LIVE WELL SAN DIEGO
2019 DATA SUMMIT

Data Training
Strength in Numbers: Improving Organizational Data Collection and Reporting
Strength in Numbers: Improving Organizational Data Collection and Reporting

Presented by:

Lisa Asmus, MPH
Senior Program Evaluator & Principal Investigator
Institute for Public Health, SDSU
Adjunct Professor, SDSU
Today you will learn how to:

Part 1

1A **Determine** what to measure and **identify appropriate** quantitative or qualitative data collection methods

1B **Improve** data quality when designing data collection tools

Part 2

2A **Identify** equitable and culturally sensitive approaches to data collection and reporting

2B **Collect** data and use a data tracking system

Part 3

3A **Interpret** results and share findings with different audiences
Part 1A. **Determine** what to measure and **identify appropriate** quantitative or qualitative data collection methods

_step 1A-1_ Know what you want to measure. 
_Logic Model_

_step 1A-2_ Specify exactly what and how to measure. 
_Evaluation Plan_

_step 1A-3_ Determine data sources. 
_Data source types and when to use Qualitative versus quantitative_
Step 1A-1: Know what you want to measure. What do you want to measure? Why do you want to measure it? Who do you want to measure?

- Engage Stakeholders
- Create a Logic Model to document how your effort will work and what changes are expected (with stakeholder input)
- Research what others have measured; are there standards or common measures?
Determine What to Measure

Step 1A-1: Know what you want to measure.

Stakeholders

- People who will be making decisions on the basis of the findings
  - Funders
  - Leaders

- People who will be affected by decisions made during or after the evaluation or project
  - Program staff
  - Program participants
  - Secondary users
  - Policy makers and advocates

Source: BetterEvaluation   https://www.betterevaluation.org/
Step 1A-1: Know what you want to measure.

Questions for stakeholders:

- **Problem Statement:** What problem are we trying to solve?
- **Activities:** What does our program/initiative do? What are the intervention components? *Products, services, infrastructure, actions techniques, tools, who target*
- **Outputs:** What are the tangible results of our activities? What do we make? (immediate outcomes, process measures) *Number of classes, materials, program participants or meetings*
Step 1A-1: Know what you want to measure.

Questions for stakeholders:

- **Outcomes**: What are the intended results of our program/initiative? What does success look like? What kind of changes do you want to see?

  *Changes in attitudes, behaviors, knowledge, morbidity, etc. Who experienced changes, how much did they change?*

- **Goals**: What are the overarching goals of our program? What do we expect to impact in the long-term (fundamental change in organizations, communities or systems)?

  *Improved conditions, increased capacities, changes in policy, morbidity*
Determine What to Measure

PLANNING: start with the end in mind

Program Action

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
<th>Outcomes - Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Activities</td>
<td>Short Term</td>
</tr>
<tr>
<td></td>
<td>Participation</td>
<td></td>
</tr>
</tbody>
</table>

- **What we do**
  - Conduct workshops, meetings, deliver services, develop products, curriculum, resources
  - Train
  - Provide counseling
  - Assess
  - Facilitate
  - Partner
  - Work with media
- **Who we reach**
  - Participants
  - Clients
  - Agencies
  - Decision-makers
  - Customers
- **What the short term results are**
  - Learning
  - Awareness
  - Knowledge
  - Attitudes
  - Skilled
  - Opinions
  - Aspirations
  - Motivations
- **What the medium term results are**
  - Action
  - Behavior
  - Practice
  - Decision-making
  - Policies
  - Social Action

Evaluation

**What do you want to know?**

**How will you know it?**

**EVALUATION: check and verify**

Source: University of Wisconsin-Extension, Ellen Taylor-Powell, PhD PowerPoint Logic models to enhance program performance
Step 1A-2: Specify exactly what and how to measure.

MORE discussions to LIMIT what to measure:

- What are the key questions you want answered?
- What is the most important to measure?
- Have the resources to measure it?
- Is it measurable?
- Program/initiative truly influence the outcome?
- Is it meaningful?
- Is it seen as credible?
- Will it validate your program?

Children with ADHD received either cognitive behavioral therapy or proven drug therapy (process), resulting in better grades (outcome).

Always keep in mind: Is it easy to measure?
Step 1A-2: Specify exactly what and how to measure.

- **Process**
  - Completion of program activities
  - Outputs
  - Staff/client perceptions of process or satisfaction
  - Barriers or successes (lists and descriptions)

- **Outcome**
  - Reactions or feelings (*not usually an indicator of lasting impact*)
  - Learning (perception, knowledge)
  - Attitudes
  - Changes in skills/behaviors (apply learning to change behaviors)
  - Effectiveness (improved performance because of changed behaviors)
### Determine What to Measure

**Step 1A-2: Specify exactly what and how to measure.**

Create an Evaluation Plan

<table>
<thead>
<tr>
<th>Objective</th>
<th>Indicator</th>
<th>Method</th>
<th>When Collect</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 adults aged 70+ will attend the two-class program</td>
<td># of adults aged 70+ attending a class # of classes attended</td>
<td>Attendance log</td>
<td>During each class - ongoing</td>
</tr>
<tr>
<td>80% ...will report increased knowledge about fall risk-factors</td>
<td># attending two classes # (%) reporting increased knowledge</td>
<td>Post-test (survey)</td>
<td>Immediately after second class</td>
</tr>
<tr>
<td>....80% of adult attendees will report having a safety bar installed in the home</td>
<td># attending two classes # (%) with homes with bar(s) installed</td>
<td>Observation (visit log)</td>
<td>Six months after attendance</td>
</tr>
</tbody>
</table>
Step 1A-3: Determine data sources – data types

- **Secondary Data**
  
  Already collected data.
  
  - Review data collection documents associated with secondary data
  
  - Are that data gathered what you need?
  
  - Limitations?

- **Primary Data Collection**

  Collect data yourself

  - Who will you collect it from?
  
  - When will you collect it from them?
  
  - Do you have the resources to gather the data?
Step 1A-3: Determine data sources – data types

- **Secondary Data Examples**
  - US Census
  - Behavioral Risk Factor Surveillance System (BRFSS)
  - California Health Interview Survey (CHIS)
  - Youth Risk Behavior Survey (YRBS)
  - California Healthy Kids Survey
  - Pregnancy Risk Assessment Monitoring System (PRAMS)
  - Cancer registries
  - Vital statistics
  - Surveillance databases
  - National Health Interview Survey (NHIS)
  - Hospital discharge data
  - Etc.
Step 1A-3: Determine data sources – data type

- **Primary Data Sources**
  - Surveys/questionnaires (online, paper and pencil)
  - Interviews (in-person, phone, video storytelling)
  - Group discussion/focus groups
  - Observation (meetings, events, performance, encounters)
  - Document review (medical records, diaries, logs, meeting minutes)
  - Counts (logs, activity forms, attendance)
  - Case study (in-depth review of one participant)
Step 1A-3: Determine data sources – collection methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Interviews</td>
<td>• Can be less selection bias</td>
<td>• Most costly</td>
</tr>
<tr>
<td></td>
<td>• Greatest response rate</td>
<td>• Least anonymity (more social acceptability bias)</td>
</tr>
<tr>
<td></td>
<td>• Can use visual materials</td>
<td>• Trained interviewer</td>
</tr>
<tr>
<td>Telephone Interviews</td>
<td>• Rapid</td>
<td>• Selection bias – omits homeless</td>
</tr>
<tr>
<td></td>
<td>• Less expensive</td>
<td>• Less anonymity that self-administered</td>
</tr>
<tr>
<td></td>
<td>• Quality of interview – can monitor</td>
<td>• Trained interviewer</td>
</tr>
<tr>
<td></td>
<td>• Better response rate than mail</td>
<td></td>
</tr>
</tbody>
</table>

**Step 1A-3: Determine data sources – collection methods**

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<th>Method</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey/Questionnaire</td>
<td>• Most anonymity (less social acceptability bias)</td>
<td>• Least control quality of data</td>
</tr>
<tr>
<td>Completed by Respondent</td>
<td>• Less selection bias than telephone</td>
<td>• Reading level 7th grade</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mailed: lowest response rate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Online: ? response, selection bias</td>
</tr>
</tbody>
</table>

Choose an appropriate qualitative or quantitative data collection method*

**Step 1A-3: Measurement Type Terminology**

**Quantitative:** Related to quantity, used to explain through numerical data (i.e. how much)

*Example:* % of individuals with health care visit past 12 months

*Questions:* “Closed” or “Closed-Ended”

**Qualitative:** Related to quality, used to explain and gain insight, often narrative (i.e. why, reasons)

*Example:* Description of barriers persons face when seeking substance abuse treatment, reasons outcomes achieved or not

*Questions:* “Open-Ended” or “Narrative”

*Each data source (surveys/questionnaires, interviews, focus groups, observations and document review) can include both quantitative and qualitative measures.*
Part 1B. Improve data quality when designing data collection tools.

**Step 1B-1** Review existing data collection tools.

**Step 1B-2** [Attempt to] create non-biased questions.

*Ask persons from the target population for help.*

**Step 1B-3** Pilot test with persons from the target population.

Specific question design examples
Step 1B-1: Review existing data collection tools.

Remember what to measure

- Logic Model and Evaluation Plan
  - Outcomes, objectives, hypotheses, indicators, information needs of funder
- Mock up data tables/graphs/points

### LDL Cholesterol Level by BMI Category

<table>
<thead>
<tr>
<th>BMI Category</th>
<th>Optimal (&lt;100)</th>
<th>Near Optimal (100-129)</th>
<th>Borderline High (130 to 159)</th>
<th>High (160 to 189)</th>
<th>Very High (190 and above)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obese</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Step 1B-1: Review existing data collection tools.

Research existing tools/questions (to use or modify)

- Full standardized surveys (some free, purchase some)
- Embedded within literature (ask author)
- Online
- CDC, NIH, Tobacco Control, etc.
Step 1B-2: [Attempt to] create non-biased questions.

Read, read, read about designing questions and biases

- Why open- and closed-ended response are very different (and how people do not use the “other” response)
  - Closed list is limiting; open-ended is not quantifiable

- The effect of category ranges on responses
  - Answer box (i.e. _____) at first to inform ranges

- Forced-choice yields better data than check-all-that-apply
  - Y/N separately for each response better

- Question order
  - Read about common question order mistakes

Source: https://cdn.corecanvas.com/leresearch2017-4f1d5942/media/original/5a21f838db1306_How_to_Write_Better_Questionnaires11.pdf and http://www.davidfharris.com/blog/
Step 1B-2: [Attempt to] create non-biased questions.

Design questions (needed to answer your objectives)

How to Create Good Questions (less biased)

- Simple, clear, direct
- Copy or modify questions where possible
- Short recall period
- Short question is better but be specific (not vague)
- No reverse/negative wording
- Limit multi-question scales (unless know what doing)
- Scale questions:*
  - Replace agree/disagree questions with direct questions about what you want to measure
  - Balance of positive/negative responses for scale questions (strongly agree, agree, neutral, disagree, strongly disagree)

*Source: http://www.davidfharris.com/blog/
Step 1B-2: [Attempt to] create non-biased questions.

Design questions (needed to answer your objectives)

How to Create Good Questions (less biased)

- **No ‘And’ or ‘Or’**
  - Make sure the question is really asking only one question
- Add ‘not applicable’ ‘unsure’ ‘do not know’ ‘other’
- Keep the phrasing as neutral as possible; no emotive language
- No bias in stem of question
  - Instead of ‘How much did you like’ use ‘How would you rate’

**Don’t create questions (or collect data) unless you will use them**
Step 1B-2: [Attempt to] create non-biased questions.

Design questions (needed to answer your objectives)

How to Create Good Questions – Social Desirability Bias

- Add reassurance
  - “Please answer honestly, answers confidential, ...”

- Method of gathering
  - Interview or survey, anonymous online, hand in – put in envelope

- Confidentiality/anonymity
  - How anonymous is it really – date of birth, zip code, combinations of questions
  - How will you assure anonymity or confidentiality?
  - Locked box
Step 1B-2: [Attempt to] create non-biased questions.

Design questions (needed to answer your objectives)

How to Reduce Bias in Survey/Questionnaire Design

- Shorter
- Make clear in directions and questions that a positive or a negative answer is equally acceptable
- Language:
  - No specific terms from field, jargon, abbreviations
  - Use common language
  - Define concepts and terms
  - Reading level (7th grade)
- Formatting:
  - Give directions (especially all that apply or choose one)
  - Nice clear layout, skip patterns, good formatting
Step 1B-2: [Attempt to] create non-biased questions.

Design questions (needed to answer your objectives)

Tips
- For knowledge questions, include ‘unsure’ (counts as wrong)
- Try using 10 questions for knowledge (easy to score)
- Answer a specific objective/objective piece with one question

Address
- Cultural sensitivity, appropriateness
Step 1B-3:  Pilot test with persons from the target population.

Design survey methods

- With 1) other staff and 2) persons from target population
- Have persons write questions and notes while they take survey
- Discuss what the questions and responses mean to potential participants individually and/or in a group
- Collect some surveys and analyze to help spot problem areas
Design questions (needed to answer your objectives)

**Common Question Types**

**Open-Ended** (qualitative)
- Begin with what, why, describe, specify....

**Single-Select** (closed, quantitative)
- Yes/No or Yes/No/Unsure
- Choose one

**Multi-Select** (closed, quantitative)
- Choose all that apply

**Scale / Likert Scale** (closed, quantitative)
- Scale 1-10 [with 1 being....and 10 being...]

**Ranking** (closed, quantitative)
- Order most important to least important, 3 most important
Problem Questions: Y/N

Check-All-That-Apply
Which of the following varsity sports do you consider yourself to be a fan of?

Check all that apply
☐ Men’s baseball
☐ Women’s basketball
☐ Men’s basketball
☐ Women’s cross-country
☐ Men’s cross-country
☐ Men’s football
☐ Women’s golf
☐ Men’s golf

Forced-Choice
Do you consider yourself to be a fan of each of the following sports?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Men’s baseball</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Women’s basketball</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
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<td>☐</td>
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</tr>
<tr>
<td>Men’s football</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Women’s golf</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Men’s golf</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
**Problem Questions: Response Range**

On average, in the past week how many hours of TV did you watch?

<table>
<thead>
<tr>
<th>Response Ranges</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low-End Range:</strong></td>
<td>People respond differently to the same question with different response categories</td>
</tr>
<tr>
<td>□ Less than 0.5 hours per day</td>
<td>If all that mattered was the question stem, results from the three groups would be the same. Respondents look at the answer choices to gauge their responses.</td>
</tr>
<tr>
<td>□ 0.5 - 1 hour per day</td>
<td></td>
</tr>
<tr>
<td>□ 1 - 1.5 hours per day</td>
<td></td>
</tr>
<tr>
<td>□ 1.5 – 2.0 hours per day</td>
<td></td>
</tr>
<tr>
<td>□ 2.0 – 2.5 hours per day</td>
<td></td>
</tr>
<tr>
<td>□ More than 2.5 hours per day</td>
<td></td>
</tr>
<tr>
<td><strong>High-End Range:</strong></td>
<td></td>
</tr>
<tr>
<td>□ Less than 2.5 hours per day</td>
<td></td>
</tr>
<tr>
<td>□ 2.5 – 3.0 hours per day</td>
<td></td>
</tr>
<tr>
<td>□ 3.0 – 3.5 hours per day</td>
<td></td>
</tr>
<tr>
<td>□ 3.5 – 4.0 hours per day</td>
<td></td>
</tr>
<tr>
<td>□ 4.0 – 4.5 hours per day</td>
<td></td>
</tr>
<tr>
<td>□ More than 4.5 hours per day</td>
<td></td>
</tr>
<tr>
<td><strong>Answer:</strong> ______</td>
<td></td>
</tr>
<tr>
<td>(answer box)</td>
<td></td>
</tr>
</tbody>
</table>

Source: [http://www.davidfharris.com/blog/](http://www.davidfharris.com/blog/)
Problem Questions: Check box mistake

Survey of persons at X agency

Is the client homeless?
Check if homeless □

Interpretation

10% homeless result – knew it was much higher
• If a person did not check the box were they housed or was the question not answered?

Is client currently homeless?
☐Yes  ☐No  ☐Unsure

OR

What is the current living situation?
☐Homeless – defined as....
☐Rent/Own
☐Other, specify______________
☐Do not know
Problem Questions: Open Ended

What is the biggest issue facing the United States today? n=10

Two Response Types

Open Ended:

Biggest Issue: ______________________
______________________________

Closed (choose one):

☐ President
☐ Economy
☐ Public Health
☐ Other____________________

Interpretation

Open-ended
• 1 reported ‘economy’ (10% but do not report %), variety other responses
If asked closed can get different responses....
3  30% President
4  40% Economy (compared to 1!)
2  20% Public Health
0    0% Other
1  10% No Response
But can limit thought process
Problem Questions: Length Issue

POST and YEARLY: SelfReported Technical Knowledge

POST and YEARLY: Training Methods and Workload

Post and YEARLY: Satisfaction with Program / SelfReported Knowledge Gaps

Medical Provider Survey: HIV/STD

Problem Questions: Length Issue

POST and YEARLY: SelfAssessment of Self Efficacy

POST and YEARLY: Additional Training

Are there any other topics you would like training on that were not listed on the previous page? (if so please list)

Would you like additional cross-course time (more than what you are currently receiving)?

PROVIDER ONLY: Demographic Information
1. What is your gender? Male/Female
2. Are you Hispanic or Latina? Yes/No
3. What race do you identify with (please write)? African American/Black, Asian, Hispanic, Native American, Other
4. What is your age? 20-29 years, 30-39 years, 40-49 years, 50-59 years
5. What is your profession? MD, DO, PA, RN, Other
6. Are you a student? Yes/No
7. What are your credentials? MD, DO, PA, RN, Other
8. In what area(s) are you your formal medical training?

POST and YEARLY: SelfReported Technical Knowledge

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Borderline Personality Disorder is a mental illness that often results in impulsive actions. Do you believe people afflicted with this disorder might be more prone to road rage than the average person?  Yes  No  Don’t Know

- Stem is leading

Do you think that teachers are:
Very kind, somewhat kind, a little kind, not very kind

- Not balanced scale (no negative end)
- May feel pressure to respond positively (similarly, how often do you get drunk....)

How useful do you think this class is?
Useful, neither, not useful

- Stem is leading
Social Desirability – tendency to give socially acceptable answers, even if not true

*Should concerned dog owners vaccinate their pets?*

- Word ‘concerned’ is a problem - creates defensiveness if an owner did not vaccinate “Do you think dogs should be required to vaccinate”

*Do you agree.....*

- Leading
Did law enforcement investigate your reported incident or incidents?

- What if some were investigated and others not? Suggest: Investigated ‘latest’ incident

Do you believe there should be a separate crime of road rage in the penal or vehicular code? Yes  No  Not Sure

- Assumes know what penal or vehicular code is, and that there is not one already – need more info or include response: ‘Do not know enough about it to have an opinion’
Do you engage in leisure time pursuits involving aerobic exercise during school non-session times?
Yes  No  Unsure
- Engage in, leisure time pursuits – slang, reading level
- Aerobic is technical and needs defining
- ‘Non-session’ is not a common term (‘school break’)

What is your passport No.?
- Abbreviation
- Sensitive information

Source: https://static.stuff.co.nz/files/designsurvey.pdf
What is the income of your spouse?
- Assumes have a spouse – best is to use filter question (not applicable is not as good as a filter and skip pattern)

Where do you like to party?
- What if do not like to party? “What do you like to do on the weekend evenings?”
- No definition for ‘party’

Do you use shampoo every night?
- Assumes shower at night, and every night
Problem Questions: Confusing

What was your income last year?
- Vague: 2017? Gross income? Ask household income and # of persons supported if want to calculate poverty levels

Does this class cover topics of health and statistics?
- AND problem

Did you get an ‘A’ in math or physics?
- OR problem
- Assumes took math and physics, assumes had only one class in each, unsure what year

Do you agree that teachers should not be expected to help all students?
- Double negative
Problem Questions: Confusing

**What time of day do you usually go to the store on Tuesdays but not on the weekend with your friends who are your best friends?**
- Too long, recall problem / time frames

**How many times did you use condoms in 1994**
- Recall too long ago, number of times not useful by itself - need to know number of episodes or partners

**Do you agree that busses are kept clean? Yes  No**
- Confusing, yes means ‘agree’ no means ‘not agree’

**What percentage of electricity costs are for your refrigerator?**
- Unknown, requires calculation
Problem Questions: Unable to Interpret

What was your income last year:
0-10,000  9,001 to 12,000
- Puts zero in with income level
- Make sure categories do not overlap

What does your business hold:
land, real estate, computers, equipment
- Make sure categories are measuring the same thing
- Mutually exclusive categories
Not Good (assume know if has business strategy)
The company has a clear business strategy:
  Strongly Agree
  Agree
  Neither agree nor disagree
  Disagree
  Strongly disagree
  
Better
Does the company have a business strategy?
  Yes  No  Do not know

If yes, how clear or unclear is the company’s business strategy?
  Unclear  Clear  Do not know
  1  2  3  4  5

Better Questions

Not Good
We have developed an excellent business management approach:
- Strongly Agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Problems:
- Positive bias of stem and Likert-Scale
- Ambiguous can focus on excellent (‘strongly disagree’ if think ‘good’) or about developed – what if did not know developed?
- Could rate management approach
- Pros and cons of neutral items (hard to interpret)

Better
Did we develop our own business approach?
- Yes
- No
- Unsure

How would you rate the current business management approach?
- Poor
- 1 2 3 4 5 Excellent
- Unknown

How can our business approach be improved?

Better Questions

Not Good
How frequently did you visit the post office in the past 30 days?

☐ Very frequently
☐ Frequently
☐ Somewhat frequently
☐ Infrequently
☐ Very infrequently

Better
How many times did you yourself visit the post office for any purpose in the past 30 days?

____ # times visited post office in past 30 days

Tip: Can change order to scale for ½ of survey respondents

• Positive bias of Likert-Scale
• Order of scale (top or left chosen more often)
• Everyone defines the response differently
• (read more about them)

Part 1A. Determine what to measure and identify appropriate quantitative or qualitative data collection methods

Step 1A-1 Know what you want to measure.
Step 1A-2 Specify exactly what and how to measure.
Step 1A-3 Determine data sources.

Part 1B. Improve data quality when you design your own data collection tool.

Step 1B-1 Review existing data collection tools.
Step 1B-2 [Attempt to] create non-biased questions.
Step 1B-3 Pilot test with persons from the target population.

Specific question design examples
Lori Jones, Example

- HIV Prevention Programs
  - Designing a hybrid data collection form
  - Work plan
  - Align local, state, national requirements
  - Measuring PrEP
  - Reporting
  - Best practices
## Hybrid Form

**Client Encounter Form (complete one for each encounter): TPA, ILI, GLI**

### 1. Administrative Information

<table>
<thead>
<tr>
<th>OA unique ID (enter or adhere):</th>
<th>Session date: (mm/dd/yyyy)</th>
<th>Provider ID:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Type:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TPA: Online</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ILI: In-Person</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GLI Name:</td>
</tr>
</tbody>
</table>

**Program announcement:** PS18-1802

<table>
<thead>
<tr>
<th>Region of contact/service:</th>
<th>Agency ID:</th>
<th>Location ID:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>East</td>
<td>North Central</td>
</tr>
</tbody>
</table>

**Transmission risk:**
- MSM/PWID
- MSM
- PWID
- Other sexual risk
- Unknown risk

**High risk/vulnerable (first visit):** Check if high-risk/vulnerable

### 2. Client Identification

<table>
<thead>
<tr>
<th>LEO client ID:</th>
<th>*HIPOD ID:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
</tr>
<tr>
<td></td>
<td>First Name</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Legal first name:</th>
<th>Legal Middle name:</th>
<th>Legal last name:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Alternate first name: (alias, preferred, maiden, etc.)</th>
<th>Alternate middle name: (alias, preferred, maiden)</th>
<th>Alternate last name: (alias, preferred, maiden, etc.)</th>
</tr>
</thead>
</table>

Accountable Communities for Health
Hybrid Form

4. HIV Testing History*

<table>
<thead>
<tr>
<th>HIV test before today?</th>
<th>Most recent HIV result received <em>(before today)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Yes</td>
<td>(1) Negative</td>
</tr>
<tr>
<td>(0) No</td>
<td>(2) Positive</td>
</tr>
<tr>
<td>(8) Client doesn’t know</td>
<td>(3) Preliminary Positive</td>
</tr>
<tr>
<td>(9) Declined to answer</td>
<td>(4) Inconclusive, invalid</td>
</tr>
<tr>
<td>(8) Client doesn’t know</td>
<td>(9) Declined</td>
</tr>
</tbody>
</table>

5. Client Pre-Exposure Prophylaxis (PrEP) Awareness and Use

<table>
<thead>
<tr>
<th>Ever heard of PrEP?</th>
<th>(1) Yes (0) No</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Currently taking daily PrEP medication?</em>*</td>
<td>(1) Yes (0) No</td>
</tr>
<tr>
<td>Used PrEP anytime in the last 12 months?</td>
<td>(1) Yes (0) No</td>
</tr>
<tr>
<td>If not on PrEP, wants PrEP?</td>
<td>(1) Yes (0) No</td>
</tr>
<tr>
<td><strong>Currently taking PEP?</strong></td>
<td>(1) Yes (0) No</td>
</tr>
</tbody>
</table>

6. Priority Populations

| In the past 5 years, has the client had a male sex partner? | (1) Yes (0) No |
| In the past 5 years, has the client had a female sex partner? | (1) Yes (0) No |
| In the past 5 years, has the client had a trans or genderqueer/ non-binary sex partner? | (1) Yes (0) No |
| Has the client ever injected drugs that were not prescribed to them by a medical care provider? | (1) Yes (0) No |

7. Essential Support Services

<table>
<thead>
<tr>
<th>Health benefits navigation/enrollment</th>
<th>Screened for Need</th>
<th>Need Identified</th>
<th>Provided or Referred</th>
<th>Biomedical Referral</th>
<th>Provided or Referred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral health services</td>
<td>Yes No</td>
<td>Yes No</td>
<td>Yes No</td>
<td>*Pre-exposure prophylaxis (PrEP)</td>
<td>Yes No</td>
</tr>
<tr>
<td>Social services</td>
<td>Yes No</td>
<td>Yes No</td>
<td>Yes No</td>
<td>Post-exposure prophylaxis (PEP)</td>
<td>Yes No</td>
</tr>
</tbody>
</table>
LiveStories Links

PrEP Implementation

https://insight.livestories.com/s/v2/prep-implementation-in-san-diego-county/3812f939-4b88-4fd7-a702-9c4d20f45141

Getting to Zero

https://insight.livestories.com/s/v2/gtz-outcomes/dbbb69ec-199c-4a9a-8f8f-40b7a9bdade4/
Questions: Until 1:45

Questions?
Break Time – Return 2 PM
Part 2A. **Identify** approaches to data collection and reporting that are culturally sensitive.

- Stakeholders
- Training for Data Collectors
- Examples / Audience
Stakeholders

- People who will be making decisions on the basis of the evaluation findings
- People who will be affected by decisions made during or after the evaluation
  - Program staff
  - Program participants / Target population
  - Secondary users
  - Policy makers and advocates

Create a diverse advisory team to help with planning, implementing and interpreting findings from the evaluation

Source:
- BetterEvaluation
  https://www.betterevaluation.org/
- CDC
Identify Approaches

Seek guidance and input from stakeholders during all phases of evaluation/measurement:

- Deciding Measurements/Outcomes
- Survey/Interview Content
- Question Design
- Survey Methods
- Pilot Testing
- Understanding Results

Need some stakeholders that are from target population!

Training for Data Collectors

- Interviewers must be trained well (no reactions, values, etc.), practice with feedback
- Ask target population directly if want certain types of interviewers (sometimes same population not always preferred)
- Provide cultural sensitivity training and education about the target population and community culture
- Consider confidentiality and using spaces where others cannot overhear
- Use anonymous methods if possible

Identify Approaches

Institute for Public Health - Engaging Stakeholders

- **Mindset** to always learn, assume not know
- **Ask questions**
- **Defer to staff judgement** when staff are knowledgeable about the target population, *defer to target population* knowledge
  - Translation
  - Cultural sensitivity / appropriateness
- **Pilot test** with persons from the target population
  - Existing patients
  - Community advisory board members
- **Get staff/stakeholder input**, explanations and interpretation of processes and outcomes
  - Front line staff
  - Management
  - Clients

Partner Examples Engaging Stakeholders

- **HIV, STD, Hepatitis Branch**
  - Getting to Zero, Strategies Committee, NHAS indicators, Live Stories

- **Family Health Centers of San Diego**
  - Community advisory board, staff, clients
Have you had experiences engaging stakeholders? How did it go?

Audience Experience
Part 2B. Collect data and use a data tracking system.

Step 2B-1: Data Collection
Step 2B-2: Data Coding and Entry
Step 2B-3: Data Backup and Cleaning
Step 2B-4: Data Analysis
Step 2B-5: Reporting
Collect Data: Step 1

Step 2B-1: Data Collection

- Collect data according to the evaluation plan
- Electronic or paper and pencil
  - Logs
  - Pre/post surveys
  - Post surveys
  - Interviews
  - Etc.
- Store collected data appropriately (in locked cabinet or encrypted drive if sensitive information)
- Sort and keep collected data organized
Collect Data: Step 1

**Step 2B-1: Data Collection**

- HIPAA and data security/confidentiality
  - When possible gather survey with no identifiers
  - If identifiers are present – handle as confidential data (locked and encrypted drive, lock box in the field)
  - If identifiers are present with questions about health information this is HIPAA data and must be collected and stored accordingly:

  https://www.hhs.gov/hipaa/for-professionals/privacy/special-topics/de-identification/index.html
  - Email address + health question = HIPAA
  - 5 digit zip code + health question may be HIPAA
  - Date of birth + health question = HIPAA
Collect Data: Step 2

**Step 2B-2: Data Coding and Entry**

- Sort and ready data collected for entry
- Select method for data entry
  - Electronic health record
  - Existing databases
  - Excel spreadsheet
  - Customized database
  - Hand counting
- Determine who will enter, check, tabulate and analyze the data
- Where will data be entered (what computer), is there a network?
## Step 2B-2: Data Coding and Entry

<table>
<thead>
<tr>
<th>Data Storage Type</th>
<th>Considerations</th>
</tr>
</thead>
</table>
| Electronic Health Record / Existing Database           | - Have all the data elements you need?  
   - Can it be modified?  
   - Can produce data and/or reports that you need?  
   Are they specific to your program?  
   - If using a non-modifiable pre-made system, work backwards and choose measures already in system |
| Excel                                                  | - Use drop downs, validation, entry screens and protect cells (i.e. yes, yyes)  
   - Entry staff who are careful (sort data incorrectly) |
| Customizable database (MS Access, SQL, Other)          | - Best solution for quality data but more expensive  
   - Have surveys / forms finalized first or incur costs of changing the system                           |
### Step 2B-2: Data Coding and Entry – Software Type

<table>
<thead>
<tr>
<th>Software</th>
<th>Use</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS Access or other database</td>
<td>• Data entry</td>
<td>• <strong>Clean data on entry</strong> (data checks on or between variables)</td>
<td>• Can be costly</td>
</tr>
<tr>
<td></td>
<td>• Complex data (multiple records per person)</td>
<td>• Can have queries to further clean data</td>
<td>• Must know exactly what want</td>
</tr>
<tr>
<td></td>
<td>• Data summary, reports</td>
<td>• Easy to use and see data</td>
<td>• Changes need to be made by programmer</td>
</tr>
<tr>
<td></td>
<td>• Data cleaning</td>
<td>• Reports/analysis run on demand</td>
<td></td>
</tr>
<tr>
<td>Excel</td>
<td>• Data entry</td>
<td>• <strong>Graphing</strong></td>
<td>• Easy to mess up data accidentally</td>
</tr>
<tr>
<td></td>
<td>• Data summary</td>
<td>• Data analysis</td>
<td>• Can be bulky if too many variables</td>
</tr>
<tr>
<td></td>
<td>• Data analysis</td>
<td>• Data entry errors although can add drop downs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Graphs</td>
<td>• Flat (one table)</td>
<td></td>
</tr>
<tr>
<td>Statistical Program</td>
<td>• Data entry</td>
<td>• <strong>Easy data analysis</strong></td>
<td>• Entry mistakes easy (like excel with no drop downs)</td>
</tr>
<tr>
<td></td>
<td>• Data summary</td>
<td>• Flat (one table)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Data analysis</td>
<td>• Complex statistical analysis</td>
<td></td>
</tr>
</tbody>
</table>
## Collect Data: Step 2

### Step 2B-2: Data Coding and Entry

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>var</td>
<td>var</td>
</tr>
<tr>
<td>2</td>
<td>var</td>
<td>var</td>
</tr>
<tr>
<td>3</td>
<td>var</td>
<td>var</td>
</tr>
<tr>
<td>4</td>
<td>var</td>
<td>var</td>
</tr>
<tr>
<td>5</td>
<td>var</td>
<td>var</td>
</tr>
</tbody>
</table>

**Excel**

**SPSS**

**Access DB**

**Access but could be any**
**Step 2B-2: Data Coding and Entry - Coding**

**Coding**

- Depending on how entry is set up you may or may not need to know any codes for the data
- Variable name = what you will call the data element - “Gender”
- Variable values = the coding you will use as values - “Yes” or 1 (if not numerical, statistician will probably recode to numbers)
- Qualitative – if know categories can put each as a column and enter 1 into each column
Collect Data: Step 2

Step 2B-2: Data Coding and Entry - Coding

Entry

- Usually enter one row per survey, person, visit and the variable are across the top labeling the columns
- Text or qualitative data should be entered verbatim
- After entering a survey or record make a mark or write the database record number on the survey
- Online, computer, entry devices, scanned
- Double-entry
Collect Data: Step 2

Step 2B-2: Data Coding and Entry - Codebooks

Discharge Information MasterID: ID

Date Closed: ClosedDate
Discharge Discharge Status:
1. Completed/Graduate (received/receiving all needed care) Months enrolled in all needed care? Months
2. Terminated
   Terminated If terminated choose one:
   1. Left against staff advice with satisfactory progress (1)
   2. Left against staff advice without satisfactory progress (2)
   3. Nonparticipation / unable to contact (3)
   4. Violation of rules (4)
   5. Referred with satisfactory progress (5)
   6. Referred with unsatisfactory progress (6)
   7. Incarcerated from offense while in program, satisfactory progress (7)

8. Incarcerated from offense while in program, unsatisfactory progress (8)
   □ Incarcerated, old offense, satisfactory progress (9)
   □ Incarcerated, old offense, unsatisfactory progress (10)
   □ Transferred to another facility (11)
   □ Death (12)
   □ Other (13) Other

Have the following symptoms been reduced since beginning in Nexus (client self report):

SxMH Mental health 1. Yes 2. No 3. Not Applicable
SxSub Substance abuse 1. Yes 2. No 3. Not Applicable
SxBeh Behavioral health/risk 1. Yes 2. No 3. Not Applicable

Ongoing needs?

NeedsMH Mental health 1. Yes 2. No DischargePlan
3. Not Applicable

NeedsSub Substance abuse 1. Yes 2. No
3. Not Applicable

Plan to Meet Needs / Aftercare Plan:

II. Client Information

Current Gender Identity (check one):
□ (1) Male
□ (2) Female
□ (3) Transgender: MTF
□ (4) Transgender: FTM
□ (5) Other Gender Identity (specify):
□ (9) D/R

Biological Sex at Birth (check one):
□ (1) Male □ (3) Intersex
□ (2) Female □ (9) D/R

Race/Ethnicity (check all that apply):
□ (1) Black/African American
□ (1) American Indian/Alaskan Native
□ (1) Asian (specify):
□ (1) Native Hawaiian/Pacific Islander (specify):
□ (1) Hispanic/Latino(a) (specify):
Collect Data: Step 2

Step 2B-2: Data Coding and Entry

- **Excel**
  - Create a data entry sheet that is user friendly (and exactly matches the data collection log paper form if possible)
  - Create checks or have people enter ‘1’ only so that it can sum to a total at the bottom

But could be made into a drop down if mutually exclusive – Gender (M, F, TF, TM)
**Collect Data: Step 2**

**Step 2B-2: Data Coding and Entry**

- **Excel**
  - Add as many drop-down boxes as possible
  - You can calculate fields and if statements to summarize data

---

<table>
<thead>
<tr>
<th>HIV Prevention: PrEP Navigation</th>
<th>Contract:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>One (OAIId):</strong></td>
<td>Calculated</td>
</tr>
<tr>
<td><strong>OAID:</strong></td>
<td><strong>Date to Orientation</strong> (can be neg)</td>
</tr>
<tr>
<td>551122</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Date Initiated PrEP</td>
</tr>
<tr>
<td></td>
<td>7/3/18</td>
</tr>
<tr>
<td><strong>Participant Tracking:</strong></td>
<td><strong>Insurance:</strong></td>
</tr>
<tr>
<td><strong>DATE HIV Negative Result Provided:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>DATE of PrEP Navigation Orientation:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>DATE Referred to PrEP Medical Provider:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>DATE of 1st PrEP Medical Visit:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Goal Achieved:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
</tr>
<tr>
<td>551122</td>
<td>6/1/18</td>
</tr>
</tbody>
</table>

Calculated (see next page) Drop down
Step 2B-2: Data Coding and Entry

- Excel

  If statements for summarization:
  - **Cell 4L:** add to the right of the table =IF(K4="Kaiser",1,0) will be a 1 if K4 was “Kaiser” then can add that column
  - **Cell G4:** =IF(AND(C4<>"",B4<>""),C4-B4,"") subtracts one date from another (in column G) if neither was empty
  - **Column Sum:** A column with a drop down 1 for male and 2 for female with 30 records =COUNTIF(G1:G30,2) to get the number of females
  - **Column Sum:** A column with a drop down “Male” or “Female” with 30 records =COUNTIF(J1:J30,"Female") to get number of females
Collect Data: Step 2

Step 2B-2: Data Coding and Entry
MS Access
Collect Data: Step 2

Step 2B-2: Data Coding and Entry

MS Access

Outcome Report: Objectives 2.1-8.4

Persons with intake between 1/1/2000 and 1/1/2029

Number of clients with intake dates between the report dates entered: 5

<table>
<thead>
<tr>
<th>Objective (% of all with intake unless otherwise indicated)</th>
<th>Outcome</th>
<th>Target</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Screened for SMI, SUD and support services needs (% of all)</td>
<td>5</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>3.1 Create participant-centered Individualized Service Plan (ISP) (% of all)</td>
<td>3</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>3.2 Scheduled for SUD treatment services as indicated in the ISP (% with need)</td>
<td>4</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Denominator: needs service (not already receiving at intake)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 Scheduled for mental health services as indicated in the ISP (% with need)</td>
<td>4</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Denominator: needs service (not already receiving at intake)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Objective 9.1: Clients with Baseline and 6-Month/Discharge/Later CSAT

80% of [ ] participants will show improvements in MH condition and/or associated functioning.

A. Reduction in days experiencing mental health symptoms out of past 30 (CSAT F5a-f) 8
B. Reduction in days being bothered by mental health symptoms out of past 30 (CSAT F6) 3
C. Reduction in PHQ score 2

Reduction in MH condition (A, B or C) between baseline and latest 6-month/discharge CSAT 8

Note: not a good report for monthly data, report run for intakes completed > 6 months ago will show better outcomes.
Step 2B-3: Data Backup and Cleaning

Backup

- Save a copy of your datafile before cleaning
- Save a copy of your datafile after cleaning but before analysis
- Enter your data on a computer or server that is backed up
- Do not enter/save sensitive data on the internet (unless it is in a HIPAA secure system – i.e. not SurveyMonkey)
**Step 2B-3: Data Backup and Cleaning**

Cleaning

Cleaning data is the process of detecting and correcting inaccurate, incomplete or incorrect data:

- Get rid of spaces in front of values
- Apply a value to missing cells (usually leave to analyst)
- Make sure numbers stored as text are converted to numbers
- Remove duplicate records (survey entered twice)
- Spell check, fix typos
- Make sure dates are stored as dates
Collect Data: Step 3

Step 2B-3: Data Backup and Cleaning

Cleaning Example – What I Look For
- Typos
- Dates entered incorrectly
- If missing data are truly missing
- Values outside of possible limits
- Illogical data (cross-validate with more than one field)
- Seems off – check original record

Cleaning Example – How I Do It
- Sort columns of data looking at highest and lowest values
- Sort two or more columns together to look for errors (i.e. took medication ‘every day in last month’ but marked ‘missed 2 days’ last week)
- Use queries
Collect Data: Step 4

Step 2B-4: Data Analysis

Quantitative - Descriptive

- **Frequencies**: Tabulate the information (add up the number or ratings, rankings, yes/no/missing values for each question)

- **Percentages**: Calculate percentages out of the total
  
  Use different denominators for questions that subset your survey (i.e. only if have diabetes answer the next 10 questions)

- **Averages**: Calculate averages of rankings, ages, etc.
- Repeat any of the above for subpopulations (age, gender, etc.)
- Double-check everything!!

Quantitative - Analytic

- Calculate p-values or other more advanced statistical methods as needed.
Collect Data: Step 4

Step 2B-4: Data Analysis

Qualitative

- Read through all of the responses/data.
- Organize comments into similar categories or themes (strengths, weaknesses, suggestions, etc.)
- Label each category or theme
- Count the number who responded within each theme (do not report %, does not tell you percent who agreed with a category)
- Count the number who did not respond at all to put in table
- Attempt to identify patterns or associations

Best practices: can use statistical software, and/or have more than one analyst analyze separately then come together to update/compare themes and discuss differences until agree
Collect Data: Step 4

Step 2B-4: Data Analysis

Pre-Post: Quantitative

- Comparison of responses on pre and post for the same question for the same person
- Percent of persons who changed (i.e. answered ‘no’ on pre and ‘yes’ on post)
- Do not include in analysis those who did not respond to the question. Denominator is only of those who responded on pre and post

Pre-Post: Qualitative

- Even if same question was asked twice, best to put it in two different tables – not really compare
## Collect Data: Step 4

### Step 2B-4: Data Analysis by Hand – Pre and Post

**How often did you used condoms in last month?**

<table>
<thead>
<tr>
<th>ID/Name</th>
<th>Pre</th>
<th>Post</th>
<th>Change in Use</th>
<th>Positive Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaron</td>
<td>No Sex</td>
<td>Never</td>
<td>Not Applicable</td>
<td>No</td>
</tr>
<tr>
<td>Rebecca</td>
<td>Rarely</td>
<td>Usually</td>
<td>Increase</td>
<td>Yes</td>
</tr>
<tr>
<td>59</td>
<td>---</td>
<td>Always</td>
<td>Missing</td>
<td>Missing</td>
</tr>
<tr>
<td>29-D</td>
<td>Sometimes</td>
<td>Rarely</td>
<td>Decrease</td>
<td>No</td>
</tr>
<tr>
<td>jmka0648</td>
<td>Never</td>
<td>Always</td>
<td>Increase</td>
<td>Yes</td>
</tr>
<tr>
<td>GeorgeB</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Increase</td>
<td>Yes</td>
</tr>
<tr>
<td>22</td>
<td>Usually</td>
<td>Always</td>
<td>Increase</td>
<td>Yes</td>
</tr>
<tr>
<td>GeorgeA</td>
<td>Always</td>
<td>Sometimes</td>
<td>Decrease</td>
<td>No</td>
</tr>
<tr>
<td>Fred</td>
<td>Sometimes</td>
<td>No Sex</td>
<td>Not Applicable</td>
<td>Yes</td>
</tr>
<tr>
<td>Sylvia</td>
<td>Always</td>
<td>Always</td>
<td>Same</td>
<td>No</td>
</tr>
</tbody>
</table>

Columns by Hand – Example (but could calculate in a program)
Step 2B-4: Tables Examples – Pre and Post

Table 1. Condom use in last month (n=7 responding on pre and post survey)

<table>
<thead>
<tr>
<th>Change in Condom Use Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase</td>
<td>57% (4/7)</td>
</tr>
<tr>
<td>Decrease</td>
<td>29% (2/7)</td>
</tr>
<tr>
<td>No change</td>
<td>14% (1/7)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100% (7/7)</strong></td>
</tr>
</tbody>
</table>

Table 2. ...In last month (n= 7 respondents)

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Pre Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>29%</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Usually</td>
<td>14%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Sometimes</td>
<td>24%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Rarely</td>
<td>29%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>14%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Decide to include non-response or not, often for pre/post only use responders to each question on both the pre AND the post.

Table 1: Fifty-seven percent (57%) of the 7 respondents indicated increased condom use in the last month between the pre and post surveys.

Table 2: Fifty-seven percent (57%) of the 7 respondents reported ‘always’ or ‘usually’ using condoms in the last month on the pre test compared to 43% on the post test.
### Table 3. Percent of Clients Reporting a Reduction in HIV Risk Behaviors Since Starting Program (n= 10 respondents)

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, reduced risk behaviors</td>
<td>50%</td>
</tr>
<tr>
<td>No</td>
<td>20%</td>
</tr>
<tr>
<td>Unsure</td>
<td>20%</td>
</tr>
<tr>
<td>No Response</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Decide to include non-response or not, in this example left it in the table (n=10 respondents instead of 9)*
### Table 2: Main themes from focus groups and in-depth interviews of JDC medical staff

<table>
<thead>
<tr>
<th>THEMES IDENTIFIED</th>
<th>JDC STAFF RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>FACILITATORS</td>
</tr>
<tr>
<td></td>
<td>• After the training on Ct screening clinical staff reported feeling more confident in implementing the Ct clinical guidelines.</td>
</tr>
<tr>
<td></td>
<td>• The training delivered in the professional development workshop was a good starting point for discussions about protocols for Ct screening.</td>
</tr>
<tr>
<td>JDC Infrastructure</td>
<td>• JDC medical units are fully equipped with exam rooms and other materials to carry out Ct screening.</td>
</tr>
</tbody>
</table>

Source: https://www.cdc.gov/std/program/pupestd/Step-5-SPREADS.pdf
Table 4. Responses to the question, “List one behavior you have changed since starting the program” (n= 10 respondents)

<table>
<thead>
<tr>
<th>Response Category</th>
<th>Number Responding Similarly ¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce sexual risk</td>
<td>7</td>
</tr>
<tr>
<td><em>Response included: condoms more, fewer sex partners, use more spermicide, less sex</em></td>
<td></td>
</tr>
<tr>
<td>Better self care</td>
<td>3</td>
</tr>
<tr>
<td><em>Response included: eating, resting, taking meds</em></td>
<td></td>
</tr>
<tr>
<td>Unsure</td>
<td>1</td>
</tr>
<tr>
<td>No Response</td>
<td>3</td>
</tr>
</tbody>
</table>

¹ Total number of responses sums to more than the total number of clients as some clients provided multiple responses.

Include: ‘no response’, and a footnote if the number sums to more than the total. Do NOT include percentages.
Collect Data: Step 4

Step 2B-4: Data Analysis and Collection

Common Problems

- Pre and post tests cannot be matched on participant
  - If different persons completed the pre and the post cannot report them together
  - If the same participants completed each but cannot match (i.e. 100 pre and 100 post and same persons) – frequency only, no changes over time

- Collection of information that will not be used (or too much)

- Did not test instrument first, cannot interpret results

- Logs that do not collect the information that was needed (or what was needed changed)

- Employee buy-in and/or comfort with data collection tools/system and employee turnover

- Wording of objectives/measures (not simple or measurable)
Step 2B-5: Reporting - General Report Sections

- **Background/Introduction**
  - Describe program goals and activities, target group and setting
  - Describe your intervention(s)

- **Methods**
  - How, when, and who collected the data, what measures were used, how they were categorized/modified and analyzed
  - Limitations (problems, missing information, outside forces, biases)

- **Results**
  - Present data

- **Discussion**
  - Put results into perspective (explain shortcomings, how improve)
  - Other considerations (what groups do results apply to? Biases)

- **Conclusions/Recommendations**
  - Length of conclusions can vary
  - Conclusions based on facts in report (no new information)
Collect Data: Step 5

Step 2B-5: Reporting - Infographic

Canva.com and other free online resources can help

Example:
Part 2A. Identify approaches to data collection and reporting that are culturally sensitive.

- Stakeholders
- Training for Data Collectors
- Examples / Audience

Part 2B: Collect data and use a data tracking system.

Step 2B-1: Data Collection
Step 2B-2: Data Coding and Entry
Step 2B-3: Data Backup and Cleaning
Step 2B-4: Data Analysis
Step 2B-5: Reporting
Letty Reyes, Example

- HIV Positive Testing Database
Questions: Until 3:00

Questions?
Interpret Results

Part 3A. Interpret results and share findings with different audiences.

**Step 3A-1** Data Collection Tools Review

**Step 3A-2** Questions to Ask

**Step 3A-3** Display Data in Relevant Format(s)

**Step 3A-4** Interpretation Considerations

**Step 3A-5** Share Findings
Step 3A-1: Data Collection Tools Review

- Refer back to your data collection tools/questions, interpretation will depend on how they were worded.

- Use full questions, if possible, in report tables to aid reader in interpretation.
Interpret Results: Step 2

Step 3A-2: Questions to Ask

- What did you learn?
- What were the limitations?
- Who took your survey/participated (and why), who did not take your survey – did they differ?
- In what way does the data suggest your program was successful (or not)?
- Were there any different results for subpopulations (by demographics such as gender, many vs. few visits, etc.)?
- Are the results what you expected? Why or why not?
- Can you justify your summary or conclusion with results?

Interpret Results: Step 3

Step 3A-3: Display data in relevant formats.

- Graphs, tables, text, infographic, PowerPoint
- Tailor to different audiences
- Report data/statistics your audience understands
Interpret Results: Step 3

Step 3A-3: Display data in relevant formats. Example

The pre- and post-tests for Session 1 consisted of 10 knowledge-based questions. A correct score (out of 10 questions) was computed for each participant. The average number of correct responses increased significantly between the pre- and the post-test (Table 2).

Table 2. Average (Mean) Correct Score Change out of 10 Questions: Session 1 (n=195 matched tests)

<table>
<thead>
<tr>
<th>Test</th>
<th>Number of Tests</th>
<th>Mean Score</th>
<th>Change in Mean Score</th>
<th>P-Value¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE</td>
<td>195</td>
<td>6.71</td>
<td>+2.14</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>POST</td>
<td>195</td>
<td>8.85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When examining each person separately instead of the mean scores, 164 persons (84%) showed an increase in the number of correct responses
Interpret Results: Step 3

Step 3A-3: Display data in relevant formats.

Percent of Individuals Per Session with Increase in Knowledge

<table>
<thead>
<tr>
<th>Session</th>
<th>Percent</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session I</td>
<td>84%</td>
<td>(n=195)</td>
</tr>
<tr>
<td>Session II</td>
<td>33%</td>
<td>(n=171)</td>
</tr>
<tr>
<td>Session III</td>
<td>67%</td>
<td>(n=178)</td>
</tr>
<tr>
<td>Session IV</td>
<td>74%</td>
<td>(n=132)</td>
</tr>
</tbody>
</table>

Note: n=number of individuals with a matched pre and post survey for the session
Step 3A-4: Interpretation Considerations

Basic Tips

- Ask **stakeholders** to provide their interpretation *first*
- Make only conclusions based on your data
- Use statistics your audience understands
- *(Don’t panic)* Use findings to improve/modify your program
- Interpret results with the goals of your program, possible biases and external factors in mind

Interpret Results: Step 4

Step 3A-4: Interpretation Considerations

Specific Tips

- What does each audience need or want to know?
- Consider the limitations (biases, validity, reliability)
- Are there alternative explanations for results?
- How do your results compare to those of similar programs?
- Have the different data collection methods used to measure your progress shown similar results? (self report, lower incidence)
- Are your results consistent with theories supported by previous research?
- Are your results similar to what you expected? If not, why do you think they may be different?

Do you think the following would put you at risk of HIV infection? (n=38 matched pre and post surveys)

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Pre % ‘Yes’</th>
<th>Post %‘Yes’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharing needles cleaned with bleach</td>
<td>84%</td>
<td>92%</td>
</tr>
<tr>
<td>Sex with a women without a condom</td>
<td>81%</td>
<td>81%</td>
</tr>
<tr>
<td>Having sex while high or drunk</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>Sharing unclean needles</td>
<td>84%</td>
<td>92%</td>
</tr>
<tr>
<td>Sex with a man without a condom</td>
<td>73%</td>
<td>81%</td>
</tr>
<tr>
<td>Tattooing or body piercing</td>
<td>69%</td>
<td>83%</td>
</tr>
<tr>
<td>Receiving or giving money for drugs or sex</td>
<td>65%</td>
<td>81%</td>
</tr>
<tr>
<td>Sex when you have an STD</td>
<td>61%</td>
<td>78%</td>
</tr>
<tr>
<td>Receiving blood in a hospital</td>
<td>49%</td>
<td>54%</td>
</tr>
</tbody>
</table>
Interpret Results: Step 4

Example.

Do you think the following would put you at risk of HIV infection?

- Question worded badly lending itself to two different interpretations
  - General knowledge about if these behaviors are risky
  - OR
  - Are you currently doing these behaviors and they are putting you at risk?

This illustrates why you **ALWAYS** go back to the original question when you interpret results.
**Wording Matters: Interpretation**

**AND Example: a smaller percent than you think!**

**Objective:** At least X% of clients with follow-up contact will adhere to their plan AND reduce their alcohol use.

**Fix Objective:** Remove ‘ands’ that measure two different things.

- **Adhere to Plan:** 50 (50%)
- **Reduce Alcohol Use:** 40 (40%)
- **BOTH:** 20 (20%)

100 Clients Total
OF WHOM Example: the objective you can never meet

Objective: 90% OF clients in the program will report an increase in knowledge (program is a series of more than one day/meeting).

Fix Objective: 90% of those with post test OR of those completing program OR of those in each class

Enroll in Program 100 (100%)

- Finish Program and Post Test 60 (60%)
- Increase in Knowledge 55 (55%)

100 Clients Total
Increase Example:

- Percent increase, or increase by X percent
  
  \[
  \frac{(\text{total } x - \text{total } y)}{\text{total } x}
  \]
  
  *Example:* Persons who complete X services will realize a 10% decrease in alcohol use defined as....

- Percent with an increase
  
  \[
  \frac{\text{number with increase}}{\text{total number}}
  \]
  
  *Example:* 80% of persons who complete X services will realize a decrease in mental health symptoms defined as....
Interpret Results: Step 4

Step 3A-4: Interpretation Considerations

- Correlation (association) versus Causation
  - Experimental (randomized) versus observational
  - A and B are correlated: A causes B, B causes A, A and B have a common cause, A and B cause C, A causes B and B causes A, A causes C which causes A, no connection - coincidence
    - Children that watch TV are more violent (or violent watch TV)
    - Diet soda linked to weight gain (or vice versa?)
    - Women and hormone replacement therapy (HRT) lower incidence coronary heart disease. Later found out that women taking HRT were from higher socioeconomic group and the relationship was actually reverse.

Source: https://en.wikipedia.org/wiki/Correlation_does_not_imply_causation
Step 3A-4: Interpretation Considerations

- **Selection Bias** (representativeness: are there differences in relevant characteristics between those surveyed/included and not)
  - Sampling bias, attrition bias, survivorship bias, non-response bias, self-selection....
  - Who took your survey (and why), who did not take your survey and did they differ?
  - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3369519/
    - Example: Non-random survey of 1000 persons with HIV (paper and pencil at agencies providing services) versus survey of 1000 persons with HIV online
      - “Of the people surveyed...”
      - “Of persons in program...”

Source: https://en.wikipedia.org/wiki/Selection_bias
Step 3A-4: Interpretation Considerations

- **Missing Values**
  - Include or not include in analysis/tables – are you doing a frequency or comparison?
  - Non-response bias if too many did not answer
    
    “Of those who responded....”
    
    Can test if different comparing demographics (but what if missing important demographic?)

- **Sample Size**
  - Analytical – estimate power and not when size was too small
  - P-value vs. meaningful differences
  - ‘Unstable’ estimates
    
    Recommend against using
  - Needs assessment
    
    10%, will next assessment provide different information?
Step 3A-4: Justifications

Justifying conclusions

Determining what the results “say” about your program

Judgements are statements about a program’s merit, worth or significance when you compare findings against one or more selected program standards.
Interpret Results: Step 4

Step 3A-4: Justifications

Checklist for Justifying Conclusions

- Check data for errors
- Consider issues of context when interpreting data
- Document potential biases
- Examine the limitations of the evaluation
- Consider alternative explanations
- If multiple methods have been employed, compare different methods for consistency in findings.

*Consider data and support for findings from different sources to strengthen justification (i.e. client self-report, staff report, client blood pressure changes)*

Step 3A-4: Justifications

Checklist for Justifying Conclusions

- Compare results to:
  - Existing standards (e.g. Health People 2010) or common standards
  - Program outcomes of previous years
  - What you expected
  - Original program goals, indicators and intended outcome
  - Description of the program’s or participants’ experiences, successes and challenges
  - Description of program’s strengths or weaknesses
  - Assess results against available literature and results of similar programs.

Interpret Results: Step 5

Step 3A-5: Sharing Results

Summarizing findings and share with key audiences

Dissemination involves communicating evaluation procedures or lessons learned to relevant audiences in a timely, unbiased, and consistent manner.

- Tell the evaluation story with data, figures, quotes and client stories
- Use data reports to demonstrate the effectiveness of your program, identify ways to improve your program, modify program planning, demonstrate accountability, and justify funding
- Customize findings/visualizations to key audiences (i.e. organizational leadership, funders, boards of supervisors, county health departments, legislators, community groups)
- Provide recommendations

Interpret Results: Step 5

Step 3A-5: Sharing Results

Common Methods

- Mailings
- Websites
- Community Forums
- Media (television, radio, newspaper)
- Social Media
- Personal Contacts
- Listservs
- Organizational Newsletters
- Posters
- Conferences
- Presentations
- Publication

Sharing Results Worksheet

Plan for Sharing Results (Dissemination Plan)

Worksheet

<table>
<thead>
<tr>
<th>Audience</th>
<th>Format Most Appropriate</th>
<th>Effective Channel(s)</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>
</tbody>
</table>

*Look up other dissemination plan formats on internet

Part 3A. **Interpret** results and share findings with different audiences.

**Step 3A-1** Data Collection Tools Review

**Step 3A-2** Questions to Ask

**Step 3A-3** Display Data in Relevant Format(s)

**Step 3A-4** Interpretation Considerations

**Step 3A-5** Share Findings

- Resource Guide handout: websites, books and other resources with embedded hotlinks
- Blank forms:
  - Data needs
  - Logic model
  - Evaluation plan A
  - Evaluation plan B
Data Collection & Reporting Resource Guide

Program Evaluation

✧ Program Performance and Evaluation Office (PPOE), Introduction to Program evaluation for Public Health Programs: A Self-Study Guide
Centers for Disease Control and Prevention approach to evaluation and evaluation resources. The CDC Evaluation Resources section includes many materials.
Available at: https://www.cdc.gov/eval/index.htm
Available at: https://www.cdc.gov/evalhosts/index.htm

✧ Program Development and Evaluation
University of Wisconsin-Madison maintains a website with easy to use guides and tip sheets for program evaluation, planning, designs, data collection methods, evaluating impact, analyzing and reporting data.
Available at: https://tyl.extension.wisc.edu/programdevelopment/evaluating-programs/

✧ Evaluation Planning Guidelines for Grant Applicants (88 pages)
Available at: https://minorityhealth.hhs.gov/Assets/pdf/Checked/1/EvaluationPlanningGuidelinesforGrantApplicants.pdf

✧ Better Evaluation, Sharing Information to Improve Evaluation
An international collaboration to improve evaluation practice and theory by sharing and generating information about options and approaches. Information about all aspects of evaluation.
Available at: https://www.betterevaluation.org/

Logic Model

✧ Logic Models
The University of Wisconsin-Madison produced a manual on logic models and offers examples and links to other resources.
Available at: https://tyl.extension.wisc.edu/programdevelopment/logic-models/
## Determining Data Needs

Who wants to know what about your program?

<table>
<thead>
<tr>
<th>WHO might use the evaluation?</th>
<th>WHAT do they want to know?</th>
<th>HOW will they use the info?</th>
</tr>
</thead>
<tbody>
<tr>
<td>You – staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funder</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: University of Wisconsin-Extension, Ellen Taylor-Powell, PhD PowerPoint *Logic models to enhance program performance*
### Logic Model

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Outcomes (initial, intermediate or longer-term)</th>
</tr>
</thead>
</table>
## Evaluation Plan A

Developing an evaluation plan based on your logic model

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sources</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Methods</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sample</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Instruments</td>
</tr>
</tbody>
</table>

### Inputs

### Outputs

### Outcomes

Source: University of Wisconsin-Extension, Ellen Taylor-Powell, PhD PowerPoint *Logic models to enhance program performance*
Evaluation Plan B

Goal:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Specific Measures/ Indicators</th>
<th>Source(s) of Data (name of surveys)</th>
<th>Data collection Methods (when collect, how)</th>
<th>Person Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Questions: Until 3:30

Questions?
Training Evaluation

Please complete and turn in your training evaluation

THANK YOU!!!
# Choosing a Method

## Logic Model Visual: State Level

### Inputs

<table>
<thead>
<tr>
<th>Coalition Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
</tr>
<tr>
<td>Regional</td>
</tr>
<tr>
<td>State</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research and best practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote school and community based prevention programs and policies</td>
</tr>
<tr>
<td>Establish baseline of existing resources</td>
</tr>
<tr>
<td>Educate</td>
</tr>
<tr>
<td>Assist with planning and implementing programs/services</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Promote youth cessation services and policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Treating Tobacco Addiction Youth Logic Model</td>
</tr>
</tbody>
</table>

### Activities

| Promote community involvement in restricting tobacco access to youth |
| Establish baseline of current practices |
| Inform/educate |
| Eliminate self-service |
| Facilitate active enforcement of laws |

| Facilitate youth involvement in policy change |
| Recruit youth |
| Involve youth/adults |
| Educate |

| Promote school and community based prevention programs and policies |
| Establish baseline of existing resources |
| Educate |
| Assist with planning and implementing programs/services |

<table>
<thead>
<tr>
<th>Promote youth cessation services and policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Treating Tobacco Addiction Youth Logic Model</td>
</tr>
</tbody>
</table>

### Reach

| Community org, Businesses |
| Policy makers |
| Adults |
| Youth |

| Schools |
| Community |
| Families |
| Youth |

| Community org, Parents, Caretakers |
| Law enforcement |
| Retailer |
| Health Department |

### Short

| Increased awareness of need to eliminate youth access to tobacco products, including tobacco industry tactics, laws, noncompliance |

| Increased commitment to eliminate access/sources |

### Medium

| Increased knowledge and skills in participating in policy change |

| Increased commitment by youth and adults for youth to participate in policy change |

| Increased adoption of policy changes that involve youth in the change process |

### Long

| Increased # of youth actively engaged in policy change |

| Increased adoption of policy changes that involve youth in the change process |

| Increased # of effective prevention programs or policies adopted |

| Increased # of youth participating in prevention programs |

| Delayed average age at first use, reduced initiation |

| Reduced morbidity and mortality |

| Decreased access to tobacco for minors |

| Decreased supply to minors |

| Social norms less supportive of youth tobacco use |

### Source: Wisconsin Tobacco Control Program Work Group, University of Wisconsin 2003
Logic Model: Program Level

**Problem Statement:** Over 70% of the falls among older adults are due to inadequate knowledge of the reason for falls, and lack of bars in bathtubs. Most adults did not understand the need for bars.

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Activity</th>
<th>Outputs</th>
<th>Immediate Outcomes</th>
<th>Long Term Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant money, staff and education materials</td>
<td>Classes for older adults $ for bars</td>
<td>• # of older adults attending class * # of classes attended per adult</td>
<td>• Increase in knowledge of risk factors for falls in the home * Increase in desire to make changes in home * Self-perceived barriers to change</td>
<td>• Home modifications are made * Older adults fall less often * Morbidity is reduced (may be an impact)</td>
</tr>
</tbody>
</table>
Choosing a Method

Limit what to measure.

You do not need to include all ideas, outputs, or outcomes!
Choosing a Method

Limit what to measure.

MORE discussions with stakeholders

- Can you analyze and report on the measure easily?
- Is it practical? Consider time, finances, and other constraints

Source of picture: United Way of Washington County
https://www.unitedwayofwashingtoncounty.org
Choosing a Method

Limit what to measure.

Final Determination Decisions

- Include both process and outcome measures if possible
- If possible, try to pick measures that show cause and effect
  
  - Example: Children with ADHD in our program received either cognitive behavioral therapy or proven drug therapy (process), resulting in better grades (outcome).

Always keep in mind: Is it easy to measure?
Choosing a Method 3

Determine data sources.

Survey/Questionnaire

- **When to Use:** Find out similar information from many respondents, non-threatening, quick

- **Basic Information:** Self-administered - in-Person or online; can be anonymous or not

- **Needs:** Needs good question design; search for existing questions

- **Biases:** Self-report (inaccurate recall, dishonesty), habituation bias (answering same way on all)

- **Advantages:** Reduces interviewer bias

- **Examples:** Pre/post, post, one-time, needs assessment, satisfaction, intercept survey

Some content: Carter McNamara, MBA, PhD Basic Guide to Program Evaluation, and Basic Guide to Nonprofit Program Development & Evaluation
https://managementhelp.org/evaluation/program-evaluation-guide.htm
Choosing a Method

Determine data sources.

Interview

- **When to Use:** Ensure complete data, probe for additional information or full understanding, if preferred by target population
- **Basic Information:** Administered by interviewer in person or by phone, can be anonymous but usually not
- **Needs:** Trained interviewer with time available, space where responses are not overheard
- **Biases:** Social desirability bias (want to be liked), acquiescence bias (say yes)
- **Advantages:** Best response rate
- **Examples:** Key informant interviews, participant interviews, pre and follow-up interviews
Choosing a Method

Determine data sources.

Focus Group

- **When to Use:** To explore a topic in depth through group discussion, useful in evaluation and marketing; quality not quantity
- **Basic Information:** A group of 8-12 people with a trained leader
- **Needs:** Trained leader, note taker, usually food or other incentives
- **Biases:** Moderator bias, note taker bias, biased responses (social desirability, acquiescence, dominant respondent, mood); one group may respond differently than other (some researchers suggest 8 groups on same theme); need to think about group composition
- **Advantages:** Very in-depth information
- **Examples:** Planning phase, review materials, feedback, generate hypotheses

Some content: Carter McNamara, MBA, PhD Basic Guide to Program Evaluation, and Basic Guide to Nonprofit Program Development & Evaluation
Choosing a Method

Determine data sources.

Observation

- **When to Use:** When there is an observable activity, accurate information about how a program actually operates (usually process)
- **Basic Information:** Activity must be observable
- **Needs:** Observers need to be trained; data collection form to standardize observations (with definitions and information)
- **Biases:** Observer bias (see what expect or want, conscious or unconscious prejudices)
- **Advantages:** High accuracy rate
- **Examples:** Time study, staff performance, smoking in public

Some content: Carter McNamara, MBA, PhD Basic Guide to Program Evaluation, and Basic Guide to Nonprofit Program Development & Evaluation
Choosing a Method

Determine data sources.

Existing document Review

- **When to Use:** When data are already existing and recorded (on paper or electronically), view of program operation without disrupting program
- **Basic Information:** Information must be available
- **Needs:** Abstraction form
- **Biases:** Problems if data not recorded or collected uniformly or are recorded in an open-ended text field/note, selection bias if a non-random sample
- **Advantages:** Can be accurate, can be inexpensive
- **Examples:** Medical chart review, records of asthma management programs in schools, school suspension reviews, meeting notes

Some content: Carter McNamara, MBA, PhD Basic Guide to Program Evaluation, and Basic Guide to Nonprofit Program Development & Evaluation
Choosing a Method

Determine data sources.

Document review – program logs

- **When to Use:** Logs, forms, excel sheets created specifically for the program
- **Basic Information:** Information that will be gathered by staff
- **Needs:** Pay attention to counts will need from forms, train users
- **Missing Data:** Need staff who will review data collection for completion and manage process
- **Advantages:** Usually done as a part of program activities, can be standardized, leads to easy process measuring
- **Examples:** Sign in logs, attendance logs, activity tracking
Choosing a Method

Determine data sources.

Case Study

- **When to Use:** To fully understand or depict a client’s experiences in a program, can do a cross comparison of cases
- **Basic Information:** A story or example, can use quotes or a summary
- **Needs:** Willing client
- **Advantages:** Powerful means to portray program to outsiders, attention-getter, some will read only the case study, advocacy
- **Disadvantages:** Can be time consuming, depth of information not breadth (may not be generalizable)

Some content: Carter McNamara, MBA, PhD Basic Guide to Program Evaluation, and Basic Guide to Nonprofit Program Development & Evaluation
Choosing a Method

Specify exactly what and how to measure.

- **Evaluation Plan**
  
  *A document that outlines the questions to be answered and the information to be gathered*

  Use logic model and discussions of outcomes to develop measurable objectives/outcomes (SMART Specific, Measurable, Achievable, Relevant, Time-Bound)

- **Qualitative versus Quantitative Methods**
  
  *Each measure in the evaluation plan can include qualitative, quantitative data or both.*

  The measurement plan will help clarify which method(s) to use
Choosing a Method

Specify exactly what and how to measure.

Evaluation Plan

<table>
<thead>
<tr>
<th>Question</th>
<th>Indicator</th>
<th>Data Collection Method</th>
<th>Data Source</th>
<th>Timing</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation or Research Question, Outcome, Objective, What want measure</td>
<td>Measure, marker of accomplishment or progress</td>
<td>Survey, etc.</td>
<td>Who/what are you measuring?</td>
<td>How often or when?</td>
<td>Who is responsible for collecting the data?</td>
</tr>
</tbody>
</table>

*Often if starting from an objective, indicator column is not included (it is very duplicative)*
### Choosing a Method

Specify exactly what and how to measure.

**Evaluation Plan: Qualitative versus Quantitative**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Indicator</th>
<th>Collection Method</th>
<th>Qualitative or Quantitative?</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 adults aged 70+ will attend the two-class program</td>
<td># of adults aged 70+ attending a class # of classes attended</td>
<td>Attendance log</td>
<td>Quantitative (#)</td>
</tr>
<tr>
<td>80% ...will report increased knowledge about fall risk-factors</td>
<td># attending two classes # (%) reporting increased knowledge</td>
<td>Post-test (survey)</td>
<td>Quantitative (#, %)</td>
</tr>
<tr>
<td>Document summarizing reasons bars were not installed</td>
<td>List of reasons – self-report</td>
<td>Interview</td>
<td>Qualitative</td>
</tr>
<tr>
<td>....80% of adult attendees will report having a safety bar installed in the home</td>
<td># attending two classes # (%) with homes with bar(s) installed</td>
<td>Observation (visit log)</td>
<td>Quantitative (#, %)</td>
</tr>
</tbody>
</table>
Choosing a Method

Specify exactly what and how to measure.

Logic Model Reminder

<table>
<thead>
<tr>
<th>Outputs</th>
<th>Immediate (Short-Term) or Intermediate Outcomes</th>
<th>Long-Term Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• # of older adults attending class&lt;br&gt;• # of classes attended per adult</td>
<td>• Increase in knowledge of risk factors for falls in the home&lt;br&gt;• Increase in desire to make changes in home&lt;br&gt;• Why no changes previously</td>
<td>• Home modifications are made&lt;br&gt;• Older adults fall less often&lt;br&gt;• Morbidity is reduced (may be Impact)</td>
</tr>
</tbody>
</table>

Process Objectives

Outcome Objectives

Outcome Objectives, Goals or Impacts
## Choosing a Method

Specify exactly what and how to measure.

### Evaluation Plan

<table>
<thead>
<tr>
<th>Objective</th>
<th>Indicator</th>
<th>Data Collection Method</th>
<th>Data Source</th>
<th>Timing</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>During 2018, 500 adults aged 70+ will attend the two-class program</td>
<td># of adults aged 70+ attending at least one class&lt;br&gt;# of classes attended per person</td>
<td>Attendance log</td>
<td>Attendees over age 70</td>
<td>At each training session</td>
<td>Training leader</td>
</tr>
<tr>
<td>80% of older adults attending two classes will report increased knowledge about risk-factors for falls</td>
<td># attending two classes&lt;br&gt;# (%) reporting increased knowledge</td>
<td>Post-test (survey)</td>
<td>Attendees over age 70</td>
<td>After the second class</td>
<td>Training leader</td>
</tr>
</tbody>
</table>
# Evaluation Plan

<table>
<thead>
<tr>
<th>Objective</th>
<th>Indicators</th>
<th>Data Collection Method</th>
<th>Data Source</th>
<th>Timing</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Outcome</td>
<td>Create a document summarizing reasons bars were not installed 6 months after class</td>
<td>List of reasons – self-report</td>
<td>Interview</td>
<td>Attendees who did not install bars</td>
<td>4-7 months after last class</td>
</tr>
<tr>
<td>Long Term Outcome</td>
<td>By six months after the second class, 80% of adult attendees will report having a safety bar installed in at least one bathroom in the home</td>
<td># attending two classes # (%) with homes with bar(s) installed</td>
<td>Observation (visit log)</td>
<td>Homes of attendees over age 70</td>
<td>Between 4-7 months after last class</td>
</tr>
</tbody>
</table>
## Choosing a Method

Examples of Outcomes and Sources

<table>
<thead>
<tr>
<th>Question</th>
<th>Possible Outcome</th>
<th>Potential Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formative Research</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How relevant are the materials to the lives of participants?</td>
<td>• Perceived relevance</td>
<td>• Focus groups</td>
</tr>
<tr>
<td><strong>Process Evaluation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How effective is the nutrition education program at reaching the</td>
<td>• Program reach</td>
<td>• Program records</td>
</tr>
<tr>
<td>appropriate target population?</td>
<td>• Program completion</td>
<td>• Participant surveys</td>
</tr>
<tr>
<td></td>
<td>• Characteristics of participants</td>
<td></td>
</tr>
<tr>
<td>To what extent is the nutrition education program being</td>
<td>• Program fidelity</td>
<td>• Program materials</td>
</tr>
<tr>
<td>implemented in the ways specified?</td>
<td></td>
<td>• Interviews with implementers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Program information on mode and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>intensity of implementation</td>
</tr>
<tr>
<td>How much does the program cost?</td>
<td>• Program budgets</td>
<td>• Program budgets</td>
</tr>
<tr>
<td></td>
<td>• Program staffing</td>
<td>• Staff interviews</td>
</tr>
</tbody>
</table>

Source: https://fns-prod.azureedge.net/sites/default/files/SNAPEDWaveII_Guide.pdf
## Choosing a Method

### Examples of Outcomes and Sources

#### Outcome Assessment (May benefit from a control or comparison group)

<table>
<thead>
<tr>
<th>Question</th>
<th>Example 1</th>
<th>Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the program motivate participants to engage in healthier nutrition behaviors?</td>
<td>Changes in participant attitudes and motivations for healthier foods</td>
<td>Participant surveys</td>
</tr>
<tr>
<td>Do program participants master nutrition-related competencies?</td>
<td>Changes in participant competencies (e.g., nutrition knowledge, self-efficacy)</td>
<td>Participant surveys</td>
</tr>
<tr>
<td></td>
<td>Changes in consumption (e.g., use of 1% or fat-free milk)</td>
<td></td>
</tr>
</tbody>
</table>

#### Impact Evaluation (typically requires a control or comparison group)

<table>
<thead>
<tr>
<th>Question</th>
<th>Example 1</th>
<th>Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the nutrition education program effective?</td>
<td>Changes in nutrition-related behavior</td>
<td>Participant surveys</td>
</tr>
<tr>
<td></td>
<td>Changes in consumption</td>
<td>Surveys of parents of child participants</td>
</tr>
<tr>
<td>What are the program costs relative to its effectiveness?</td>
<td>Cost-effectiveness</td>
<td>Program impacts/unit of program cost</td>
</tr>
</tbody>
</table>

Source: https://fns-prod.azureedge.net/sites/default/files/SNAPEDWaveII_Guide.pdf
How do we choose an appropriate quantitative or qualitative data collection method?

Look at your evaluation plan again and decide which seems most appropriate; it should be easier now.

Many outcomes can be measured with both qualitative and quantitative methods; or by more than one method (to improve accuracy).

Your choice may be based on how you want to report the data and how much data you will have (qualitative can be longer to analyze).
Question Design

Create questions that are non-biased.

Design questions (needed to answer your objectives)

10 STEPS TO A GOOD SURVEY DESIGN

1. Identify what you want to cover in a survey
2. Put questions that are necessary
3. Keep it short and simple
4. Ask one question at a time
5. Avoid using jargons
6. Open-ended questions or closed-ended question?
7. Spend time to design your survey
8. Analyze the responses after collecting
9. Put a summary report together
10. Conclude your plan of action

Source: https://www.questionpro.com/features/survey-design/
Culture is personal and deeply rooted. It includes our environment, thoughts, values, beliefs, feelings and sensations. **Culture is dynamic — changing.**

*Dr. Vivian Chavez*
Cultural Humility

Accepting our limitations and engaging in a life-long learning process which incorporates openness, power-balancing, and critical self-reflection when interacting with people for mutually beneficial partnerships & institutional change.

Clients, patients, program participants, and other stakeholders are approached humbly and are viewed as collaborators in the change process.

Culturally Competent Evaluator

“…is prepared to engage with diverse segments of communities to include cultural and contextual dimensions important to the evaluation.” – American Evaluation Association

Identify Approaches

Stakeholders

- Assess own cultural self-awareness
  
  Self-reflection questions for evaluators (page 6)

- Engage stakeholders that reflect the diversity of the community (or target populations)

- Talk to community leaders
  
  - What is the community’s history?
  
  - What traditions and norms exist in the community?
  
  - What are the community demographic and trends?
  
  - What are the community’s specific interest, needs and assets?

Identify Approaches

Stakeholders

- Lay clear ground rules for participation to establish equality
- Teach basic evaluation along the way
- Create a diverse advisory team to help with planning, implementing and interpreting finds from the evaluation

Identify Approaches

Describe the Program with Stakeholders

Guiding Questions to Help Describe the Program

- Are the stakeholders’ perspectives appropriately reflected in the program description such that relevant contextual factors are included?
- What types of conceptual models resonate with and are useful to the stakeholders?
- Does the program description identify intended beneficiaries?
- Does the description sufficiently resolve differing views on the program?
- Does the context provided with the program description include community or participants’ strengths?
- What is known about the strengths, assets, challenges, and barriers of the community, including the talents and expertise that individual community members or organizations bring?
- Are there “gatekeepers of knowledge” within the community that can help us understand the social and political context of the program or community?

Focus the Evaluation Design with Stakeholders

Gather information from the stakeholders about the program’s perspectives, values, and goals and how they would measure or define as success.

- The choice of evaluation questions should reflect stakeholders’ values
- Consider cultural assumptions and norms in the evaluation design.

Guiding Questions to Help Focus the Evaluation Design

- Whose values and perspectives are represented in the evaluation questions?
- Is the design appropriate to the evaluation questions?
- Does the evaluation design fit the cultural context and values of the community?
- How will I obtain multiple perspectives on how the evaluation will be implemented?

Identify Approaches

Gather Credible Evidence and Data Instruments (with stakeholders)

- Hold focused discussions with key stakeholders to determine what “credible” means to them. Ensure the multiple perspectives are represented.
- Select data instruments that are culturally appropriate (most standardized ones will have been normed to dominant culture)
  - Allow sufficient time for testing the revised instruments with the new populations
  - Ensure appropriate translation (professionally translate then back translated)
  - Pilot test with community members to ensure that they make sense and are sensitive

Factor in Culture when Planning Data Collection (with stakeholders)

- Be an active listener and learner rather than an authority figure
- Focus group moderators skilled in making participants comfortable (and do not make assumptions or favor one experience over another)
- Have community stakeholders review the observation protocol and provide insight into norms
- Language and tone will affect how stakeholders perceive the questions, explain what is meant by ‘anonymous” or “confidential” and who will have access to the data
- Interviewers must be trained well (no reactions, values, etc.)

Identify Approaches

Factor in Culture when Planning Data Collection (with stakeholders)

- When tailoring data collection to cultural context, consider issues like nonverbal communication, attire and the importance of small talk.
  - Food likely helps
  - Time concepts are different

- Allow sufficient time for training in the methods and protocols

- Consider potential or perceived biases or confidentiality, train collectors in respecting cultural norms if from outside the community

- Provide cultural sensitivity training and education about the community culture to data collectors

- Consider cultural norms when selecting data collectors (gender, etc.)

Identify Approaches

Justify Conclusions with Stakeholders

- Engage stakeholders from different cultures in the processes of data analyses, collection, and interpretation what the data mean.
- Seek stakeholders interpretations before providing your own
- Engage stakeholders to balance and ensure accuracy of interpretations before drawing conclusions (i.e. different stakeholders may interpret findings differently)
- Make sure that many stakeholders’ voices are heard
- Consider any conclusions that may be beneficial for some but not for others, present negative judgements with particular sensitivity and phrase them to reflect the program and it’s operations, not the participants or community.

## Interpret Results

### Justifications

#### Standards for Justifying Conclusions

<table>
<thead>
<tr>
<th>Standard</th>
<th>Questions</th>
</tr>
</thead>
</table>
| **Utility** | • Have you carefully described the perspectives, procedures and rationale used to interpret the findings?  
• Have stakeholders considered different approaches for interpreting the findings? Consider stakeholder perspective on findings (they may not agree, discuss and reach consensus) |
| **Feasibility** | • Is the approach to analysis and interpretation appropriate to the level of expertise and resources? |
| **Propriety** | • Have the standards and values of those less powerful or those most affected by the program been taken into account in determining standards for success? |
| **Accuracy** | • Can you explicitly justify your conclusions  
• Are the conclusions fully understandable to stakeholders? |

Please rate the following:

<table>
<thead>
<tr>
<th>Rating Scale:</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
</table>

1. Quality of the training
2. Quality of content
3. Range of content covered within this topic area
4. How well did the meeting accomplish the objective “Determine what to measure and identify appropriate quantitative and qualitative data collection methods”?
5. How well did the meeting accomplish the objective “Improve data quality when designing data collection tools”?
6. How well did the meeting accomplish the objective “Identify equitable and culturally sensitive approaches to data collection and reporting”?
7. How well did the meeting accomplish the objective “Collect data and use a data tracking system”?
8. How well did the meeting accomplish the objective “Interpret results and share findings with different audiences”?

9. “This meeting was a/an ________ use of my time.”

10. What was the most important or useful portion and/or aspect of this training for you?

11. What would you change? How could we have made this meeting better?

12. What topics would you like to see covered at future training sessions?