MONITORING AND EVALUATION OF HEALTH RESEARCH CAPACITY STRENGTHENING ACTIVITIES

Dr. Daniel Bauer
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Berlin, 07/01/14
A few definitions...
Who cares?

✓ “most powerful, cost-effective, and sustainable means of advancing health and development” (CoHReD, 1990)

✓ bridge the inequity gap between low and middle income countries (WHO, 2009; Whitworth, 2008)

✓ key element in the process of enhancing global health (Lansang, 2004)

- fragmentation of approaches
- proliferation of semi-autonomous units
- duplications of projects (cost, administration)
- brain drain
- lack of national ownership and sustainable impact (Bolger, 2000; UNDP, 1997).
Keeping it simple

• Monitoring and Evaluation of Health Research Capacities Strengthening Activities

or...

• Analyses of the Process and Outcomes/Impact of Activities that aim at enabling People, Organisations or a Society to shape their own development in health research and adapt to changing conditions

• Ok, its about building and measuring sustainable research competencies and capacities!
How to do it then?

• It’s a complex task...
• Our plan of action:
  • (1) review existing frameworks for the evaluation of HRCS
  • (2) review or develop tools to evaluate HRCS activities
    • at the individual level
    • at the organisational level
  • (3) pilot the evaluation
# HRCS Planning, Monitoring & Evaluation Framework

**Organizational**

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<tr>
<th>Capacity components</th>
<th>Narrative Summary</th>
<th>Indicators</th>
<th>Means of verification</th>
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<td>outcome</td>
<td>1. Increased capacity to manage the research organization</td>
<td>1. Level of financial sustainability; registered research projects (number, funding level, funder spread); number of PhD and masters students (by gender); student to supervisor ratio; existence of a unit dedicated to research management; quality of the organization according to national standards</td>
<td>- Annual reports</td>
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<td>2. Increased synergy between research organizations</td>
<td>2. Number of joint activities with other research organizations; number of formal partnerships with other research organizations; number of joint scientific publications</td>
<td>- Mid-term and final interviews</td>
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<td>3. Increased capacity to apply and share results of research</td>
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Review of Existing Frameworks

- 13 frameworks identified in literature research
- Common structure
  - interventions from **individual** to **supra-national** level
  - dimensions operationalising CS project phases ("structure" – "process" – "outcome"; Donabedian, 1997)
- Taking the program’s stage into consideration (Rossi, 2003)
### Monitoring & Evaluation Framework for HRCS

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<td><strong>4. HRCDA</strong>&lt;br&gt;Organisation&lt;br&gt;Methods&lt;br&gt;Didactics&lt;br&gt;Learner-teacher interaction&lt;br&gt;Material</td>
<td><strong>5.1. Individual</strong>&lt;br&gt;Short-term&lt;br&gt;Reaction: Learning:&lt;br&gt;Mid-term/ Transfer&lt;br&gt;Workplace satisfaction</td>
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<td><strong>Analysis of current state</strong></td>
<td><strong>Definition of needs for CD</strong></td>
<td><strong>Description of CD activity</strong></td>
<td><strong>Output/Outcome assessment</strong></td>
<td><strong>Impact assessment</strong></td>
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Application of Framework

- **Aim:** Evaluate HRCS activities at individual and organizational level

- **Reviewing the literature**
  - Review of published indicators
  - Systematic review of published tools

- **Focus groups discussions**
  - Selection of key components and indicators
  - Adaptation of tools and instruments

- **Consensus**
Putting it all to the test

- **Fozivudine in Africa trials initiative (FATI) – a stepwise drug development programme for an improved AZT treatment**
- Site visits in Kumasi (GH) in 2013 & Mbeya (TZ) in 2012 & 13
Sample & Instruments

Sample

- a total of 42 participants (13 women)
- from various positions directly or indirectly involved in clinical research (physicians, management, study nurses, social scientists, support staff)

Instruments

- Three different interview guidelines for different professions (based on indicators derived from the literature)
- Questionnaire for the assessment of self-perceived research skills (modified after Smith, 2002) and job satisfaction (Andrews, 1976)
- Network chart for the evaluation of collaborative teamwork
- Questionnaire for the evaluation of CD trainings
## Evaluation on the individual level

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### Definition of goals
## Research skills at the MMRC

**Mean values for n = 10**

<table>
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<tr>
<th>A Content-related research skills</th>
<th>no experience</th>
<th>little experience</th>
<th>some experience</th>
<th>moderately experienced</th>
<th>very experienced</th>
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<td>finding relevant literature</td>
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<td>critically reviewing the literature, research proposals, and reports</td>
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2012: experience you already have  
2014: experience you would like to achieve
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**Definition of goals**
**Analysis of current state**
**Definition of needs for CD**
**Description of CD activity**
**Output/Outcome assessment**
**Impact assessment**

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Social Network Analysis

• Networks within the organisation and beyond influence the ability to effectively do research
• Analyses of a research team’s social network allow insights e.g. into the permeability for new team members, effective communication and social atmosphere

Imagine you had a problem/question about the research you are currently working on. Whom do you think you would be very likely likely somewhat likely to contact in order to discuss that problem/question?
Results: Social Network Analysis

MMRC, FATI-Team, July 2012

MMRC, FATI-Team, August 2013
In-depth probing: Interviews

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Organisation’s vision and mission and organisational culture and tradition

- MMRC: goal of becoming an independent, state-owned research institute
- KATH: no explicit vision or plan for development, would be needed to attract national and international partners

Career pathways and career development programmes

- MMRC: scientists wished for more support in planning their careers, performance appraisals were initiated during the second site visit
- KATH: clear career pathways are available in Ghana, entry points and support needed especially for young researchers
Lessons learnt 1/2

Before the study

• Integrate all stakeholders, face-to-face meetings preferable
• Documentation supports a sustainable and transparent cooperation

Context of the study

• Consider type of study (multi-centre vs investigator-initiated)
• Identify and contact local collaborators for additional information

Defining indicators and outcomes

• Define capacity and training needs for the research project
• Define indicators and outcomes (ESSENCE Framework as starting point)
Lessons learnt 2/2

Selecting and testing the instruments

• Interviews: theory based but allow for flexibility to account for context; cover both individual and institutional aspects; resource-consuming

• Network analysis: Sensitive data requires transparent data protection policy; prone to over-interpretation

Evaluation of CS trainings

• Questionnaire developed and validated (Huber et al., 2014)

Organising the evaluation study

• good relationships with local contact persons

• Transparency regarding the purpose of study
Conclusion

• Application of M&E Framework for HRCS worked
• Health Research Capacities can be measured
• A lot of tools and instruments are available
• As well prepared as possible, as flexible as necessary

• Its complex. When in doubt, seek advice.
Thank you

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References