Developing an Evaluation Plan: Resources and Tools in Action

Jan Jernigan & Nicole Kuiper
OSH Surveillance and Evaluation Webinar
August 28, 2014

The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Developing an Evaluation Plan: Principles and Tools

Jan Jernigan, PhD
Division of Nutrition, Physical Activity and Obesity
Program Development and Evaluation Branch
Presentation Objectives

- Evaluation requirements of new FOA template
- Overview of Evaluation Plan workbook
- Application of Evaluation Plan guidance
New FOA Template

- New FOA template required for all non-research FOAs:
  - CDC Evaluation & Performance Measure Strategy
  - Applicant and Awardee Evaluation and Performance Measurement Plan
CDC Evaluation and Performance Measure Strategy

- Develop and include an overarching evaluation and performance measurement strategy:
  - Type of evaluations to be conducted
  - Key evaluation questions to be answered, potential available data sources, and feasibility of collecting available data
  - Required performance measures
  - How evaluation and performance measurement will track subpopulations
  - How evaluation findings and performance measures:
    - Are used for continuous program/quality improvement
    - Yield findings to demonstrate the value
  - Dissemination channels and audiences
Applicant Evaluation & Performance Measure Plan

- Applicants must provide an overall jurisdiction or community-specific evaluation and performance measurement plan that adheres to CDC evaluation and performance measure strategy described in FOA
  - Initial plan included with application. Successful grantees have up to 6-8 months to finalize plans in collaboration with CDC.
Developing an Effective Evaluation Plan

- Developed collaboratively between OSH and the Division of Nutrition, Physical Activity and Obesity (DNPAO)
  - To assist grantees in the development of a comprehensive evaluation plan
- One of two guidance documents developed collaboratively
  - Writing a final evaluation report

http://www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation/index.htm
An Evaluation Plan is........

- A written document that describes how you will monitor and evaluate your program so that you will be able to describe the What, the How, and the Why it Matters for your program
So That You Will Be Able to Describe……

- **The What?**
  - Description of your program
  - Accomplishments of your program

- **The How?**
  - How you did it
    - Process evaluation
  - What worked and what didn’t work

- **The Why it Matters?**
  - Why your program makes a difference/impact
CDC’s Framework for Evaluation

STANDARDS FOR "GOOD" EVALUATION

Accuracy
Feasibility
Propriety
Utility

STEPS IN EVALUATION

Engage Stakeholders
Describe the Program
Focus the Evaluation Design
Gather Credible Evidence
Gather Lessons Learned
Justify Conclusions
Ensure Use and Share

www.cdc.gov/eval
Step 1: Engage Stakeholders

- Identify your Evaluation Stakeholders Workgroup (ESW) in your evaluation plan
  - Builds a market for evaluation results
  - Increases ability to answer the questions that need to be answered
  - Increases transparency, credibility and buy-in
  - Facilitates implementation
Question:

What groups/representatives should be included in an evaluation stakeholder workgroup?
Who Should be in ESW?

- Position to make decisions about the program
- Those who are involved in running the program
- Those who are served by the program
Step 2: Describe Program

- Brief description to clarify program’s purpose, activities and capacity to improve health
- Logic model to visually show activities and intended outcomes
  - Presentation of links in a chain of reasoning
  - Disciplined way of mapping a program
  - Platform for discussion
  - Multi-purpose tool
Logic Model: Visual Roadmap

**INPUTS**
- Program Resources

**ACTIVITIES**
- What we do with program resources to fulfill mission

**OUTPUTS**
- Direct products of activities

**OUTCOMES**
- Benefits during and after program activities
Step 3: Focus Evaluation

- Evaluation questions
- Prioritize
  - Stage of development
  - Program, Stakeholder, and Decision Maker Priorities
  - Feasibility
- Use of evaluation results
Step 4: Gathering Credible Evidence

- Stakeholder involvement
- Align evaluation questions with the method
  - Quantitative/qualitative
- Determine specific performance measures relevant to evaluation questions
  - Measure – what you will measure?
  - Example: Attitudes of smokers and nonsmokers about the acceptability of exposing others to secondhand smoke (KOI # 2.3.3)
Assessing Data Sources and Needs

- What do you need to know (measurable objective)?
- When do you need the data (reporting)?
- How often is the data needed (frequency)?
- Will the data be compared with similar data from elsewhere?
- Is credibility an issue (who collects, confidence)?
- At what level is the data needed (state, local)?
- How much money do you have to spend on data collection?
Data Sources

- **Secondary - Existing Data Sources**
  - Usually collected for other purposes but can be used for evaluation
  - Often collected over a period of time, providing historical data that can be used to monitor progress and set trends.
  - In using secondary data, it is important to assess the utility of the data as it relates to: 1) reference period; 2) population coverage; 3) completeness; and 4) accuracy

- **Primary Data Sources**
  - People – Key Informants
  - Observation
  - Surveys, etc.
Question:
Why is it important to engage your Evaluation Stakeholder Workgroup in justifying conclusions of the evaluation (in data analysis and interpretation phase)?

- Increases transparency
- Promotes credibility and acceptance of data results
- Increases validity of process and conclusions
- Promotes “action” through meaningful and useful information
- All of the above
Step 5: Justify Conclusions

- Includes analyzing data and drawing conclusions
- The planning for conclusions step is needed to turn the data collected into meaningful, useful, and accessible information for action.
- Including your stakeholder group in this step is directly tied to the previous discussion on credibility and acceptance of data and conclusions.
- It is critical that your plans include time for interpretation and review from stakeholders (including your critics) to increase transparency and validity of your process and conclusions.
Results and Conclusions

- **The What?**
  - What your program is
  - What your program accomplished

- **The How?**
  - How you did it
    - Process and implementation evaluation
  - What worked and what didn’t work

- **The Why it Matters?**
  - Why your program makes a difference
  - Use for advocacy for increased & sustained funding
Step 6: Disseminating Results

- Dissemination to diverse audiences is vital to communicating the effectiveness of particular programs
- Can enhance the use of the evaluation
- Can be in multiple formats for multiple audiences as planned for in your evaluation plan
  - Written
  - Oral presentations
  - Use of Technology
Communicating Evaluation Results

- Communication and Dissemination Plan should be updated and included in the evaluation report.
- Communication and Dissemination phase is a two-way process designed to support use of the evaluation results:
  - Translate results into practical applications.
  - Systematically distribute information through a variety of audience-specific channels.
Elements of an Evaluation Report

- Title Page
- Executive Summary
- Intended Users and Uses
- Program Description
- Evaluation Focus
- Methods and Data Sources
- Results, Conclusions and Interpretation
- Use, Dissemination and Sharing Plan
- Appendices
  - Tools
  - Additional resources

Practicing What We Preach: Using our Tools for CDC Evaluations

Nicole Kuiper, MPH
Health Scientist, Office on Smoking and Health (OSH) Evaluation Team
Outline

- Application of *Developing an Evaluation Plan* in recent evaluation
- Program background
- Organized by steps of CDC Framework
  - Describe the process, tools used
  - Benefits
  - Challenges and solutions
  - Timeline
- Other tools and resources
- Summary and conclusions
Program Background

- Asian Smokers’ Quitline (ASQ) has been funded by CDC since 2012 as national service
  - Chinese (Mandarin and Cantonese dialects), Korean and Vietnamese language speakers
  - Services (counseling and materials) completely in-language
  - Each language has unique telephone number
  - In-language promotions in newspapers and through outreach
  - Provide 2 weeks of NRT free-of-charge
  - No cost to states; some have bought media and/or provided additional NRT

http://www.asiansmokersquitline.org/
Step 1 – Engaging Stakeholders

- Internal & external phases
- Alerted primary external stakeholders (i.e., Quitline service providers)
  - Initial buy-in on evaluation involvement, and feedback on very high level evaluation topics
- Began internal planning with cross-disciplinary meetings
- Before Evaluation Stakeholder Workgroup (ESW) designation, Worksheet: Stakeholder Mapping (1.1)
# Stakeholder Mapping Exercise (1.1)

<table>
<thead>
<tr>
<th>Priority</th>
<th>Person/Group</th>
<th>Role / Use of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Internal and External Stakeholder Engagement

- Series of internal meetings to develop and revise worksheets (Steps 1-4)
- Leadership (decision making needs)
  - High level information
- Then, re-engaged primary external stakeholders
### High Priority Stakeholder Exercise

#### Worksheet 1.2

<table>
<thead>
<tr>
<th>Group Interested in Evaluation</th>
<th>What is to be Evaluated?</th>
<th>How Will the Results be Used?</th>
<th>Evaluation Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Question:
Can you anticipate challenges to filling out these worksheets with stakeholders?

- Many challenges
- Some challenges, but some benefits
- A few challenges, but benefits outweigh challenges
- No challenges
Benefits

- Shared draft worksheets with external stakeholders and revisions improved plan
- Added stakeholders and revised information needs
  - Consideration of their needs during report writing and dissemination
Step 2 – Describe the Program

- Gathered program information that we didn’t have
  - Service protocol (# counseling sessions, etc.)
  - Nature of promotions, outreach
- Historical record prior to changes
- Not a worksheet, but requested during our internal engagement process
Components of Program Description

High-level:
- Statement of need
- Inputs or program resources available
- How activities linked with outcomes
- Stage of development (i.e., program maturity)
- Environmental context
Program Description Considerations

- Timeline: This can take time for program to collect
- Challenge: Because it was a new program, information wasn’t already pulled together in one place.
- Benefit: Stakeholder feedback improved description
- Benefit: Ease of report writing
### Step 3 – Focus the Evaluation Design

**Worksheet 3.1**

<table>
<thead>
<tr>
<th>Evaluation Questions</th>
<th>Analyses That Might be Used to Answer the Question</th>
<th>Assumptions or Conditions for This Method to Be Viable</th>
<th>Resources Needed to Implement</th>
<th>Limitations of This Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Benefit: Feasibility implicit/explicit consideration**
Step 4 – Gather Credible Evidence

- Closely tied to Step 3
- Plan: Worksheet 4.1

<table>
<thead>
<tr>
<th>Evaluation Question</th>
<th>Indicator(s)</th>
<th>Method &amp; Data Source</th>
<th>Frequency</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Benefit: Underwent most revisions during process, due to stakeholder engagement and subsequent clarification
Step 5- Justify Conclusions

- Includes plans for analysis and drawing conclusions
- No worksheet was used
- Analysis plan
- Results interpretation activities with stakeholders
Question

As you develop a plan to share evaluation findings, what types of key events along the way would warrant sharing with at least some stakeholders? (Check all that apply):

- Evaluation report completed
- Analysis completed / Interpretation of Results
- Data collection completed
- Data collection begun
- Evaluation plan completed
## Step 6 – Ensure Use and Share Lessons Learned

### Communications Plan

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Forum</th>
<th>Role</th>
<th>Date(s)</th>
<th>Did it occur?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation plan completed</td>
<td>Branch meetings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TA calls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Results Interpretation</td>
<td>Stakeholder A Webinar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stakeholder B webinar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference presentations</td>
<td>APHA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AEA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Communications Plan

- Benefits: Stakeholders added ideas, expanding opportunities, chance for input
- Timeline: Waited until the plan was drafted
- Embedded adapted table in plan
  - Instill confidence we had results to share
  - Which results we wanted to share with whom
Final Plan Details

- **Length: 12 pages**
  - Question Overview (Exec. Summary): ½ page
  - Intended Use and Users: ½ page
  - Program Description: > 3 pages
  - Evaluation Focus: ½ page
  - Methods: ½ page
  - Analysis / Interpretation Plan: < 1 page
  - Use, Dissemination and Sharing: ~5 pages, including tables
  - Worksheets mentioned previously are Appendices (not included in 13 pages)
Benefits of Developing the Plan

- Stakeholders reported:
  - Better understanding of evaluation
  - Easier than anticipated
  - Process that facilitated their involvement

- Concrete activities to facilitate discussion / response

- Share with stakeholders that aren’t on the ESW
Logistical Challenge & Solution

- **Downloading worksheets to enable editing**
  - Adobe Pro
  - Huge file size because of underlying graphics

- **Exploring how to include fillable, editable worksheets**
  - Word files online
Another Tool: Authorship Agreement

- Separate tool
- Delineate roles and timeline
- For manuscript or reports with multiple contributors
- Negotiate authorship order and issues at beginning and throughout
Timeline

- **Brainstorming:** July 2013
- **Internal meetings:** Aug. – Sept. 2013
  - With worksheets, collecting program description
- **External meetings:** Oct. – Dec. 2013
  - Worksheet revisions, drafted program description
- **Drafted complete plan:** December 2013
- **Implementation of plan:** January 2014 – present
- **Dissemination of plan, findings:** Currently on-going, plans throughout the year
Other OSH Evaluation Resources

- Introduction to Program Evaluation
- Introduction to Process Evaluation
- Key Outcome Indicators for Comprehensive Tobacco Control Programs
- Surveillance and Evaluation Data Resources for Comprehensive Tobacco Control Programs (new)

http://www.cdc.gov/tobacco/tobacco_control_programs/surveillance_evaluation/index.htm
Summary and Conclusions

- Effective plans are feasible
- Stakeholder engagement is critical and built into process
- Select/adapt worksheet to fit your context
- Revisions / multiple iterations are part of the process
- Adapt process to fit your needs
- Goal is a useful plan
Jan Jernigan: ddq8@cdc.gov
Nicole Kuiper: nik4@cdc.gov

Photo credit: http://www.flickr.com/photos/23679420@N00/545653437/sizes/z/in/photolist-QdBKT-25kuIF-2hA7TJ-2kkgtJ-397CKE-3fRHGF-3ZCRwZ-4a5hEa-4o8sXH-4FuTGy-
4Qokri-4S8uZe-4VHDKq-4Zxr8T-52ovtA-55r3n-5l26Fg-5hLxM-5mv4k4-5q3kuz-5qL5rM-5zEjFG-5BrV7A-5HP6lM-5QxJZa-5YhgUK-67cRkw-6a8ueD-6fvXzC-6rHvo2-
6F5kSW-6FFzTi-6J8UVE-6NczWM-6WeVqv-6Y6rUJ-76nHee-7jmJk-7q4zYp-7rPFIR-7rTBt7-7t1Laz-7t1LIF-7t5P7S-8qUpxV-8y2Tt5-bZd2uU-9oGwvq-bN9EVX-bMQ5zV-abAqpx/
Standardized Tobacco Assessment for Retail Settings (STARS)

Nina M Parikh, MAT, MPH
& Nikie Sarris, MPH
Presenters

Nikie Sarris, MPH
RTI
Research Public Health Analyst

Nina Parikh, MAT, MPH
Stanford Prevention Research Center
Research Project Manager
Funding sources

• NCI established the SCTC Research Initiative in 2009 to address high-priority research gaps in:
  – Secondhand smoke policies
  – Tax and pricing policies
  – Mass media countermeasures and community and social norms
  – Tobacco industry marketing and promotion

• OSH supported this effort through an Epi Branch contract with RTI International
Overview

• Rationale for STARS
• Creative process
• Resulting product
• Materials available for download
Background

• Essential to monitor tobacco industry activity at point of sale to inform evidence-based policy making

• Most widely used tool is Store Alert Report Card (Lee et al., 2013)

• Revised, easy-to-use standard is needed
Purpose

Recommendations of listening sessions with stakeholders (Sept-Oct, 2012)

- Primarily to inform policy, not research or enforcement
- Target audience is practitioners
- Standardized form should take approx. 10 minutes
- Paper-and-pencil, explore electronic version later
- Core survey plus optional modules is ideal
STARS Committee Co-Chairs

Lisa Henriksen, PhD
Senior Research Scientist
Stanford Prevention Research Center

Kurt Ribisl, PhD
Professor of Health Behavior
Univ of North Carolina at Chapel Hill

Todd Rogers, PhD
Senior Scientist
RTI International


<table>
<thead>
<tr>
<th>Members</th>
<th>Affiliation (*SCTC research project sites)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kirsten Aird</td>
<td>Oregon Public Health Division</td>
</tr>
<tr>
<td>Kate Armstrong</td>
<td>Tobacco Control Legal Consortium</td>
</tr>
<tr>
<td>Dianne Barker</td>
<td>Barker Bi-Coastal Health Consultants; UIC*</td>
</tr>
<tr>
<td>Lisa Henriksen</td>
<td>Stanford Prevention Research Center*</td>
</tr>
<tr>
<td>Michael Johns</td>
<td>New York City Department of Health &amp; Mental Hygiene</td>
</tr>
<tr>
<td>Harlan Juster</td>
<td>New York State Department of Public Health</td>
</tr>
<tr>
<td>Lois Keithly</td>
<td>Massachusetts Department of Public Health</td>
</tr>
<tr>
<td>Brian King</td>
<td>Office on Smoking and Health, CDC</td>
</tr>
<tr>
<td>Brett Loomis</td>
<td>RTI International*</td>
</tr>
<tr>
<td>Maggie Mahoney</td>
<td>Tobacco Control Legal Consortium</td>
</tr>
<tr>
<td>Allison Myers</td>
<td>Counter Tobacco</td>
</tr>
<tr>
<td>Kurt Ribisl</td>
<td>University of North Carolina at Chapel Hill*</td>
</tr>
<tr>
<td>April Roeseler</td>
<td>California Tobacco Control Program</td>
</tr>
<tr>
<td>Todd Rogers</td>
<td>RTI International*</td>
</tr>
<tr>
<td>Stephanie Walton</td>
<td>Colorado Department of Public Health and Environment</td>
</tr>
</tbody>
</table>
Tobacco display bans

Incubation period

- Graphic design
- Begin pilot testing
- End pilot testing
- STARS release

Timeline:
- April 2013: Sub.mtg
- May 2013: Sub.mtg
- June 2013: Sub.mtg
- July 2013: Graphic design
- August 2013: Sub.mtg
- Sept. 2013: Begin pilot testing
- Oct. 2013: Sub.mtg
- Nov. 2013: End pilot testing
- Dec. 2013: Sub.mtg
- Jan. 2014: Sub.mtg
- Feb. 2014: STARS release
- March 2014: Make revisions
- April 2014: June
Beta testing

- 6 pilot sites
- 313 stores (244 in OR, 142 in IN, 114 in KS)
- Average time to complete was 9.7 minutes (sd=5.6)
- Oregon and Texas programmed for iPad data collection
Multiple modes of feedback

• Hard copies of STARS survey
  – Missing data — price and sales tax required clerk interaction

• Written feedback
  – Training materials: length, utility, gaps
  – Form: length, items useful for policy work, what was hard to complete, additional topics to include, difficulties with clerk interaction

• Phone call
  – Asked follow-up questions for better understanding of recommendations for improvement
Modifications made

• Technical issues (printing, store identification)
• Content (reformatted price section, added item about price of little cigars/cigarillos)
• Question order
• Store type examples revised (e.g., CVS)
STARS survey

- 20 questions
- 10 minutes
- Requires clerk interaction
- Many items with reliability data
## Tobacco products on STARS

<table>
<thead>
<tr>
<th>Tobacco Product</th>
<th>Flavored</th>
<th>Placement</th>
<th>Promotion</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigarettes</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Cigarillos/little cigars</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Large cigars</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Chew, moist/dry snuff, dip or snus</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>E-cigarettes</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>
STARS content: Store attributes

- Simple store-type categories
- Pharmacy counter
- Sells alcohol
- Features WIC or SNAP
STARS training materials
based on materials SPRC developed for CA Tobacco Control Program

• PowerPoint File
  – 90 slides for self- or group-administered instruction (45-60 min)

• Pocket Guide
  ◦ 10-page instructional review for use in the field
STARS data management

- Data Entry Template
  - Created based on feedback from pilot sites
  - Variable names created for STARS questions
  - Easier data entry
  - Automatically generates results (e.g., average time to complete survey, % of stores with flavored tobacco products)
Downloading STARS materials

1) Go to:
Downloading STARS materials

2) Click **HERE**: 

![Click HERE to download.](image_url)
3) Register and click “Download”
- Obtain user feedback to improve materials
- Address dissemination gaps
4) Save file and open downloaded zip file

E-mail us at SCTC-STARS@rti.org if you encounter any problems downloading materials.
STARS materials

- STARS Survey
- One-pager Overview
- Training PowerPoint
- Pocket Guide
- Pocket Guide Assembly Instructions
- Excel Data Entry Template
Looking ahead: STARS Dissemination & Implementation Research

- Dissemination reach (Aim 1)
- Implementation fidelity (Aim 2)
- Acceptability/appropriateness for an underserved population (Aim 3)
Thank you

Contact us at SCTC-STEMS@rti.org