Improving Evaluation Data Quality by Addressing Nuances in Commonly-Used Tobacco Prevention and Cessation Indicators

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Background

• State tobacco control programs
  • Data collection systems
    • Data on reliability
    • Over/underestimates
  • Comparisons across states
NC Statewide Tobacco Control Program

- North Carolina Health and Wellness Trust Fund
- Teen Tobacco Use Prevention and Cessation Initiative
  - 46 grantees
- Four major goal areas
  - Initiation
  - Secondhand smoke exposure reduction
  - Cessation
  - Eliminating tobacco-related health disparities
- Independently evaluated by UNC
Evaluation

- Uses indicators based on logic models based on best practices
Evaluation

- Grantees provide monthly reports on indicator and non-indicator activities using the indicator Progress Tracking System (iPTS)
- 28 indicators across 4 goal areas
Data flow

Grantee

UNC SOM TPEP Reviewer 1

UNC SOM TPEP Reviewer 2

HWTF
Example of a cleaned indicator change

Indicator: Number of smoke-free policies adopted.

Indicator change item description (from raw data):
“We worked with a local restaurant to create a nonsmoking section on one side of their dining area.”

Indicator Change Units as reported in Raw Data = 1

Indicator Change Units in Cleaned Data = 0

Reason for change:
Units were changed because the definition for this indicator requires that the venue be 100% smoke-free. A nonsmoking section does not qualify the venue for an indicator change.
Prevention Edu./Yth Empowerment: Provide youth tobacco use prevention education and empowerment opportunities in schools and the community.

# of tobacco use prevention education media/promotional messages published or aired

- **Units**
- **Name of Media Outlet**
- **Type of Media/Promotion**
- **Start date of media**
- **Paid/Earned/Unpaid?**
  - Paid
  - Earned
  - Unpaid
- **Did you use any HW/TF funds for this activity?**
  - Yes
  - No
- **School/Club/Faith-based?**
  - Yes
- **Errors**
  - Question #13: Required. Designed for a Unique Population?
  - Question #16: Required. Reached a unique population?
  - Question #19: Required. What item # on your action plan does this address? If not in your current action plan, enter N/A.
Evaluation – Data Cleaning

• Initially, cleaned data based on brief operational definitions and internal decision rules
• Noticed a high level of error
• Goal: Improve data quality
  – Create detailed definitions addressing as many nuances as possible
  – Create a codebook
Discovering and Addressing Nuances

• Based on experience reading monthly reports from community-level grantees

• Must address
  – What qualifies as an indicator unit change
  – How to quantify the indicator unit change
Example: cessation media indicator

What counts as a media message?

Should promotional items be counted?

Should fliers or student-made posters be counted?

Should mass emails be counted?

Do all media messages count the same?

Do posters made by a youth group count the same as a radio spot?

Should a flier distributed in multiple locations be counted once or once for each place where it was distributed?

If mass emails are counted, should they be reported as one unit for the email or one unit for each email to which it was sent?

If one media piece contains messages addressing two focus areas within the initiative, should it be counted as one unit or two?
Example: cessation meetings indicator

# of presentations or meetings promoting Quitline, NOT, 5A, counseling for youth or Spit Tobacco cessation

What counts as a meeting?
Should a telephone call be counted?
Should an email be counted?
Should the definition be limited to include only face-to-face meetings?
Is there a minimum time required to be counted as a meeting or would a “stop in the hall” count?

If one meeting is held with representatives from three different high schools, should it be counted as one unit or three?
If a meeting spans more than one day (e.g. a two-day retreat), should it be counted as one unit for the whole event or one unit per day?
### GOAL AREA: CESSATION

Focus Area #6: Provide access to effective tobacco use cessation resources

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<th>IND 23</th>
<th># of cessation media/promotional messages published or aired</th>
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<td><strong>Definition</strong></td>
<td>Earned, paid or unpaid media or promotional messages in print, broadcast, or web-based media that focuses on providing access to effective tobacco use cessation resources for youth. Media message must either (a) be produced by grantee or partner, (b) make reference to grantee or grantee activity/project, (c) include contributions from grantee, and/or (d) be purchased using HWTF funding (HWTF materials). Do not report media messages for which you had no involvement.</td>
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| **Units** | - One media message includes one product (e.g., 100 copies of one poster printed = 1 media message).  
- One media message can be reported once per month (e.g., same ad published once in May and once in June = 1 unit in May and 1 unit in June).  
- For **large mass media** count: 1 unit per audience (e.g., a radio advertisement aired on 3 different channels = 3 units).  
- For **small media** count: 1 unit per product (e.g., 20 copies of the same flyer delivered to 3 different schools = 1 unit). The message should be different in order to merit a separate unit or indicator change (i.e., three PA announcements focusing on different topics = 3 units). Please note how the messages are different in your description if you report more than one unit. |
| **Name of media outlet** | Type in the name of the publication (e.g., KCTV, New York Times) or the type of promotional item (e.g., “Why Smoking is Bad for You” flyer, wristband). If more than one outlet or type of promotional item was used, please create an additional entry for each one. |
| **Type of media outlet** | Choose one of the following options: announcement, billboard, brochure/flyer/poster/sign, direct mail/newsletter, magazine/newspaper, radio, TV, theater slide, Web site, or other. |
| **Start date of media** | Using the calendar provided, choose the first date within the reporting month that this message was distributed. |
| **Paid/earned/unpaid?** | Media messages can be 1) earned, 2) paid, or 3) unpaid. Earned messages include radio, TV, and newspaper interviews that were mented by the grantee based on their work. Earned media also include letters to the editor. Grantees do not pay for earned media coverage. Paid messages include ads, radio spots, or HWTF materials that were purchased. Unpaid messages include HWTF or grantee media messages that are distributed without cost (e.g., student-made flyers or posters, PA announcements, promotional items). |
| **Did you use any project funds for this activity?** | Check yes, if non-personal funds were used to create or implement this item/activity. Otherwise, check no. |
| **School/Church or club-based?** | Check yes if the media message was distributed to a school/church or club-based audience only. Check no if the media message was distributed to a broader audience. |
Results

• Codebook and trainings reduced error rates significantly
• Overall error rate reduced by 67%.
Discussion

• Greater standardization of a minimum data set across statewide programs
• Reduce time and resources spent by each state individually
• Based on best practices and broad experience of community-level grantees
• Allow for national evaluation
For more info about TPEP and this evaluation:

www.fammed.unc.edu/TPEP