global and local innovation in strengthening health systems and improving people’s health (WHO 2006).
Managing Knowledge
Knowledge Management

KM comprises a range of strategies and practices used in an organization to identify, create, represent, distribute and enable adoption of insights and experiences. Such insights and experiences comprise knowledge, either embodied in individuals or embedded in organizations as processes or practices.
Challenges
How do we create world class information systems?
What is good evidence?
Once we identify evidence-based practices, how do we prioritize them for scale up?
What do we mean by scale up?

The process of taking one or more interventions with known effectiveness and introducing it (them) into a program delivery strategy designed to reach high, sustained and equitable population coverage at adequate levels of fidelity and quality. (Victora et al 2004, adapted by Stephenson, Clay and Pablos-Mendez 2013)
Mapping the Process of Scale Up: Developing a Theory of Change

"I think you should be more explicit here in step two."
Creating Conditions for Sustainable, Equitable Scale Up: Value Chains

- **POLICY**: formulation & implementation
- **COMMUNITY**: social co-productions
- **BEHAVIORS**: healthy lifestyle and adherence
- **PRACTICE**: clinical or organizational
- **TECHNOLOGY**: drugs, equipment, etc.
- **SYSTEMS**: finance, logistics, human resources, infrastructure, capacity, M&E
How do we develop an implementation science agenda?
Thank you
What is Implementation Science?

Bryan J. Weiner, Ph.D.
University of North Carolina at Chapel Hill
Roadmap

• How do domestic and global perspectives on IS differ?

• How is IS different from:
  – Process evaluation?
  – Improvement science?
  – Dissemination science?
  – Health systems strengthening?
View from NIH

- **Implementation** is the use of strategies to adopt and integrate evidence-based health interventions and change practice patterns within specific settings.

- **IS**: the scientific study of methods to promote the integration of research findings and evidence-based interventions into healthcare practice and policy. It seeks to understand the behavior of healthcare professionals and support staff, healthcare organizations, healthcare consumers and family members, and policymakers in context as key variables in the adoption, implementation and sustainability of evidence-based interventions and guidelines...
View from PEPFAR

• IS: the study of methods to improve the uptake, implementation, and translation of research findings into routine and common practices

• Scope: improve program effectiveness and optimize efficiency, including the effective transfer of interventions from one setting to another

• The PEPFAR IS Framework:
  – monitoring and evaluation
  – operations research
  – impact evaluation

KQs: Monitoring and Evaluation

1. Is the program being implemented as designed and planned?

2. Are inputs and outputs sufficient to achieve the desired outcomes?

3. Are program benefits getting to intended recipients?

4. Are expected program outcomes moving in the right direction?

KQs: Operations Research

1. What are the implementation problems exhibited by a particular project?

2. What are innovative solutions to deal with implementation problems?

3. What policies or service delivery models can improve effectiveness or efficiency?

4. What is the optimal allocation of resources for the program?

1. What would have happened had the intervention not taken place?

2. What was the impact of the intervention on beneficiaries?

3. How does the outcome among beneficiaries compare to the outcome among individuals who were not involved in the program?
View from WHO/TDR

- **Implementation** involves evidence-supported, systematic, and planned efforts within a **system (or organization)** to institutionalize an intervention and to ensure its intended effects and impacts.

- **Implementation research** asks: “What is happening in the design, implementation, administration, operation, services, and outcomes of social programs? Is it what is expected or desired? Why is it happening the way it is?”

- Implementation research does not isolate the effects from the **context**, thus distinguishing itself from clinical trials and impact evaluations.
Questions to Ponder

• Does IS include integration of evidence-based health interventions into informal settings (e.g., families)?

• Is patient adherence an implementation outcome?

• How about patient adoption of health behavior?

• Is dissemination science distinct from, or included in, IS?

• If context is an important aspect of IS, what is the role of the randomized controlled trial?
Reserve Slides
Am I Doing IS if I’m…

• Implementing evidence-based programs?
• Providing training or technical assistance?
• Building capacity?
• Doing quality improvement?
• Doing a process evaluation?

Answer: probably not… but could support IS
Learning while Doing

* Training, technical assistance, capacity building, quality improvement, etc....
Process Evaluation

• ...describe how program activities were delivered.
• ...determine the degree to which program activities were implemented as planned.
• ...assess link between program activities and outcomes.

• Useful for:
  – Monitoring, improvement, replication
  – Investigating dose-response relationship
Combining Process Evaluation and IS
Improvement Science

• **Quality improvement (QI)** uses quantitative and qualitative methods to improve the effectiveness, efficiency, and safety of service delivery processes and systems, as well as the performance of human resources in delivering products and services.

• **Improvement science**: a body of knowledge that describes how to improve safety and consistently.... the primary goal of this scientific field is to determine which improvement strategies work as we strive to assure effective and safe patient care.

Types of Outcomes in Implementation Research

**Implementation Outcomes**
- Acceptability
- Adoption
- Appropriateness
- Costs
- Feasibility
- Fidelity
- Penetration
- Sustainability

**Service Outcomes**
- Efficiency
- Safety
- Effectiveness
- Equity
- Patient-Centeredness
- Timeliness

**Patient Outcomes**
- Morbidity
- Mortality
- Health Status
- Quality of Life

*IOM Standards of Care*
Dissemination Science

• **Dissemination**: the targeted distribution of information and intervention materials to a specific public health audience or clinical practice audience

• **Core processes**: communication and social influence

• **Key outcomes**:
  – Awareness
  – Knowledge
  – Positive view
  – Intention to adopt
  – Adoption
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Health Systems Strengthening

- **Health systems strengthening**: (i) the process of identifying and implementing the changes in policy and practice in a country’s health system such that the country can respond better to its health and health system challenges and (ii) any array of initiatives and strategies that improves one or more of the functions of the health system and that leads to better health through improvements in access, coverage, quality, or efficiency.
Example

- FHI360: Health Systems Strengthening (HSS) Program Component of USAID/Senegal’s Health Program
- Aims:
  - Innovative financing mechanisms for health activities at decentralized levels,
  - Planning and evaluation of the health system at decentralized levels, and
  - Innovative strategies for financing HIV care and support through local health insurance schemes, micro-credit and a fund managed by regional administrative and technical institutions to promote sustainability.
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What are Implementation Frameworks & Strategies?

Gregory A. Aarons, Ph.D.
University of California, San Diego
Department of Psychiatry
Center for Organizational Research on Implementation and Leadership (CORIL)
Child and Adolescent Services Research Center (CASRC)

Implementation Framework:
- A proposed model of factors likely to impact implementation and sustainment of EBP
  (Aarons, Hurlburt, & Horwitz, 2011; Damschroder et al., 2009; Tabak et al., 2012)

Implementation Strategy:
- Systematic processes to adopt and integrate evidence-based innovations into usual care.
  (Powell et al., 2011)
Review of Models

(Tabak, et al., 2012)

Reviewed 61 models
- Models (aka “theories” or “frameworks”)

- Frameworks evaluated on:
  - Construct flexibility
    - Broad → highly operationalized
  - Focus on dissemination vs. implementation
    - D-only → D+I → I-only
  - Socioecologic framework level
    - Individual → Community → System

Most frameworks also are adapted or modified in practice

Common Elements of Frameworks

- **Multiple Levels**
  - Implementation occurs in complex systems
  - Need to identify concerns at different levels
    - System
    - Organization
    - Provider
    - Patient

- **Multiple phases**
  - Implementation occurs over time
  - There may be relatively discrete phases or stages
Multiple Levels in Quality Improvement

**Four Levels of Change for Assessing Performance Improvement**

1. **Larger System/Environment**
   - Reimbursement, legal, and regulatory policies are key

2. **Organization**
   - Structure and strategy are key
   - Cooperation, coordination, & shared knowledge are key

3. **Group/Team**
   - Knowledge, skill, and expertise are key

4. **Individual**

**Assumptions about Change**

- Reimbursement, legal, and regulatory policies are key
- Structure and strategy are key
- Cooperation, coordination, & shared knowledge are key
- Knowledge, skill, and expertise are key

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Outer Context

System

- Leadership
- Policy
- Packaging and use of research evidence
- Communications
- Collaboration/Negotiation
- Funding strategies


Inner Context

Organization
- Congruence of leadership
- Culture/climate for evidence-based care

Provider
- Local opinion leaders (formal/informal)
- Individual attitudes
- Perceptions of what is “expected, supported, rewarded”

Patient
- Advocacy/empowerment
- Competing demands
- Co-morbidities

### QuER-DM Implementation Framework

**CONTEXT**

ADDITIONAL FILE 2: Matrix of Constructs from Models in the Literature to CFIR Constructs

Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowey JC: Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science.

See Table 1 in main paper for full citations.

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</table>

Source: Damschroder et al., 2009
Consolidated Framework for Implementation Research (CFIR)

CFIR domains:

– Intervention characteristics
– Outer setting
– Inner setting
– Characteristics of the individuals involved
– Process of implementation

**Exploration, Preparation, Implementation, Sustainment (EPIS) Model**

- Key phases of the implementation process
- Multilevel
- Frames implementation factors *across levels within* each phase
- Enumerates common and unique factors *across levels and across phases*

**EPIS MODEL**

**EXPLORATION**

**OUTER CONTEXT**
- Sociopolitical Context
- Funding
- Interorganizational networks
- EBT Fit
- Internet use
- Insurance availability

**INNER CONTEXT**
- Organizational characteristics
- Individual adopter characteristics
- EBT fit with client characteristics
- Fiscal viability

---

**PREPARATION**

**OUTER CONTEXT**
- Sociopolitical
- Leadership at policy level
- Funding
- Interorganizational networks
- Availability of EBT materials

**INNER CONTEXT**
- Organizational culture and climate
- Leadership
- Staffing and staff characteristics
- EBT Fit
- EBT Adaptation
- Fiscal viability & resources
- Medication dose control
- Training availability

---

**IMPLEMENTATION**

**OUTER CONTEXT**
- Sociopolitical
- Funding
- Intervention developer engagement
- Leadership
- Interorganizational networks
- External ratings/report cards

**INNER CONTEXT**
- Organizational culture and climate
- Leadership
- Staff attitudes to EBT
- Individual adopter characteristics
- Incentivizing providers
- Fiscal viability
- Fidelity monitoring & support

---

**SUSTAINMENT**

**OUTER CONTEXT**
- Sociopolitical
- Funding
- Leadership

**INNER CONTEXT**
- Organizational culture and climate
- Training
- EBT fit
- Fidelity monitoring/support
- Staffing
- Child & parent outcomes
- Fiscal viability
- Technology supported practice

---


Implementation Strategies

- Address specific factors identified in implementation frameworks

    **Discrete** implementation strategies
    - Clinical reminders, training only

    **Multifaceted** implementation strategies
    - Training + reminders
    - Training + fidelity monitoring + coaching

    **Blended** implementation strategies (comprehensive)
    - Dynamic Adaptation Process strategy (DAP)
    - Leadership and Organizational Change for Implementation (LOCI)

---


# Domains of Strategies

<table>
<thead>
<tr>
<th>Type of Strategy</th>
<th>Description</th>
<th>Context Level</th>
<th>N</th>
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</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Info gathering, leadership, relationships</td>
<td>Outer/Inner</td>
<td>n=17</td>
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<tr>
<td>Education</td>
<td>Training, materials, influence stakeholders</td>
<td>Inner/Outer</td>
<td>n=16</td>
</tr>
<tr>
<td>Financing</td>
<td>Incentives, financial support</td>
<td>Inner/Outer</td>
<td>n=9</td>
</tr>
<tr>
<td>Restructuring</td>
<td>Change roles, create teams, alter record systems, create relationships</td>
<td>Inner/Outer</td>
<td>n=7</td>
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<tr>
<td>Quality Management</td>
<td>MIS + feedback, clinical reminders, decision support, PDSA cycles</td>
<td>Inner/Outer</td>
<td>n=16</td>
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<tr>
<td>Policy Change</td>
<td>Licensure, accreditation, certification, mandates</td>
<td>Outer/Inner</td>
<td>n=3</td>
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</table>

Questions for Discussion

- How are frameworks useful (or not)?
  - Are frameworks important for funding agencies (why or why not)
  - A theory of change or theory of what specific factors impact implementation effectiveness

- Is there a difference between a strategy and an intervention?
  - Clinical
  - Public health
  - Implementation

- Fidelity of what?
  - Intervention fidelity vs. implementation fidelity

- Implementation effectiveness vs. Intervention effectiveness

- To what degree is IS defined by what is funded and the perception of those decisions by others in the field
Contact

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Implementation Research in PMTCT

Laura Guay
Vice President for Research
Elizabeth Glaser Pediatric AIDS Foundation
Research Professor  GWU
Utilizing Routine PMTCT Monitoring Data for IR

- Advantage in large sample size and country wide distribution
- Does not require additional staff, data collection, or disruption of clinic flow
- However, often under-utilized resource; lessons can be learned from more analysis, better mining of existing data
- Need clear understanding of the indicators and definitions and the limitations of the data
### Testing Status of Infants

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<th>Status</th>
<th>Count</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Exposed infants</td>
<td>4226</td>
<td>97%</td>
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<tr>
<td>EID drawn</td>
<td>4099</td>
<td>70%</td>
</tr>
<tr>
<td>Results returned from lab</td>
<td>2895</td>
<td>70%</td>
</tr>
<tr>
<td>Tested positive</td>
<td>449</td>
<td>15%</td>
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<tr>
<td>Received results</td>
<td>230</td>
<td>51%</td>
</tr>
<tr>
<td>Enrolled in Care</td>
<td>200</td>
<td>87%</td>
</tr>
<tr>
<td>Initiated on ARV</td>
<td>178</td>
<td>89%</td>
</tr>
</tbody>
</table>

Overall, 633 infected children = 71% identified, 28% treated.
Courier service introduced

DBS taken
ger result back

Q4 09 Q1 10 Q2 10 Q3 10

infants enrolled
infantes initiated on ART

Attachment program
PO training

Clinical mentoring

Q4 09 Q1 10 Q2 10 Q3 10
Challenges in Utilizing Routine PMTCT Data for IR

- Missing Data/Data quality
  - Double counting (>100% variables)

- Lack of electronic individual patient level data
  - May improve with Option B+ (ART electronic records)

- Inability to link Mother-infant pairs

- Difficulty linking data across service delivery sites within a facility

- Health seeking across different health facilities
Designing IR within programs

- Time for developing relationships, understanding gaps being addressed, implementing and evaluating feasible solutions

- Balancing rigor with reality in study design, budget, timeline

- Different interpretations of human subjects research vs non-research determinations
The Pearl Study: Coverage Cascade

Stringer E et al *JAMA*. 2010;304(3):293-302
Challenges in conducting IR within PMTCT programs

- PMTCT field is continually evolving with changes implemented while studies in progress
- Multiple concurrent activities being done in field making attribution difficult
- “Protecting” study control sites interferes with program activities
- Changes in facility services, populations, or partner support during the study
Challenges in conducting IR within programs

- Enhanced “Hawthorne effect”, not just due to observation but also to additional data collection, particularly in control groups

- Clinical/ethical obligation to intervene when problems identified by study team, effect on interpretation of results

- Lack of program experience in human subjects protection regulations, IRB/regulatory delays
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<td>Routine VL testing not done</td>
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<td>Routine DBS not collected</td>
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<tr>
<td>Routine EID testing not done</td>
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<td></td>
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<tr>
<td>Routine HIV antibody testing not done</td>
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<td></td>
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<tr>
<td>Other routine laboratory tests not done</td>
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<tr>
<td>Specify ________________</td>
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<td>Missed visit for child follow-up not noted</td>
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<td>Program specified tracing of child not done</td>
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<td>Program specified tracing of mother not done</td>
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<td>Child growth faltering not identified</td>
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<td>HIV infected child not referred for care/ ART</td>
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<td>Appropriate ART not provided</td>
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Critical elements

• Close working relationship with Ministries of health, facilities, implementing partners, funders, IRB/ECs

• Careful consideration of potential obstacles during the planning process (and contingencies)

• Close monitoring of study progress and changes within the study environment
The Rang-Din Nutrition Study in Bangladesh

Implementation science- The Food And Nutrition Technical Assistance (FANTA) project’s experience

Zeina Maalouf-Manasseh
September 4, 2014
Longitudinal RCT

- Measuring effectiveness of home fortification for the prevention of malnutrition over the 1,000 days window of opportunity
  - Small quantity-Lipid-based Nutrient Supplements (SQ-LNS) for mothers & children
  - SQ-LNS for children
  - MicroNutrient Powders (MNP) for children
  - Control arm

- Main outcomes: maternal and child health and nutrition
Research setting

- Community Health and Development Program (CHDP) providing:
  - maternal health services during pregnancy,
  - delivery care,
  - postpartum care,
  - neonatal and child health services
Objectives of the Process Evaluation

• To identify the human and other resources required to deliver the products and the associated messages

• To assess the
  – reach
  – dose delivered
  – dose received
  – fidelity

of the intervention, in the context of the CHDP.
Traditional RCT framework

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<th>IMPACT</th>
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<td>Product supplied</td>
<td>Improved maternal nutritional status</td>
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<tr>
<td></td>
<td>Improved child nutritional status</td>
</tr>
</tbody>
</table>
## Study program theory framework

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>PROCESSES</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHDP Resources</td>
<td>Reach</td>
<td>Dose received &amp; Fidelity</td>
<td>Dose received</td>
<td>Improved maternal nutritional status</td>
</tr>
<tr>
<td>- Qualified and motivated staff</td>
<td>- Target population participates</td>
<td>- Product distribution regular and as intended</td>
<td>- Caregivers recall and understand messages</td>
<td></td>
</tr>
<tr>
<td>- Enough product supply</td>
<td>- Proper product transportation</td>
<td>- Message (frequency and content) delivery as intended</td>
<td>- Mother / child consumes product regularly</td>
<td></td>
</tr>
<tr>
<td>- Appropriate infrastructure</td>
<td>- Products stored as recommended</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Materials available</td>
<td>- Product distribution per protocol</td>
<td>- Improved maternal nutritional status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Appropriate equipment available</td>
<td>- Product delivered</td>
<td>- Improved child nutritional status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHDP Context</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Minimum staff turnover</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Appropriate supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Context

- Other CHDP standard messages
- Climate (e.g. rain season)
- Political situation (e.g. turmoil)
# Mixed Methods Process Evaluation

<table>
<thead>
<tr>
<th>Process component examined</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources</td>
<td>baseline and annual interviews, time and motion assessments</td>
</tr>
<tr>
<td>Physical resources</td>
<td>inventory checklists</td>
</tr>
<tr>
<td>Reach</td>
<td>training pre &amp; post-tests, beneficiary registers</td>
</tr>
<tr>
<td>Fidelity</td>
<td>storage register logs, product distribution register (quarterly)</td>
</tr>
<tr>
<td>Dose delivered/received</td>
<td>participant adherence assessment (mode of consumption, sharing, delivery mechanism), qualitative assessment of facilitators and barriers to practices</td>
</tr>
<tr>
<td>Context</td>
<td>baseline and periodic assessments of governance, management practices, HR, financial resources; mapping of community facilities GIS data</td>
</tr>
</tbody>
</table>
Data collection
Challenges

• Local capacity:
  – Lack of qualitative data collection and analysis experience
  – Lack of local research and research management capacity

• Local infrastructure:
  – Challenges reaching participants; procurement of vehicles
  – Internet connectivity is weak, transfer of data
  – Ensuring site security, electricity, ventilation

• Large volume of data
Lessons learned

• Detailed program theory framework
• Access to qualified staff, connectivity
• Map of the study area
• Plan for results sharing and reports
This presentation is made possible by the generous support of the American people through the support of the Office of Health, Infectious Diseases and Nutrition, Bureau for Global Health, U.S. Agency for International Development (USAID), under terms of Cooperative Agreement No. AID-OAA-A-12-00005, through the Food and Nutrition Technical Assistance III Project (FANTA), managed by FHI 360. The contents are the responsibility of FHI 360 and do not necessarily reflect the views of USAID or the United States Government.
Evaluation Designs for QI Interventions in Complex Settings

Pierre M Barker MD
Senior Vice President: IHI
Clinical Professor: Gillings School of Global Public Health
The Current State

“4 million women, newborns and children in sub-Saharan Africa could be saved every year if well-established, currently available, affordable health care interventions could be implemented across the region”

African Academies of Science, Accra, 2010
Where is the problem?

Basic science → Efficacy studies → Effectiveness Studies → Context-sensitive “real-life” implementation → Scale-up to populations

Implementation science
Quality Improvement: Bringing Together Two Types of Knowledge

**Evidence Based Subject Matter Knowledge**
- Protocols/Guidelines
- Clinical Training

the “what”

**Implementation Knowledge**
- Motivation/Leadership
- Efficient Systems
- Accurate Reflective Data
- Context-sensitive learning

the “how”
Improvement: Bringing Together Two Types of Knowledge
Case Example: PMTCT Scale-up in South Africa
Implementation and Scale-up of Effective Perinatal PMTCT in 3 Districts (S. Africa)

3 Districts,
- pop 5.5 million,
- 202 clinics,
- 18 hospitals

Project Aim:
Decrease MTCT to <5% between 2008 and 2011
Essential QI Methods

The “Gap”

Generating and testing local solutions to close performance gaps

Context-sensitive learning systems to accelerate local solutions to close performance gaps:

Local leadership
Implementing and Scaling up PMTCT in 3 Districts of KZN Province South Africa

Cluster randomized design

Randomization Unit:
Nurse supervisor plus 6 – 10 clinics

Research Questions:

1. Could a QI intervention lead to district-wide improvements in PMTCT care and outcomes?
2. Was there added value associated with clinic participation in a Collaborative Learning Networks?
Cluster Randomization with Step Wedge design

48 Clusters

24 Intervention

24 Control

Wave 1: 9 intervention; 9 Control

Wave 2: 8 intervention; 8 Control

Wave 3: 7 intervention; 7 Control
Cluster Randomized Design

Intervention 1
QI alone

Intervention 2
QI plus collaborative learning network
1st issue: Can you believe the data?
2nd issue: Integrity of fixed protocol

- Lack of design flexibility to take account of variation in district leadership abilities
- Design ignored natural referral linkages (usually within sub-district, but often across district borders)
- Unable to adapt design to changing realities (e.g. elimination of nurse supervisor position in one district)
- Randomization forced participation of the “unwilling” and denied participation of the “willing”
- Major impact on study staff morale
Other Issues

- Focus of intervention on clinics vs District Management team
- Contamination everywhere (district-wide supports were being improved)
- Multiple external improvements driving change (not just QI)
DSMB Review - Project Reset

- RCT abandoned – replaced with adaptive design (different for 3 districts).
- Re-designed “change unit” to account for natural referral patterns
- Pace and design of scale-up adapted to district capabilities
- Closer working relationship with District Managers
- Improved data Feedback system
Project Reset: adaptable design

District 1

All subdistricts had hospital and facilities learning network

District 2

Sequential hospital and facilities subdistrict learning network

District 3

Focus on only one hospital/facilities learning network
Adaptive design – 3 districts, 3 designs

Rates of HIV testing of Pregnant Women in Three Districts

- Ugu
- Umgungundlovu
- eThekwini

- Project launch
- Umgungundlovu redesign
- eThekwini redesign
- Active project support ends

Performance Target 90-110%
Using Counterfactuals (whole district comparisons)

Ngidi et al. J Acquir Immune Defic Syndr 2013;63:e133–e139
Eliminating MTCT:
HIV positive rates for infants tested at 6 wks

**Policy:** New protocol introduced: HAART if CD4<350

**Health System/QI:** HIV testing>95% pregnant women in all 3 Districts

**Health Systems/QI:** Starting mothers on HAART reaches 90% in 3 Districts

**Training/decentralization**
Nurses at PC clinics trained in providing ARVs
Conclusions/Questions

- Are cluster randomized designs appropriate for QI studies in complex settings?
- Can/should CRDs be applied within districts?
- Are counterfactuals needed in QI research?
- Are time-series plus step wedge designs sufficient for QI research in complex settings?
- Was this CRD attempted too early - would it have succeeded with a mature implementation change package?
A case report of evaluating a large-scale health systems improvement project in an uncontrolled setting: a quality improvement initiative in KwaZulu-Natal, South Africa

Kedar S Mate,1,2 Wilbroda Hlolisile Ngidi,3 Jennifer Reddy,3 Wendy Mphantswe,3 Nigel Rollins3,4 Pierre Barker1,5

Conventional evaluations of improvement interventions: more trials or just more tribulations?

Kaveh G Shoiania

BMJ Qual Saf published online September 27, 2013
doi: 10.1136/bmqs-2013-002377
Thank You!
Implementation and Scale-up Framework

Best Practice exists
New Scale-up Idea

Set-up
Build Prototype
Test Scale-Up
Go to Full-Scale & Sustain

Foster Adoption

Leadership
Learning Systems
Infrastructure for Scale-up
Human Capacity for Scale up

Phases of Scale-up
Adoption Mechanisms
Support Systems
AMDD experience with implementation research: Partners in the Staha Project

Kate Ramsey
Implementation Science Symposium, FHI360
4 September 2014
The Staha Project

1. Determine the nature, types, and prevalence of D&A in childbirth
2. Develop and validate tools for assessing D&A
3. Identify and explore the potential drivers of D&A
4. Design, implement, monitor and evaluate the impact of interventions to reduce D&A
5. Document & assess the dynamics of implementing interventions to reduce D&A and generate lessons

Increase facility-based delivery
Reduce the % of women reporting any form of D&A
Consensus building on norms and standards

Multi-level activation of mutual respect norms

District and facility management policy and practice changes

Community-driven actions to support and monitor system

Facility-based QI process to change environment/practice

Improved outcomes

Increased mutual respect

Increased facility-based delivery
Reduced D&A during childbirth

STAHA CHANGE PROCESS
The Partners

- Ifakara Health Institute (IHI)
- Averting Maternal Death & Disability Program (AMDD), Columbia University Mailman School of Public Health
- Tanzanian health system
Opening the Black Box

- Mistakes
- Misconduct
- Failure
- Neglect
Opening the Black Box

- Mistakes
- Misconduct
- Innovation
- Neglect
- Champions
- Good practices
- Failure
- Successes
Norms

Evidence

Values/beliefs around the problem
Defining disrespect and abuse in facility-based childbirth

Defining disrespect and abuse (D&A) in facility-based childbirth involves poor care caused by system deficiencies that is considered normal and acceptable. This includes behaviors that women consider D&A but providers do not, as well as behaviors that all agree are D&A. Normalized D&A refers to behaviors that women consider normal/acceptable, while initial intervention targets are aimed at improving care standards. Prevalence measures are used to assess the extent of D&A, with policy advocacy aimed at addressing the issue at the structural and policy levels.
Structures

Hierarchy

Silos
Resources

Financial

Human
I know I am talking to you here as researchers but I believe that this message may go further. I would like to request the government to make sure that it implements its policies because ensuring the implementation of its policies is how it gains the trust of the community. But if the government does not fulfill its promises to the community it’s obvious that the community will no longer have trust in it.

Charter Drafting Committee Member, Korogwe
THANK YOU!
Introducing Innovations to Fragile Health Systems: The Case of HIV-Family Planning Service Integration

Theresa Hoke, PhD, MPH
Director, Health Services Research
FHI 360
Health System Building Blocks

- Service Delivery
- Health Workforce
- Medical Products
- Information
- Leadership and Governance
- Financing
“Optimize PEPFAR as a platform to incorporate and integrate other essential health services for women, including the integration of HIV and family planning (FP) services....”
• Articles on 2 trials testing service delivery interventions

• Systematic review of 12 additional studies
  • 5 of 12 studies conducted in context of clinical trials
  • Only 5 articles reported process data
Promoting long-acting and permanent methods to PMTCT clients in Cape Town

- PEPFAR-funded provider training in FP for HIV+ women
- Training: IUD insertion
- Coaching
- Counselling aids
- IUD insertion equipment
- Reinforced referrals for sterilization
### Results: Survey with Postpartum PMTCT Clients

<table>
<thead>
<tr>
<th></th>
<th>Pre-intervention (n=265) %</th>
<th>Post-intervention (n=266) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desire future pregnancy</td>
<td>11</td>
<td>15</td>
</tr>
</tbody>
</table>

**CURRENT METHOD AMONG FP USERS**

<table>
<thead>
<tr>
<th>Method</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>IUD</td>
<td>0</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Sterilization (F)</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Condoms (M/F)</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Injectables</td>
<td>86</td>
<td>86</td>
</tr>
</tbody>
</table>

**PROVIDER HAS TALKED TO YOU ABOUT…**

<table>
<thead>
<tr>
<th>Method</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>IUD</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Female sterilization</td>
<td>28</td>
<td>36</td>
</tr>
</tbody>
</table>
## Intervention Tracking Tool

<table>
<thead>
<tr>
<th>Intervention components as planned</th>
<th>Activities as actually implemented</th>
<th>Contributions of individuals and organizations</th>
<th>Considerations for replication/expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERVENTION COMPONENT 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTERVENTION COMPONENT 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td></td>
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<tr>
<td>INTERVENTION COMPONENT 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Process Evaluation Findings

• Training providers to provide new methods was challenging
  – Inadequate foundation of FP knowledge
  – Incomplete participation in classroom sessions on the IUD
  – Low client recruitment for on-the-job practicum
  – Some providers lacked confidence to counsel on sterilization

• Training not reinforced with changes to service delivery procedures

• Routine supervisory system inadequate

• Coaching: Some providers were not inclined to take on additional responsibilities

(Hoke et al. BMC Reproductive Health, 2013)
Promoting Family Planning Use by Care & Treatment Clients through Constructive Male Engagement

• Provider training:
  ❖ FP for HIV+ women
  ❖ Gender

• Mentoring

• Clinic adjustments
  ❖ To accommodate FP counselling
  ❖ To engage men

• Counseling flipbook
### Results: Survey with Care & Treatment Clients (Intervention Group)

<table>
<thead>
<tr>
<th></th>
<th>Pre-intervention (n= 416) %</th>
<th>Post-intervention (n=330) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desire future pregnancy</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td><strong>CURRENT FP USE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual method use</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>FP method other than condoms</td>
<td>56</td>
<td>49</td>
</tr>
<tr>
<td><strong>SERVICES RECEIVED</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider talked about FP</td>
<td>18</td>
<td>35</td>
</tr>
<tr>
<td>Offered couple’s counselling on FP</td>
<td>30</td>
<td>43</td>
</tr>
</tbody>
</table>
Process Evaluation Findings

- Learning needs surpassed time allotted for training
- Need for ongoing mentoring greater than anticipated
- Commodity stock-outs
- High client volume and health worker shortage
- Low morale
WHO Health System Building Blocks

- Service Delivery
- Health Workforce
- Medical Products
- Information
- Leadership and Governance
- Financing
### Recommended targets for future research on HIV-FP integration

<table>
<thead>
<tr>
<th>Category</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Delivery</td>
<td>Improve client flow</td>
</tr>
<tr>
<td>Health Workforce</td>
<td>Motivate providers</td>
</tr>
<tr>
<td>Medical Products</td>
<td>Reinforce commodity management</td>
</tr>
<tr>
<td>Information</td>
<td>Track performance</td>
</tr>
<tr>
<td>Leadership and Governance</td>
<td>Translate policy guidance into performance expectations</td>
</tr>
<tr>
<td>Financing</td>
<td>Deliver services in a way that’s affordable to facilities and clients</td>
</tr>
</tbody>
</table>
IMPLEMENTATION SCIENCE AND FAMILY PLANNING AND REPRODUCTIVE HEALTH: CHALLENGES AND OPPORTUNITIES

Laura Reichenbach,
Deputy Director for Research, Evidence Project

Implementation Science in Global Health: Maximizing Impact in an Imperfect World
September 4, 2014
5 + 5 Project on Implementation Science to Improve FP/RH

With a University Research Network:
Columbia, Washington, LSHTM
The Evidence Project
Conceptual Framework of Implementation Science (IS) Priorities

**Supply**

- Expanding Method Access and Choice
- Improving FP program approaches for youth
- Using IS to accelerate efficient and sustainable scale up of proven FP practices

**Cross-cutting**

- Ensuring Equity
- Implementing Rights-based Programming
- Promoting Accountability Mechanisms
- Promoting Gender Transformative Approaches, including male engagement

**Demand**

- Fostering positive norms around contraceptive behaviors, particularly among youth
Implementation Science

“Application of systematic learning, research and evaluation to improve health practice, policy and programs” (USAID, GH, n.d.)
IS Challenges and Opportunities

- Research protocol development
- Evidence utilization
- Scale up
- Capacity building and local ownership
IS Challenges and Opportunities

- Research protocol development
- Evidence utilization
- Scale up
- Capacity building and local ownership
Research protocol development

Challenge of studying Implementation

- What is the state of the science?
- Need for repository of examples
- What are the practical linkages with program M&E?

Specify in protocol development
Engage stakeholders in protocol development
Need for models and examples

Data utilization
IS Challenges and Opportunities

• Research protocol development

• Evidence utilization

• Scale up

• Capacity building and local ownership
Selected USAID-funded FP/RH Projects with a Focus on Evidence Generation and/or Use (over 3 decades)

- FRONTIERS (Operations Research)
- MORE (Maximizing Results of OR)
- Data for Decision-making
- E2A Project (Evidence to Action)
- MEASURE Evaluation (data demand and use)
- PROGRESS in Family Planning
- The Evidence Project (evidence generation, translation and use)
Conceptual Framework of the Role of Evidence in Decisionmaking

Source: Cookson, 2005.
Synthesis on evidence use

What do we mean by evidence and what evidence is there that evidence is used in decision-making?

How can we make sure that research evidence plays a bigger role in decision-making vis-à-vis other factors?
Conceptual Framework of the Role of Evidence in Decisionmaking

Source: Cookson, 2005.
IS Challenges and Opportunities

- Research protocol development
- Evidence utilization
- Scale up
- Capacity building and local ownership
Key Research Questions for Scale Up

- What are facilitating factors to scale up?
- What characteristics of implementation foster its success for scale up?
- What health systems and contextual factors are essential to scale up?
- How can we achieve scale at a faster pace?
IS Challenges and Opportunities

• Research protocol development

• Evidence utilization

• Scale up

• Capacity building and local ownership
NEW DIRECTIONS IN IS AT USAID

Joseph F. Naimoli
Health Systems Research Advisor
Office of Health Systems
USAID
Implementation Science Course
Washington
August 8, 2014

ROLE OF EVIDENCE IN POLICIES, PROGRAMS & PRACTICES

Karen Hardee, Project Director
Intensive Course on Implementation Science for Family Planning and Reproductive Health
UW, Seattle WA
August 4-15, 2014
Capacity building and local ownership

• **Intensive course in IS for Family Planning and Reproductive Health**
  – Whose capacity? In what?
  – Build on legacy of existing work
  – Consider new models and approaches

• **How to foster local ownership?**
  – Time constraints
  – Capacity issues
  – Requires continued investment and commitment
IS Opportunities

• Research protocol development

• Evidence utilization

• Scale up

• Capacity building and local ownership
The Evidence Project is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of cooperative agreement no. AID-OAA-A-13-00087. The contents of this presentation are the sole responsibility of the Evidence Project and Population Council and do not necessarily reflect the views of USAID or the United States Government.

The Evidence Project seeks to expand access to high quality family planning/reproductive health services worldwide through implementation science, including the strategic generation, translation, and use of new and existing evidence. The project is led by the Population Council in partnership with the INDEPTH Network, the International Planned Parenthood Federation, Management Sciences for Health, PATH, and the Population Reference Bureau.
IMPLEMENTATION RESEARCH

Gina Dallabetta
Senior Program Officer, HIV/Integrated Delivery

FHI 360 Meeting
September 4, 2014
OVERVIEW OF PRESENTATION

• Examples of foundation work
• Deep dive into one example, Avahan
• Concluding remarks
Foundation does not classify grants as Implementation Research

Wide variety of opinions regarding Implementation Research (very informal survey)

- “My experience is that much of what is being called implementation science is really just process evaluation of health interventions. It is actually disappointing to see that many of the counterfactual-based methods used in health are ignored once a question moves into the “implementation” realm.”

- “Is it the same as operations research?”

- “It is implementation analysis to inform and guide the scale up of programs.”
“Existing interventions have potential to cost effectively avert most neonatal and maternal deaths. The barriers that are preventing these life-saving interventions from reaching people who need them are primarily implementation barriers and often not technical barriers.”

“Life-saving drugs and vaccines, and diagnostic tools are expensive in the developing world, can take years to introduce, and are difficult to make widely available.”
SOME EXAMPLES OF FOUNDATION GRANTS ADDRESSING SCALE

- Malaria Control and Elimination Partnership in Africa (MACEPA)
- Better Immunization Data (BID)
- Demand creation for Voluntary Medical Male Circumcision (VMMC)
- Reduction of Maternal and Infant Mortality in Bihar (Ananya)
- Reducing infant mortality through Kangaroo Mother Care
OVERVIEW OF PRESENTATION

• Examples of foundation work
• Deep dive into one example, Avahan
• Concluding remarks
AVAHAN I - SNAPSHOT

- **High risk groups**: FSW – 220,000, MSM / TG – 80,000, PWID – 18,000
- **Men at risk**: 5 million

**Combined State Population**: ~ 300 million

**Investment**: US$ 235 million

6 states, 82 districts

- 6 states, 82 districts
- Combined State Population: ~ 300 million
- High risk groups covered:
  - FSW: 220,000
  - MSM / TG: 80,000
  - PWID: 18,000
- Men at risk: 5 million
AVAHAN’S GOALS OVER A 13 YEAR PERIOD

**Disseminate learnings**
- Actively foster opportunities for creating learnings from Avahan
- Disseminate learnings through a wide variety of mechanisms and fora

**Build / Operate HRG prevention program at scale**
- Demonstrate program at scale with coverage, quality
- Document declining HIV infection trends in core, bridge, general population

**Transfer program to government, other stakeholders, communities**
- Sustain funding / management without program disruption
- Strengthen communities to sustain transition post-handover

**Disseminate learnings**
- Actively foster opportunities for creating learnings from Avahan
- Disseminate learnings through a wide variety of mechanisms and fora

**Sustainable communities**
- Strengthen CBOs to sustain strong HIV response

---

Avahan I
2004 ----

Avahan II
-----2008----

Avahan III
----- 2017----
PHASE I DESIGN (2003-2009)

- **Focused Prevention (57%)**
  - High Risk Groups in 6 States
    - Female Sex Workers, high-risk MSM / transgenders, PWIDs
  - Male Clients of Sex Workers
    - Truckers on National Highways, Hotspots in 4 States

- **Communication for Social Norm Change (3%)**

- **Advocacy (7%)**

- **Best Practices Transfer (18%)**

- **M&E, Dissemination (15%)**

- **The Prevention Package**
  - Outreach, Behavior Change Communication
  - Commodities (condoms, lubricants, needles)
  - Clinical services for STIs + counseling
  - Case managed approach to referral - TB, HIV testing, ART
  - Local advocacy – police sensitization, crisis response, community advisory committees
  - Community mobilization

100% -- US$ 235 Million
AVAHAHAN IMPACT EVALUATION QUESTIONS

Scale / coverage / quality / costs

- Are services adequate (~80% of population) over time?
- What were the costs?
  - If not, how to improve?
  - If adequate, then

Epidemic impact

- Increase in condom use in high-risk groups?
  - If not, why not?
  - If yes, then
- Reduction in STI and new HIV in high risk groups.

- Decrease in HIV in general population?
  - If not, why not?
  - If yes, then

- Can be attributed to high-risk group interventions?
  - If not, why not?
  - If yes, then

- What was Avahan’s contribution?

Cost effectiveness

- Cost effectiveness high-risk groups reached?
- Cost effectiveness of infections averted?
- Cost efficiency of the various service components?
Declines in HIV prevalence in ANC clinics in four southern states *

Karnataka

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
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</thead>
<tbody>
<tr>
<td>ANC</td>
<td>1.4</td>
<td>1.5</td>
<td>1.51</td>
<td>1.41</td>
<td>0.91</td>
<td>0.91</td>
<td>0.81</td>
<td>0.4</td>
</tr>
<tr>
<td>PPTCT</td>
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Maharashtra

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Andhra Pradesh

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Tamil Nadu

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* As measured in antenatal clinics (ANC) consistent sites

Source: National AIDS Control Organization (NACO) HIV Sentinel Surveillance
Indian context:

- Key population programming priority for GoI.
- GoI under NACP-II investing in NGOs for prevention.
- Routine KP surveillance, enumeration exercise, behavioral survey.
- Comprehensive TI strategy.
- Long history of participatory development approaches and global model for FSW – Sonagachi.
- Nonetheless, significant stigma, violence, low social status of target population.

Avahan context:

- NGO program
- Completely outside government
- “Sufficient” funding
- Controlled all elements of intervention
ELEMENTS OF SCALE-UP – DATA USE, REFINEMENT, PUSHING DATA USE DOWN TO FRONTLINES

**Design**

- District level mapping for hot spots and size estimates – largest first
- Site level mapping for outreach and service placement
- Network mapping to assign peer outreach worker to clients
ELEMENTS OF SCALE-UP – DATA USE, REFINEMENT, PUSHING DATA USE DOWN TO FRONTLINES

- Common minimum program with targets
- Phase specific indicators
- Routine MIS
- Use at all levels (informed through mentoring)
- Intensive field engagement, regular reviews at all levels
THE COMMON MINIMUM PROGRAM

Define set of activities to be accomplished by all implementers in areas:
• Community mobilization
• Advocacy
• Communication for behavior change
• Clinical services
• Monitoring for management
• Management

Basis for indicators and data review in supervision visits

• Informed by program experience
• Mechanism for program learning (most changes in CM section)
• Set standards but allowed for innovation

Additional learning mechanisms established later in project.
ROUTINE MIS DATA AND PROGRAMMING DECISIONS – EARLY EXAMPLE

Background:
Avahan offers free condoms to high risk groups

Data:
<50% of condoms distributed by 1200 peers
>50% of condoms distributed by 131 NGO staff

Relevance:
Scaling and speeding condom distribution

Investigation:
Lack of trust
Lack of confidence in peer educator ability
Concern for position

Action:
Skill building / tools for peers
Coaching for NGO staff
PEER OUTREACH WORKERS BECAME DATA USERS AND CASE MANAGERS
OUTREACH CONTACTS INCREASED WITH MICROPLANNING

Monthly outreach
Total reached climbed steadily as peers skills enhanced

Target 100% per month
Peers contact
Micro-planning enabled peers to do the bulk of the outreach

Source: Avahan program data for FSW and MSM/TG for the four southern states (Andhra Pradesh, Karnataka, Maharashtra, and Tamil Nadu)
SERVICE UTILIZATION INCREASED WITH MICRO-PLANNING

Condom distribution
Steady rises since peers began doing bulk of outreach

Clinic attendance
Rose and stayed steady since micro-planning introduced

Source: Avahan program data for FSW and MSM/TG for the four southern states (Andhra Pradesh, Karnataka, Maharashtra, and Tamil Nadu)
AVAHAH KEY DISSEMINATION MILESTONES 2004-14

- IHME Avahan evaluation results
- Avahan impact dissemination Sept 2012
- Avahan impact paper 2013
- Avahan cost/CEA paper 2014

- Phase I
  - 2004-2008
  - EAG 1-6

- Phase II
  - 2009-2014
  - EAG 7-8

- Elements replicated in ongoing normative guidance revision.

- Foundation staff and partners on operational manual development and training material
- National TSU (staffed from partners)
- Government Capacity Building Support (state and national)
- International dissemination
- Programs aligned with NACO model
- Phased transition of programs to government Management and support

- NACP-III
- Planning
- Phase I
  - 2004
  - Phase II
  - 2005-2014

- SWIT Published
- Elements replicated in ongoing normative guidance revision.
# DISSEMINATION AND INFLUENCE

## Within India
- “Inside track” communication
- Enough experience at the right policy window.
- Avahan was successful at what India aspired to do
- Significant investment to help operationalize the design with Avahan approaches.

## Global
- Publication of evaluation results and programmatic learnings in peer reviewed publications, monographs, tools.
- Incorporation of learnings into global manuals and protocols
- Support for replication of elements in other countries
- Former partners and employees in key positions
TENSIONS IN OUR MEASUREMENT LEARNING, AND EVALUATION WORK…

**Proving Impact**
- Controlling through M&E (it’s for us)
- Using only High Quality Data (doing it ourselves)
- Using MLE to enforce fidelity
- Keeping accountability on process and activities

**Improving Programming**
- Building ownership through M&E (it’s for them)
- Integration with Govt system (building on, using, and strengthening)
- Building in, and anticipating, multiple paths to the goals
- Keeping Attention on Outcomes

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CONCLUSIONS

1. Goal of IR should contribute to implementation / policy issues relevant to the country. Global learning is a secondary benefit.
   - Most implementation issues are context specific
   - Good documentation is necessary to “extract” global learnings

2. Improving routine data systems in countries is critical for IR
   - To identify implementation issues, local innovations
   - Key data source for implementation research
   - Improve country management
     - Use doesn’t just happen, it needs to be facilitated
     - Strengthen connection between analysis and action
     - Using data improves data, improved data is more likely to be used
   - Single view of data is important
CONCLUSIONS

3. Dissemination and influence → program change is complex

- Important to be aware of policy windows in countries
- For most interventions, policy makers, implementers and managers need evidence of improvement (less uncertainty), not proof (certainty).
- Even “simple” changes need support for institutionalization

- International processes currently require peer reviewed publications:
  - WHO – GRADE evidence
  - Cochrane reviews – prefers RCTs
IMPLEMENTATION RESEARCH AND EVIDENCE GEEKS

A call for unity!

Dr Kirsty Newman
International Conference on Evidence-Informed Policy, Nigeria 2012
“...the two facets of organizational readiness for change--change commitment and change efficacy--are conceptually interrelated”


I am familiar with the term 'implementation science/research'?

Answered: 30    Skipped: 0

- Yes I have heard of it and I know what it means
- Yes I have heard of it but I am not sure what it means
- No I have not heard of it
What can we evidence geeks offer you?

- Focus on the ‘demand-side’
- Tips on getting implementation science into use
- Lots of guinea pigs to study!
Supply

I wish my research would change the world....
Demand/Usage

I wish I had some evidence to inform my decision...
Usage
Decision makers routinely use the empirical evidence which is available

BROKERING
Decision makers have access to overviews of the body of evidence

SUPPLY
Empirical evidence is generated and communicated effectively

Poverty reduction and improved quality of life

Policy and practice informed by empirical evidence

Capacity exists to generate empirical evidence
Generation of new evidence builds on existing knowledge and respond to user needs
Empirical evidence is made available and accessible
Rigorous synthesis of empirical evidence is carried out
Evidence-informed debates are facilitated
Decision makers have the incentives and motivation to make use of empirical evidence
Decision makers have the capacity and systems to use empirical evidence
‘Research advisors’ picking correct definition of research terms
Identifying scientific consensus

Human contribution to climate change?

HIV created by CIA?
RESEARCH UPTAKE

A guide for DFID-funded research programmes

Last updated May 2013
RESEARCH PROGRAMME

Stakeholder engagement
- Initial mapping of relevant stakeholders and context
- Tailoring research design to meet user needs
  - Interactive discussions of research results
  - On-going stakeholder engagement

Capacity building
- Assess existing capacity internally and externally
- Continually monitor capacity and modify capacity building strategy accordingly
  - Design and implement capacity building strategy

Communicating
- Design initial communication strategy
  - Package and disseminate emerging results
- Rigorous synthesis
  - Adapt communication strategy based on emerging results

Monitoring and evaluating uptake
- Design research uptake objectives and ensure they are reflected in logical framework
  - Gather data on uptake
  - Adapt research uptake objectives based on emerging results
Building Capacity to Use Research Evidence (BCURE) Programmes
What can implementation research offer to the evidence geeks?

- Contribute to global discussions on evidence-informed policy/practice
- Provide evidence to inform practice of ‘evidence geeks’
- Help us get better at evaluating efforts to get research into use
Thanks!

- Evidence-based policy in development network [https://partnerplatform.org/ebpdn/](https://partnerplatform.org/ebpdn/)
- My blog [http://kirstyevidence.wordpress.com/](http://kirstyevidence.wordpress.com/)
- Evidence into Action twitter @DFID_Evidence
- My twitter @kirstyevidence