

Facilitators: Linda Netterville and Magda Hageman-A, we have Meals On Wheels



# **Introduce Yourself in the Question Box**

(found on the bottom left side of your screen)

Tell Us...

1. Your name and program

2. Your greatest challenge in measuring your program's performance

Click "Submit"



ASSOCIATION OF AMERICA





# Performance Measurement Toolkit: How to Successfully Use Your Data?

#### Administration for Community Living

November 14, 2013



# Webinar Overview

- What is the POMP Toolkit
- Selecting your sample-Demonstration
- Using the Toolkit- Examples from the field:
  - A county in New York has used data collected using these tools to get addition program funding and Home Delivered Meal routes
  - Georgia will talk about their statewide policy that AAA's collect specified data and how they use it



**POMP website:** Contains all the information and tools necessary to conduct performance-related surveys of Older Americans Act service recipients on the state and local level. These tools may also be useful for other social service and support programs.

- 1. POMP Tutorial (Video-7 minutes))
- 2. POMP Toolkit
- 3. Instruments
- 4. Utilities
- 5. Resources
- 6. Links

#### POMP Website:

http://www.aoa.gov/AoARoot/Program\_Results/POMP/Index.aspx

#### **POMP** Toolkit

Components:

- 1. Introduction
- 2. Measure Program Performance Through Survey Data
- 3. Select the Survey Instrument
- 4. Determine the Data Collection Method
- 5. Develop the Work Plan and Budget
- 6. Select the Client Sample
- 7. Administer the Survey
- 8. Enter, Review, and Analyze the Data
- 9. Prepare the Report and Disseminate the Results
- 10.Compare the Results to Other National Surveys



# Your Sample Size Calculator

# Why Do You Need a Sample Size Calculator?

#### "How big a sample do you need?"

If you are neither a statistician nor a methodologist, chances are you have 1 of 3 reactions to this question:

- 1. I know I need a power estimate, but I haven't done one since I was in college/grad school.
- 2. I don't know. Pick a percentage. Maybe 15% of the clients?
- 3. Huh?

# What Happens If . . . Your Sample Size Is Too Large?

- You will have wasted resources and people's time getting more surveys than you needed.
  - Higher printing and postage costs (postage 2 ways)
  - Time for staff to stuff envelopes
  - Time for your consumers to answer and return
- If your sample is *REALLY* enormous, little differences that don't mean anything can be "statistically significant."

# What Happens If . . . Your Sample Size Is Too Small?

- Estimates made from your survey may be very far from accurate.
- Tests of significance will not support your findings—even if they *are* accurate. Let's look at an example.
- Assume for a moment that your agency has been giving out a certain number of frozen meals each winter for days when the meal cannot be delivered because of bad weather, and you want to know if consumers would prefer shelf-stable meals.

#### Example: Too Small vs. Better Size Example 2 (better)

- Example 1 (too small)
  - You have a sample size of 10.
  - 70% (7 out of 10) say "keep frozen meals."
  - You couldn't really tell if a majority of all your consumers wanted "frozen."
  - Why? A test of statistical significance will tell you that :
    - If 50% of your whole group wanted frozen and 50% wanted shelf-stable, you could get a majority as big as 70% in 21 times out of 100 samples of 10.
    - You could say, with 95% confidence, that the "real" percentage wanting frozen would fall between 35% and 100%.

- You have a sample size of 100.
- 70% (70 out of 100) say "keep frozen meals."
- You could tell that a majority of your consumers wanted "frozen."
- A test of statistical significance will tell you that :
  - If 50% of your whole group wanted frozen and 50% wanted shelf-stable, you could get a majority as big as 70% "frozen" less than one time out of 10,000.
  - You could say, with 95% confidence that the real percentage wanting frozen would fall between 61% and 79% (70 plus or minus 9 percentage points)\*

\*This statement is as statistically inaccurate as saying "30% chance of rain tomorrow," but like the weather statement, it is the way we think about it for making decisions from our survey information.

# The POMP Sample Size Calculator Will Give You the "Just Right" Number

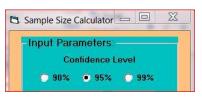
- It was provided to the project by Westat.
- It will tell you how many surveys to distribute.
- It is the greatest thing since sliced bread.



- All you really have to know is how many clients you have.
- Then you just have to make a few guesses.

# Using the Sample Size Calculator: Step 1. Confidence Level

- Decide how sure you want to be.
- Statisticians usually use 95%.
- The higher the confidence level, the bigger the sample you'll need.
- How sure you need to be depends on how you are going to use the information.



This is the first choice on your calculator, but you can try it one way and then see how the sample size changes if you go another way.

# Using the Sample Size Calculator: Step 2. Input Your Population Size

- Just the facts, Jack!
- This is one input that you should *not* play with.
- Remember that it's total consumers, not number of meals per day or per week.



Your population size is just the number of clients on your active rolls.

# Using the Sample Size Calculator: Step 3. Input Your Confidence Interval

• Statisticians usually use 5%.

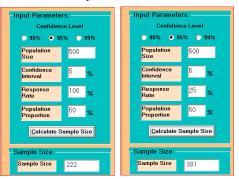
Confidence 5

%

- That's the default on your calculator.
- The "real" answer will be the survey answer plus or minus 5 percentage points.
- A smaller % here means you need a bigger sample size.
- A larger % here lets you use a smaller sample size but you will have a bigger range of variation (plus or minus more than 5 percentage points).

# Using the Sample Size Calculator: Step 4. Input Your Expected Response Rate

- I like to use this twice.
- First, put in 100%.
  - It will calculate how many surveys you really need to get back to have a "just right" sample.
- Then, use your experience to guess what percent of consumers will answer.
  - It will calculate how many surveys you should distribute to get back the number you really need.



Now look at the two numbers and think about whether you feel your guess was accurate. Do you think you will really get back 222 if you send out 381? If not, try a smaller response rate.

# Using the Sample Size Calculator:

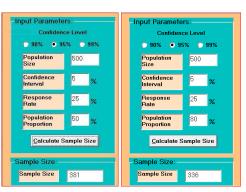
#### Step 5. Input Your Population Proportion

- Population Proportion just means the percent of consumers you think will give a particular answer (yes or no).
- What if your question has more than two answers? For purposes of this calculator, you have to reduce to two.
- Think about how you will combine the data after you receive it and then guess the percentage who will answer that way.
  - Combine % rating meals "excellent" or "very good" vs. all lower ratings (probably use 80% in calculator)
  - Combine % saying meals "always" or "usually" arrive on time vs.
     "Sometimes," "Seldom," and "Never" (probably use 70% or 80%)
  - Compare % who say they eat fewer than 3 meals on days they do not get home-delivered meals with those that say they eat 3 or more (probably use 20% or 30%)



# **Population Proportion (continued)**

- If you don't know, use the default value of 50%. It will ask for a larger sample size, but will make sure you have enough answers.
- If you are asking satisfaction questions, you can use 80% as you almost always get positive answers from 80% or more of your consumers.



These 2 examples are exactly the same except for the population proportion. As you see, in this example you need to send out 45 more surveys if you expect the question to be answered 50% yes and 50% no vs. 80% yes and 20% no.

# Using the Sample Size Calculator: Step 6. Click on "Calculate Sample Size"

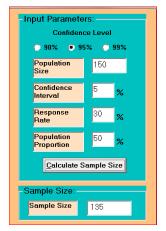
- Click the button and your sample size appears below.
- Help reminds you of what the blanks mean.

| Calculate Sample Size         |               |
|-------------------------------|---------------|
| -Sample Size:-<br>Sample Size | 336           |
| <u>H</u> elp                  | E <u>x</u> it |

#### If Your Population Is Small, Don't Sample

- If your client list is 150, you select all default values, and your return rate is 30% (optimistic), you would need to send out 135 surveys.
- Unless resources are very scarce, it's better to send out the extra 15 and have full confidence in your findings.

| Population Size | Sample Size with<br>Same Assumptions |
|-----------------|--------------------------------------|
| 100             | 93                                   |
| 150             | 135                                  |
| 200             | 174                                  |
| 250             | 211                                  |
| 300             | 245                                  |
| 1000            | 572                                  |



You will decide whether your population is big enough for sampling to be worthwhile.





# Outcome of Home Delivered Meals New York Story



# **Significance of Home Delivered Meals**

In the 2012 Federal Fiscal Year (10/1/11 – 9/31/12), the New York Aging Services Network served\*:

- 56,081 individuals (unduplicated count)
- Close to 13 million (12,686,217) meals

\*Data Source: New York State Office for the Aging 2012 State Program Report

# **Outcome Data Is Critical!**

#### Advocacy

- To justify current programs
- To support additional funding requests
- To communicate to citizens, decision makers and other stakeholders

#### **Program improvement**

- To identify issues/problems
- To identify staff training needs
- To identify best practices

# **Examples of AAA Outcome Data Use**

#### **Orleans County AAA**

- Was able to use HDM survey results to demonstrate to its subcontractor the importance of home delivered meals to frail older adults.
- As a result, Orleans County AAA was able to persuade the subcontractor to keep the HDM site open.

# **Examples of AAA Outcome Data Use**

#### **Wyoming County AAA**

• Used the survey results to justify the need for additional county funds. The increase in funding resulted in the Wyoming AAA not having to create a waiting list for meals.

#### **New York Outcome Initiative**

- The New York State Office for the Aging (NYSOFA) is developing a statewide outcome data collection system to address the growing need for outcome results.
- This statewide system is building on the POMP TO GO toolkit to collect outcome data in a <u>standardized</u>, <u>consistent</u> manner across all counties in New York.

11/15/2013



**Tompkins County Results** 

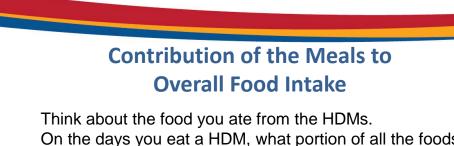


# Clients' Age and Physical Functioning Status

| <u>Variable</u>           | <u>Tompkins</u> |
|---------------------------|-----------------|
| 1 or more ADL limitations | 60%             |
| 3 or more ADL limitations | 30%             |
| 75 years of age and older | 71%             |

# Percent who ate the food served by the program

| Food Group              | <u>Tompkins</u> |
|-------------------------|-----------------|
| Fruit                   | 96%             |
| Vegetables              | 92%             |
| Dairy                   | 84%             |
| Grain (1 to 2 servings) | 90%             |
| Meat                    | 96%             |



On the days you eat a HDM, what portion of all the foods you eat in a day does this meal represents:

| Portion of HDM<br>Represents | <u>Tompkins</u> |
|------------------------------|-----------------|
| Total                        | 42%             |
| More than 1/2                | 32%             |
| Between 1/3 and 1/2          | 21%             |
| Less than 1/3                | 4%              |

# **Service Assessment**

How often would you say that your meals arrive about the time you expect them to?

|           | <u>Tompkins</u> |
|-----------|-----------------|
| Always    | 50%             |
| Usually   | 47%             |
| Sometimes | 02%             |
| Seldom    | 00%             |
| Never     | 01%             |

# Consumer Satisfaction of the Food Receive from HDM

| <u>Assessment</u> | <u>Tompkins</u><br>(Very Satisfied +<br>Somewhat<br>Satisfied) |
|-------------------|--|
| Temperature       | 99%  |
| Looks             | 95%  |
| Smell             | 93%  |
| Variety           | 93%  |
| Taste             | 86%  |

# Consumer Satisfaction of the Overall Nutrition Program

| Overall Rating of the Meal<br>Program | <u>Tompkins</u> |
|---------------------------------------|-----------------|
| Excellent                             | 26%             |
| Very Good                             | 36%             |
| Good                                  | 29%             |
| Fair                                  | 8%              |
| Poor                                  | 1%              |

# Self Reported Impact of the Program

| Self-reported Outcomes            | <u>Tompkins</u>                     |
|-----------------------------------|-------------------------------------|
|                                   | (Yes, definitely + yes, I think so) |
| Would recommend program to others | 97%                                 |
| Eat more balanced meals           | 93%                                 |
| Have something to look forward to | 91%                                 |
| Can continue to live in own home  | 90%                                 |
| Able to maintain weight           | 77%                                 |

# **Outcome Data Use**

- Tompkins County used the POMP nutrition survey results to illustrate the impact of the Home Delivered Meal program on clients and demonstrate the fact that clients could remain at home longer with the support of meals.
- As a result, additional funding from Tompkins County Legislature was added in order to provide another home delivered meal route for the "Foodnet Meals on Wheels program."





# **Using Data in Georgia**

Presenter: Elaine Popham, Regional Coordinator Georgia Division of Aging Services November 14, 2013



# **Compliance Monitoring**

Data are used to:

- Measure provider compliance
- Identify deficiencies needing clarity or corrective action (non-compliance could lead to contractual termination)
- Identify changes needed in policies & training
- Track & complete contract deliverables
- Influence partners to increase & target quality improvement efforts.

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# Improving Quality of the Service & Delivery

Data are used to:

- Improve customer service
- Give the Client a voice! (Negative client comments are investigated for corrective actions.)
- Evaluate Provider Performance
- · Identify areas needing quality improvement
- Evaluate success of program; need for policy changes; service expansion; or training
- Guides & segments the work of individual work teams.

# Examining the Effects of Services on Recipients

Data are used to:

- Evaluate service effectiveness & impact on clients:
  - The personal care staff help me to continue to live at home!
  - The counselor assisted me in making better decisions!
- Determine if services are meeting clients' needs.
- Measure how well a client is "delighted" with the service.

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# When Making Funding Decisions Data are used to: Assist in analyzing areas to reduce, eliminate or add services. To prioritize services "Pay for Performance Practice" - As additional funding becomes available, poorer performers may not be awarded extra funding or internal mini-grants to expand or supplement service.

# Using Survey Data To Raise Local Funds

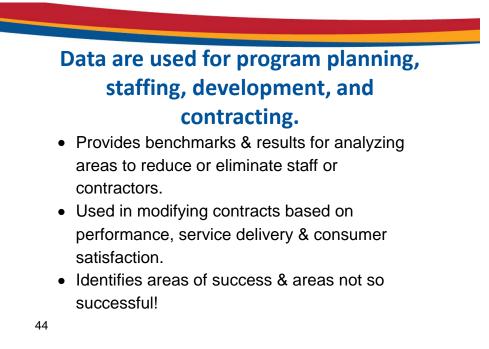
AAA used data to advocate for local funds for to pay for items, equipment & services for clients on HCBS services wait lists.

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When advocating with legislators for funding increases or to prevent funding decreases, Georgia uses data to demonstrate performance measurement documentation to justify & support these requests. When talking to Boards, Advisory Committees, Regional Commissions, Partnering Organizations, and Local Governments about services, data is used to:

- Inform & support messaging!
- Educate & advocate for services!

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When preparing grant proposals for funding opportunities, data demonstrates the need for a program or success with a pilot.

- AAA recently received a foundation grant (for Home Delivered Meals) using data to demonstrate the "need"!
- Describes consumer satisfaction surveying in all grant proposals as a CQI initiative.

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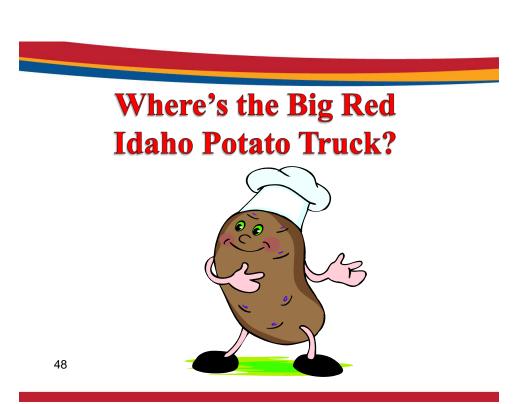
Use survey data in preparing Annual Reports, Summary Documents & Brochures

"Client quotes and success stories are very helpful!"

#### **Comments!**

- "Survey data, especially for in-home services, has assisted in detecting potential abuse, neglect and/or exploitation of clients by provider staff."
- "Survey data has provided the added punch needed to drive the point across in many situations to improve or expand services for our region!"

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# **Questions?**

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