Focused Coverage Survey Tool

January 2017
Common Evaluation Framework

**Inputs**
- Funding
  - Canadian investments
  - Government sources
  - Other contributors
- Policies
- Harmonization
  - Canadian projects aligned with national plan and well coordinated with inputs from other donors

**Process**
- Project implementation
  - Clear, evidence-based link between projects and mortality in areas of:
    1) Human resources
    2) Commodities
    3) Service delivery
    4) Other
- Capacity building
  - Programmes
  - Institutions
  - People
- Accountability
  - Performance monitoring
- Gender equality

**Outputs**
- Health system strengthened
  - Governance, Human Resources, Commodities
- Improved services
  - Access, safety, quality, efficiency, utilization, equity

**Outcomes**
- Improved survival
  - Child/newborn mortality
  - Maternal mortality
- Improved nutrition
  - Children
  - Pregnant women

**Impact**
- Are interventions reaching women & children in need?

**Accountability**
- Evaluation: process, health systems strengthening, impact
- Strengthen country health information systems
- Review of project plans & PMFs; Resource tracking
- Implementation Monitoring
- Health system monitoring
- Coverage monitoring
- Impact monitoring

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Focused household survey to assess coverage for proven MNCH&N interventions

**What is it?**
A streamlined household survey tool and protocol that is feasible for implementation every year or two, to generate high-quality data on core intervention coverage indicators.

**How can it help Canada achieve its aims?**
Available, standard, comparable data for baseline and annual reporting

**How can it strengthen MNCH accountability at country level?**
- Regular data on progress to guide programs and demonstrate results
- Flexible, so priority indicators at country level can be added
Proposed Principles for Coverage Survey Tools

- Tools must reflect the best evidence on MNCH coverage measurement
- Tools will use a modular approach to measure the 18 core coverage indicators, while allowing flexibility to add questions
- Tools must be feasible for use at district level or higher
- Tools must be feasible for repeated implementation by Canadian and in-country partner institutions with no need for a consultant
Overview of coverage measurement
What is coverage?

The proportion of individuals who need a service or intervention who actually receive it.
Measuring coverage: Household surveys

- Interview household members about their health status (or their child’s health) and interventions that they may have received
  - Recall periods of 24 hours to 5 years
- Can estimate *some* denominators
- Can estimate coverage numerators for *some* interventions and practices
- Provides data on other important variables, e.g.,
  - Wealth
  - Education
  - Gender
  - Ethnicity
- “Standard” questions and indicators for many interventions exist in DHS and MICS
Household coverage surveys – the issues

• Survey questionnaires have become very long and heavy to implement – the “kitchen sink” approach
  • One interviewer may only complete 1-2 HHs/day. This leads to a lengthy, expensive survey that cannot be conducted frequently

• “Standard” implementation protocol (particularly sampling), while rigorous, can be time-consuming and expensive to implement

• Management and analysis of hierarchical survey data is not straightforward and requires special tools
Coverage survey tools
Overview of Survey Process and Proposed Tools

Survey Process:
- Sample
- Adapt survey tool
- Train trainers/interviewers
- Collect data
- Analyze data

Tools:
- Flexible CAPI/data management program
- Light, modular questionnaires
- Survey implementation guide
- Commented syntax
Questionnaire overview

• Structure is similar to UNICEF’s MICS
• Uses standard household survey questions, where available
  • A few changes to ‘lighten’ questionnaire (e.g., immunization questions asked only for children <2 yrs)
  • Flags for adaptation to local context
• Measures the core coverage indicators for the AI
  • Allows collection of information that can be used for equity analyses
• Flexibility – option to add questions or omit certain modules or indicators (e.g., malaria, PNC)
# Questionnaire Modules

<table>
<thead>
<tr>
<th>Household questionnaire</th>
<th>Women’s questionnaire</th>
<th>Under-5 questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Household information</td>
<td>• Women’s information</td>
<td>• Child information</td>
</tr>
<tr>
<td>• Household listing</td>
<td>• Fertility</td>
<td>• Breastfeeding and nutrition</td>
</tr>
<tr>
<td>• Household assets</td>
<td>• Antenatal and childbirth</td>
<td>• Immunization</td>
</tr>
<tr>
<td>• Water &amp; sanitation</td>
<td>• Postnatal care</td>
<td>• Vitamin A</td>
</tr>
<tr>
<td>• Vector control</td>
<td>• Family planning</td>
<td>• Cough and fever</td>
</tr>
<tr>
<td>• Household characteristics</td>
<td>• Observations of woman questionnaire</td>
<td>• Diarrhea</td>
</tr>
<tr>
<td>• Observations of household questionnaire</td>
<td></td>
<td>• Birth registration (optional)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Anthropometry (optional)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Observations of under-5 child questionnaire</td>
</tr>
</tbody>
</table>
Questionnaire Issues

- Link to “Measurement agenda”
- Technical issues with respect to some coverage indicators, e.g.,
  - Feeding
  - Intrapartum
  - Newborn
  - Malaria
- Standard approach to measuring wealth (for equity analyses) is problematic
  - Looking into how to improve and streamline this module
Current status (1)

Available in DRAFT

- Questionnaires
- Interviewers and team leader manuals
- CAPI
  - CAPI manual
  - ODK questionnaires
- Sampling and sample size
  - Sample size spreadsheet
  - Spreadsheets for 1st and 2nd stage sampling
  - Sampling guide
- Indicator sheets
Current status (2)

Coming very soon

• Commented Stata do-files
• Guidance and options for server deployment
• Guidance on questionnaire translation and adaptation

Under development

• ODK Questionnaire builder
• Dashboard for survey management
• Full survey implementation guide
• Analytical tools for other statistical packages
Survey implementation guide
Survey implementation

• Issues to be addressed by implementation guide
  • Adaptation of survey questionnaire
  • Sampling
  • Sample size
  • Interviewers
    • Recruitment/pre-selection
    • Training
    • Selection
  • Local languages
  • Deployment
  • Supervision/data quality

Example of an implementation guide
CAPI/Data management/Data analysis tools
Computer Assisted Personal Interviews (CAPI)

Benefits

• No data entry – reduce one realm of error.
• More options for automatic quality assurance procedures.
• “Real-time” DQ checks with feedback to field teams.
• With a strong CAPI system, once the data collection is complete, data are ready to analyze.

Challenges

• Time intensive to set-up.
• Adds another layer of field logistics (charging, network access).
• No standard CAPI protocol for HH surveys.
CAPI and data management

• Many software packages currently available: CSPro, RedCap, Pendragon, ODK, etc.
• All have pros and cons; none do exactly what we would like for coverage surveys
• Current tool aligned with a fit-for-purpose ODK-based CAPI questionnaires and data system
  • Built-in hierarchy and links between HH, woman’s, children’s questionnaires
  • Simple interface for questionnaire translation/adaptation
  • Works on any hardware system
  • DQA component: run data quality checks
Analysis and reporting

• Annotated STATA and R do-files for calculating standard indicators and generating reporting tables

• Prefer templates rather than “push of a button” program – this forces users to examine data.
  • Can add “stops” to the template – “Did you check this?”
Plans for implementation

• Plan to provide substantial TA to ~3 Canadian grantees to support their implementation of the survey (and other tools)

• More broadly, building capacity of Canadian partners to implement these tools

• Tools will be revised and refined on an ongoing basis to incorporate learning from these implementation experiences and technical development work (while ensuring comparability of data across versions)
Communication

Website
http://www.jhsph.edu/research/centers-and-institutes/institute-for-international-programs/current-projects/RADAR/

Bulletin board
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