Putting complexity into practice:
Tools for complexity-aware monitoring, evaluation, and learning

Susan Igras, Independent Consultant | Paul Fast, Mennonite Central Committee
CORE GROUP Global Health Practitioners' Conference 2022 | Pre Conference Workshop | 3 October 2022
By the workshop end, participants will be able to:

- Describe common complexity-aware M&E approaches and select one based on fit for purpose.
- Determine appropriate methods for data collection and resource implications.
- Undertake small, practical steps for incorporating complexity-aware MEL into SBC programs at the project, organizational, and institutional/donor levels.

<table>
<thead>
<tr>
<th>TODAY’S AGENDA</th>
<th>12:30-12:50</th>
<th>Welcome, introductions, systems thinking in motion exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:50-1:10</td>
<td>Interactive presentation: Current Concepts and Trends in Complexity aware MEL</td>
<td></td>
</tr>
<tr>
<td>1:10-2:30</td>
<td>Small group case study: Let’s ‘complexify’ the Mathare Health Project’s MEL system</td>
<td></td>
</tr>
<tr>
<td>2:30-3:10</td>
<td>Group presentations and discussion + reflections on applications to participant-supported projects</td>
<td></td>
</tr>
<tr>
<td>3:10-3:30 min</td>
<td>Closing thoughts, key takeaways, post-conference commitments</td>
<td></td>
</tr>
</tbody>
</table>
Some Core Concepts

**Systems**
- Interconnected and interdependent elements
- Feedback processes shape how change happens within a system
- Emergence often unpredictable – from the interaction of the parts.

**Change**
- Systems move & change over time
- Change in relationships is frequently nonlinear
- Chaos describes the seemingly random behaviors seen
- Small differences in the initial system can lead to massive differences later.

**Agency**
- Agents react/adapt to the system and each other
- Agents’ can self-organize – an emergent property in systems
- Co-evolution can occur within the overall system.
MEL Implications for SBC Projects

• Attend to performance monitoring and evaluation’s **3 blind spots**
  ▪ What is the broader range of SBC and other outcomes that occurred, beyond those expected by the project?
  ▪ What are alternative causes to explain the success/lack of success of social and behavior change?
  ▪ What is the fuller range of pathways that lead to project outcomes?

• Monitoring and evaluation moments can help you be aware of the **pace of change**

• Consider **relationships, perspectives, and boundaries**
  ▪ Who and what are the structures, processes, and connections linking actors and factors within a system?
  ▪ What different perspectives exist in actors within the system?
  ▪ What is in and what is outside the system?

Adapted from USAID slide deck, Complexity-Aware Monitoring
Bringing Complexity into Project MEL Systems: What it does and does not do

Performance M&E aims to measure the predicted:
- Results we expected/intended
- Pathways of change we planned
- Implementation strategies we designed
- Indicators & Targets

Complexity-Aware M&E tracks the unpredictable:
- Results (beyond originally intended)
- Factors & actors outside the project
- Multiple pathways of change & feedback loops
- Systems qualities

Adapted from USAID slide deck, Complexity-Aware Monitoring
## Complexity affects most SBC interventions through…

### Contextual complexity
- The environment *and* project implementation process shape outcomes of an intervention.

### Temporal complexity
- Interventions evolve over time
- Program environments shift in response to new constraints, opportunities and priorities.
- In response, a target population and implementers’ understandings and behaviors also change

### Interpretive complexity
- Interventions are social activities; practitioners should acknowledge that every stakeholder has a unique perspective, and understands the intervention partially and differently.
## SBC Complexity Indicators Matrix (SCIM) – Illustrative Indicator Areas

<table>
<thead>
<tr>
<th>Formative assessment</th>
<th>Monitoring &amp; process</th>
<th>Outcome evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contextual</strong></td>
<td><strong>Temporal</strong></td>
<td><strong>Interpretive</strong></td>
</tr>
<tr>
<td>▪ Novelty and complexity of project approach in its context</td>
<td>▪ Stability of implementation context</td>
<td>▪ Community consensus around target behavior(s)</td>
</tr>
<tr>
<td>▪ Social and political context</td>
<td>▪ Shifts in target behavior prior to intervention</td>
<td>▪ Alignment with perceived social norms</td>
</tr>
<tr>
<td><strong>Monitoring &amp; process</strong></td>
<td><strong>Outcome evaluation</strong></td>
<td></td>
</tr>
<tr>
<td>▪ Interaction and reinforcement among project activities</td>
<td>▪ Knowability, accessibility, and certainty of implementation context</td>
<td>▪ Adaptive capacity</td>
</tr>
<tr>
<td>▪ Knowability, accessibility, and certainty of implementation context</td>
<td>▪ Political economy</td>
<td>▪ Managerial responsiveness to diverse perspectives</td>
</tr>
<tr>
<td><strong>Outcome evaluation</strong></td>
<td><strong>Interpretive</strong></td>
<td></td>
</tr>
<tr>
<td>▪ Political economy</td>
<td>▪ Sustainability of target behaviors</td>
<td>▪ Alignment with perceived social norms</td>
</tr>
<tr>
<td></td>
<td>▪ Continuation of adaptive management</td>
<td>▪ Continued managerial responsiveness to diverse perspectives</td>
</tr>
</tbody>
</table>
Complexity-aware methods

- Give insights into broader outcomes and change pathways than those defined by a project
- Assess change over time
- Help understand the relationships of actors and factors inside and outside a project that influence implementation and outcomes
- Often used as part of a broader mixed-method MEL approach.
SMALL GROUP CASE STUDY
ADDING COMPLEXITY-AWARE MEL
Piloting and Adapting the Care Group Model to Work in an Informal Urban Settlement – Mathare, Nairobi

CONTEXT | One of the largest slum communities. Semi-transitory, often insecure neighborhoods. Little trust in neighbors or services. Basic public infrastructure and health services unable to serve the needs of households.

PROJECT AIM | Adapt and pilot a Care Group Model that addresses the unique challenges of working in a slum environment. To improve MNHC knowledge, home-based-care, and services use of Moms and their Children.
PROJECT BEING ADAPTED | Main activities: Clinic and health-post-based services and supportive home visits | Operated by the Center for Peacebuilding and Nationhood’s MCH Care Group Project supported by the Mennonite Central Committee in Mathare

ITERATIVE APPROACH TO ADAPT & PILOT MODEL

- **Feasibility assessment and initial design.** CARE Group model needs to work with community realities and infrastructure | Selection of three pilot villages with poorest MCNH indicators.

- **Small project with limited staff dedicated to the pilot.** Project coordinator-nutritionist | 2 project officer-nurse/nutritionists | Existing CHVs known and trusted by the community.

- **Timeline.** Over two years | Initial round of Care Groups in one pilot village | Mid-point assessment of its reach, effectiveness, etc. led to adaptations | Then scale up to remaining two villages (and more villages after).

- **MEL approach.** Use existing outreach activity monitoring system. Assess effectiveness of pilot with a baseline/endline household survey.
MEL APPROACH

Existing monitoring system tracks SBC outreach to women and children (number of outreach activities, participation, thematic areas discussed).

To assess the pilot – adapting and adding Care Groups - the project conducted a household survey with control to assess changes in individual and home behaviors and services-use

<table>
<thead>
<tr>
<th>Planned Outcome Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of participant pregnant and lactating women who achieve a minimum <strong>dietary diversity</strong></td>
</tr>
<tr>
<td>% of participant pregnant and lactating women receiving recommended daily <strong>micronutrient supplements</strong></td>
</tr>
<tr>
<td>% of children 0–6 months <strong>exclusively breastfed</strong></td>
</tr>
<tr>
<td>% of participant children 6–24 months who are receiving <strong>all 3 ICYF recommended feeding practices</strong></td>
</tr>
<tr>
<td>% of participant women with live birth who received <strong>at least 4 antenatal care visits</strong> prior to delivery from a skilled health professional</td>
</tr>
<tr>
<td>% of participant children who received <strong>at least 4 postnatal care visits</strong> from a trained health professional</td>
</tr>
<tr>
<td>% of households practicing good hygiene with a <strong>hand washing station in the house</strong></td>
</tr>
<tr>
<td>% of participant households that have <strong>access to improved sanitation</strong></td>
</tr>
</tbody>
</table>
GROUP CHALLENGE:
Given this is a pilot operating in a complex environment, with limited funds and staff…

1) What questions might you ask to understand/learn how Care Group activities influence households and communities, and vice versa?
   a. Develop a few questions and indicators for i) the assessment and pilot design phase, ii) the implementation and adaptation phase, and iii) the end-of-pilot evaluation phase.
   b. To answer the above questions, what complexity-aware methods would you suggest adding to the existing project MEL plan? Please explain why you selected the methods.

2) How would you approach data collection and later data analysis and sensemaking? Who would be involved in data collection and analysis?

3) How would you use complexity information to explain to stakeholders how well the project worked? (The actual project end-of-pilot survey indicated significant improvements in behavioral and other outcomes in contrast to comparison villages).
Group share and discussion
Closing | What are your take-aways?

1. Benefits: Why incorporate complexity-aware methods?

2. Application: Deciding who, what, when, and how?

3. Anticipated challenges?

4. Commitment going forward!

Resources To Get You Started

- Complexity-Aware Methods Brief (2017) Measure Evaluation

PLUS

AND REMEMBER: The art of programming [and by extension MEL] is the art of organizing complexity.

- Edsger W Dijkstra

https://meisterplan.com/blog/five-ways-pmos-reduce-complexity/
Thanks!

Susan Igras - igrassusan@gmail.com
Paul Shelter-Fast - paulfast@mcc.org