

Collecting, Storing, Analyzing and Using Data

*Implementing the ROMA Cycle in the
“Next Generation” Performance Management
Framework*

ROMA NEXT GENERATION TRAINING SERIES



ROMA Next Generation Video Series

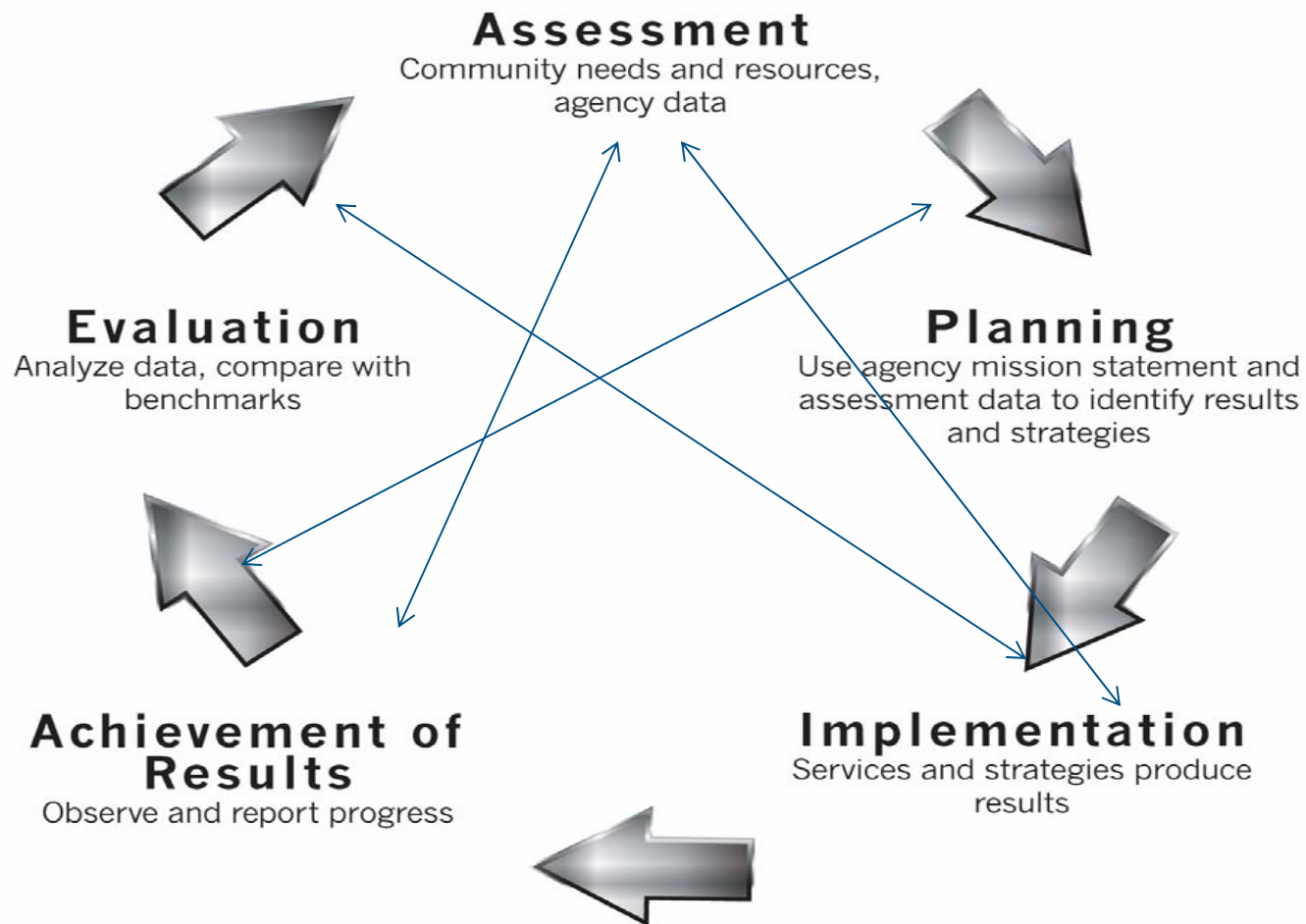


Learning Objectives for This Workshop

Participants will:

- Explain the role that data analysis plays in the ROMA Cycle:
 - Discuss the difference between data, information and knowledge
 - Recognize the complexity of the data analysis process
 - Identify data elements that are found throughout the ROMA Cycle
- Identify key data analysis techniques and how analysis can be used to turn data into information
- Recognize the uses of information to create knowledge for improvement of agency capacity and results
- Recognize the need to identify steps to establish data collection processes

The Results Oriented Management and Accountability Cycle



While We Get Settled

What data do you think we will find in each of the areas of the ROMA Cycle?

How is that data useful to your:

- Agency
- Community
- State
- Customers (families/individuals)

How is that data useful to the national network?



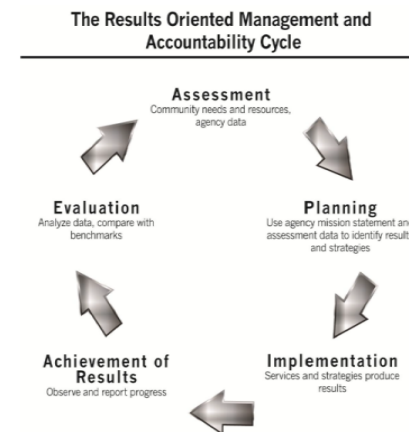
Welcome and Introductions

- Who's here?
- Why are you here?

Overview for Today

We will see how the data can be collected, aggregated, analyzed and applied throughout the ROMA Cycle as the agency:

- Conducts Community Needs Assessment
- Engages in Strategic Planning
- Implements Services and Strategies
- Reports on outcomes and progress
- Evaluates what happened
- And brings the information back to improve the re-Assessment process



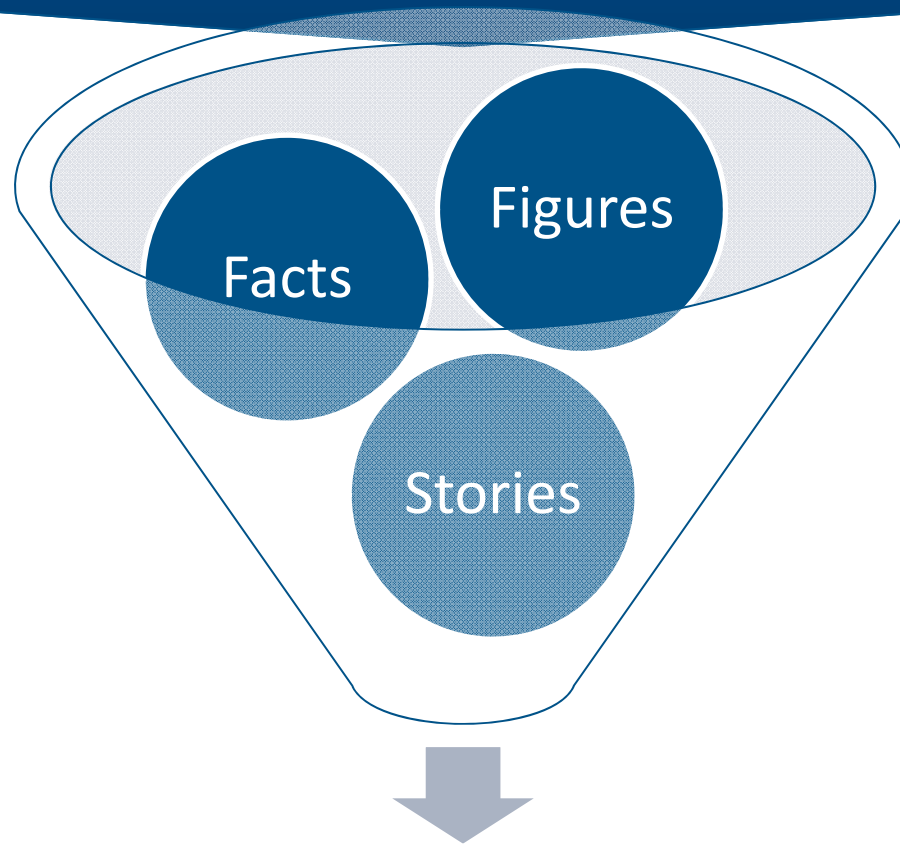
Review from Video

- What is data?
- Why do we analyze data?
- What did you learn about data in the video that you didn't know before?
- How does the data connect to your Theory of Change?

Data, Information and Knowledge

- Data is the facts that are observed, measured, collected and aggregated.
- Data only becomes information for decision making once it has been analyzed in some fashion.
- Knowledge is derived from the information and interaction with experience with a topic.

Analysis of Raw Data



Useful Information

Four Data Quality Attributes



Is the Data Accurate and Complete?

Remember that flawed data characterized as incomplete, inaccurate, not timely, etc. will lead to faulty decisions.



What Do You Want to Know?



There must be a purpose for the data.



In Analysis of Data, You Must Know What You Want to Know

- Establish what you want to know
 - Is this driven by internal or external reporting requirements?
 - Is this driven by Local Theory of Change validation?
- Identify who has the data and where the data is located, necessary to tell you what you want to know.
 - Agency programs? Input from customers?
 - Community statistics? Input from the general public?
- Consider what “buckets” or different data classifications we need to examine.

Asking the Right Questions

*The most important first step in making
meaning from the data*



A Series of Questions You Want To Answer With Your Data

- Did we do what we thought we would do?
- Did we serve the population we thought we would serve?
- Did we make an impact on the identified needs?
- Can we tell what services (or set of services) produced the best opportunity for results?
- Are some populations achieving outcomes at different rates than others?
- Did we recruit and enroll sufficient numbers to allow us to achieve our target outcomes?
- Do we need additional resources?
- Was there something unexpected that influenced the outcomes?

What Data Do You Collect?

Can you answer the Carter Questions?



Examining Data Collection

- Who does the data collection?
- How do they do it? (paper, computer, at office, in field, etc.)
- What do they do with the data after they collect it? (enter it, bring it to someone else to enter, etc.)
- How is the data stored?

Do you know?

- How many are you serving?
- Who are they?
- What services do they get?
- What happens to them?
- What does it cost?

Adapted from The Accountable Agency, Reginald Carter, Sage Human Services Guide 34, 1983.

Who Has the Data? How Is It Shared?

- Identify who has the data that would tell you what you want to know.
 - Agency programs.
 - Input from customers.
 - Community statistics.
 - Input from the general public.
 - Input from supportive customers.
- How is the data shared? Who gets to see it?

Aggregate the Data

Combining data to understand the big picture



Aggregate the Data

Consider What Type of Data To Aggregate:

- population characteristics
- well being indicators
- economic indicators
- other....

Techniques for Analysis

Applying a Few Techniques to Agency Data



A Quick Review of Data Analysis Techniques

- Count
- Compare
- Identify the factors
- Consider the trends

One Technique Is To Count

- How many did something?
- How many of a certain characteristic?
- How many were successful?
- How many responded in a certain way?

Comparative Analysis

- Program data from year to year.
 - Quantity of service, outcome, cost of program
- Your program with national trends.
- Target and actual.
- Compare with Needs Assessment.
- Differences within groups or between groups.
- Comparing with other providers
- Comparing data from another program.

Comparing with Other Providers

Consider: If we assisted 100 people in getting a job, is that good?

- What do we mean by “assisted”?
- What do other agencies who have employment as an outcome achieve? How is employment defined?
- Are our populations similar?
- How might differences in population impact differences in outcomes?

Factor Analysis

What is behind the causes and conditions?



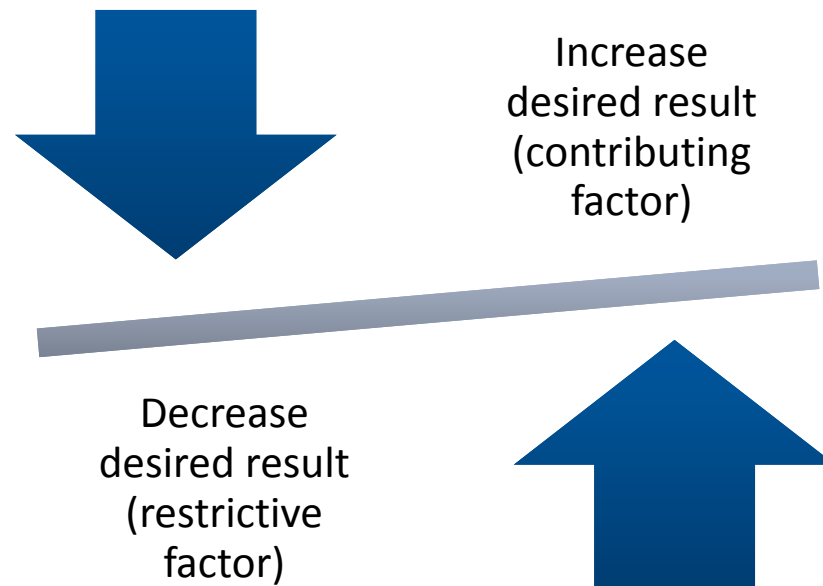
Factor Analysis

- Tool for investigating relationships for complex concepts.
- Examine elements to determine how or if they are related.
- Multiple variables are tracked and observed for patterns.
- For example: How are income, education and occupation associated with socioeconomic status? Which factors most influence socioeconomic status?

Learning from Factor Analysis

- Examine the influence of underlying causes and conditions.
- Patterns are identified.
- Relationship among the effects are likely the result of the same factors.
- Unrelated factors can discount them as the root cause of the effect.

What is the influence of a factor?



Trend Analysis

Analyzing longer term trends and identifying patterns



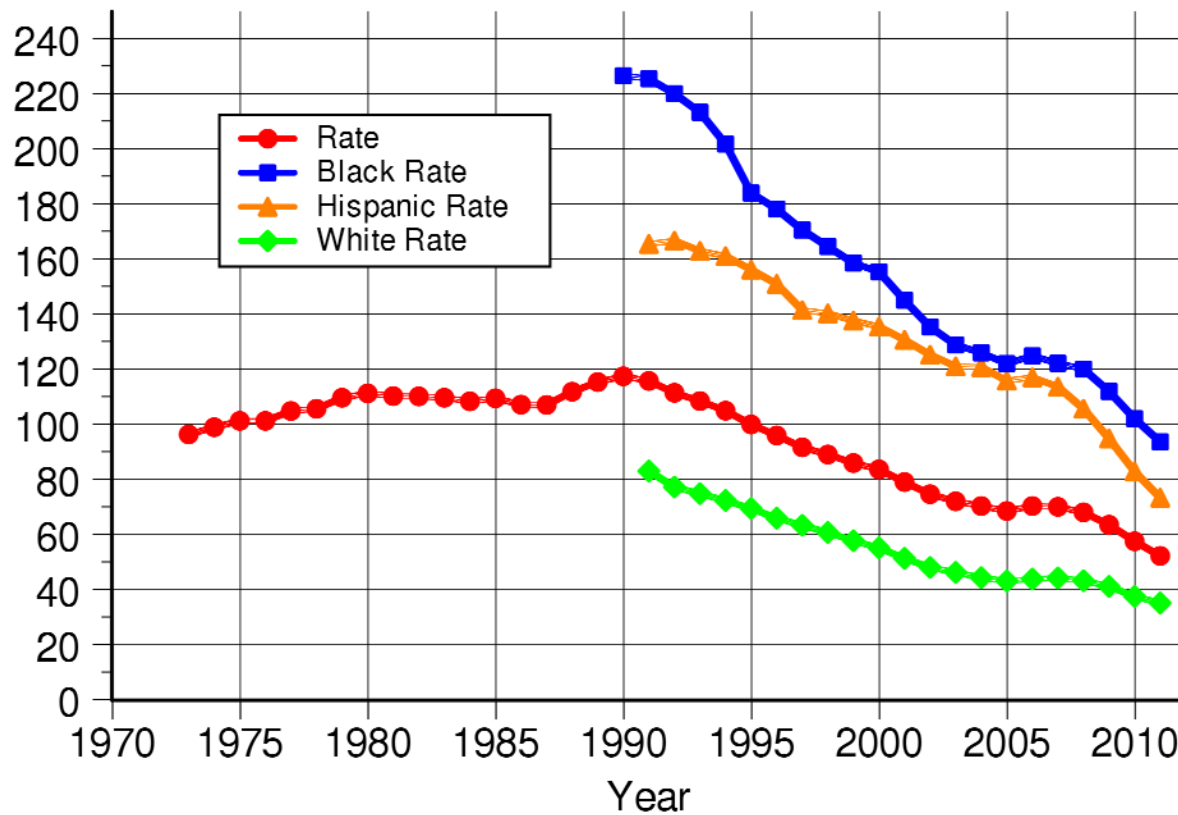
Trend Analysis

Collecting information and attempting to spot a pattern, or *trend*, in the information:

- Although trend analysis is often used to predict or forecast future events, it is also used to explain and understand events in the past.
- Trend analysis provides evidence to inform your decision making.
- Trend analysis together with annual or point in time data provides both a short and long term perspective.

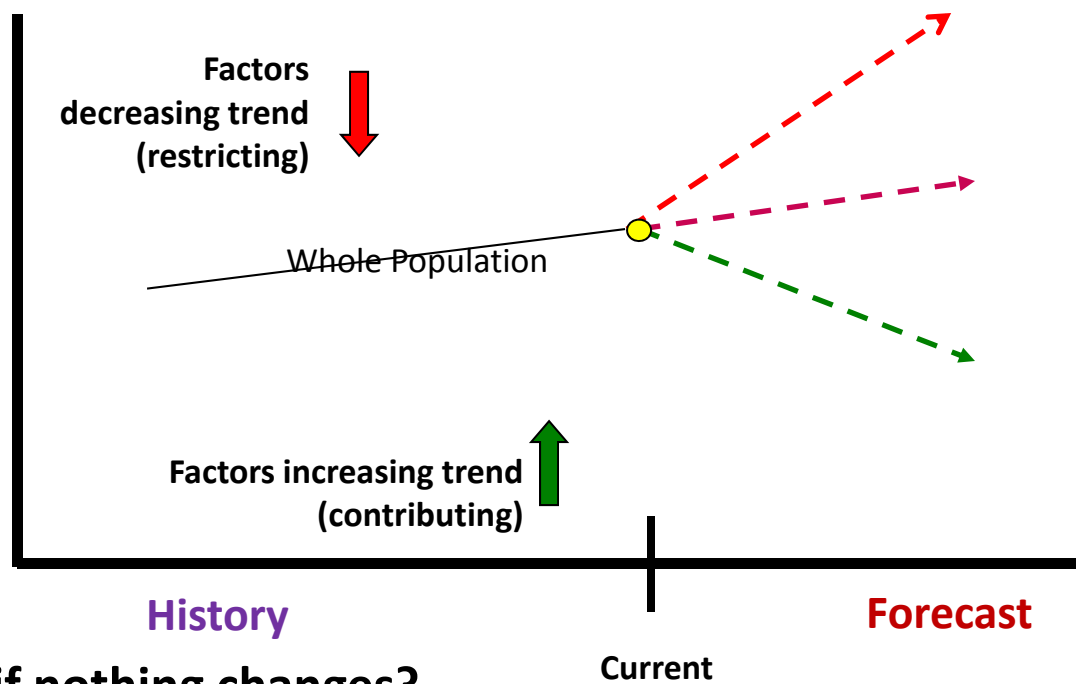
Looking at the trends

US Teen Pregnancy Rate



Predict what can happen to the trend if you address the factors

Is it Better? Does it stay the same? Is it worse?



Where will we go if nothing changes?
Where do we want to be?

Using Trend Data for Targeting

- Identifying the projection of how many people will be served next year can be based on the analysis of the trend you have seen in the past few years.
- Did the number of people served remain the same over the past few years or are there annual fluctuations? If there are differences what caused them? (changes in funding, changes in circumstances in the community, new population in need)
- Of the number of people served in prior years, how many achieved the expected outcome? How stable is that number over time?

Report the Data



Assessing your existing management reports



Assessing your existing management reports

The 20 statements on the assessment tool are designed to cover several important areas.

- Quality of the data -- Accuracy, completeness and timeliness of the data included in the report (4 items)
- Presentation of the data in the report – it is easy for the reader to find data that is important to him/her? (6 items)
- Usefulness of the data – is it relevant to the task of managing the program/service? Do I have access to the data when I want/need it? (7 items)
- Performance Focus – includes data on outcomes and performance (3 items)

Action Steps?

- Are there some areas where your reports could be changed to provide more information?
- Can the presentation be improved?
- Who in the agency (and board) should have access to this kind of reporting? Or other kind of reporting?

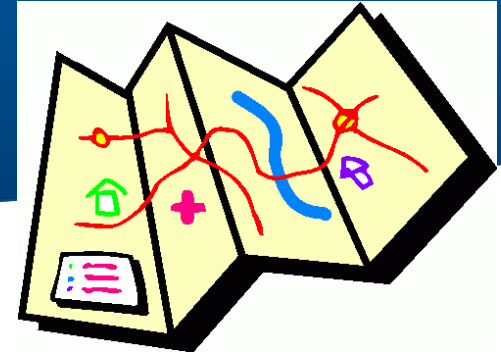
Mapping Data Collection Processes



*Identifying the path and flow of information,
service delivery, customer interaction*



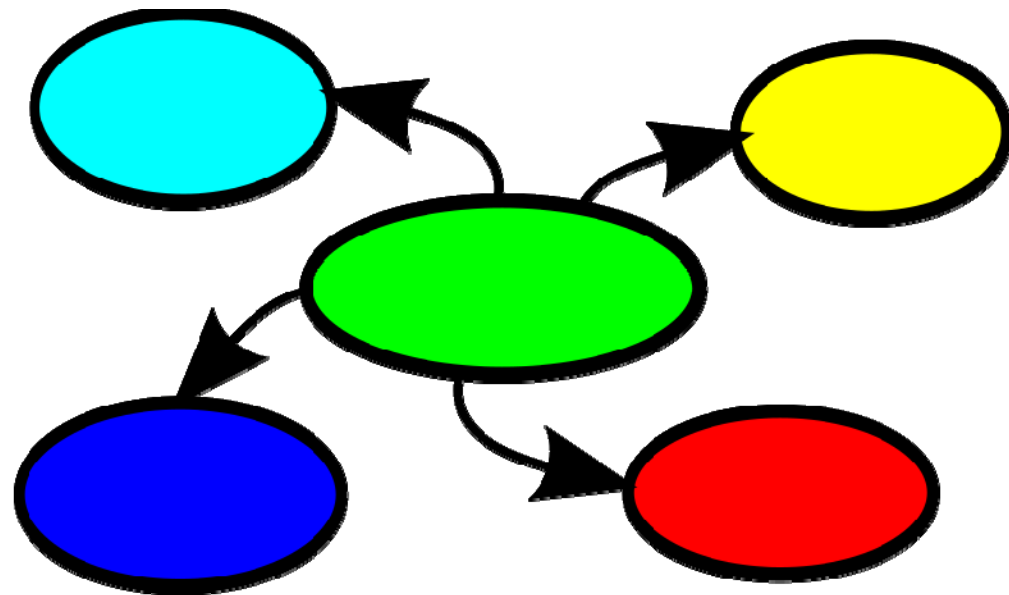
A “Map”



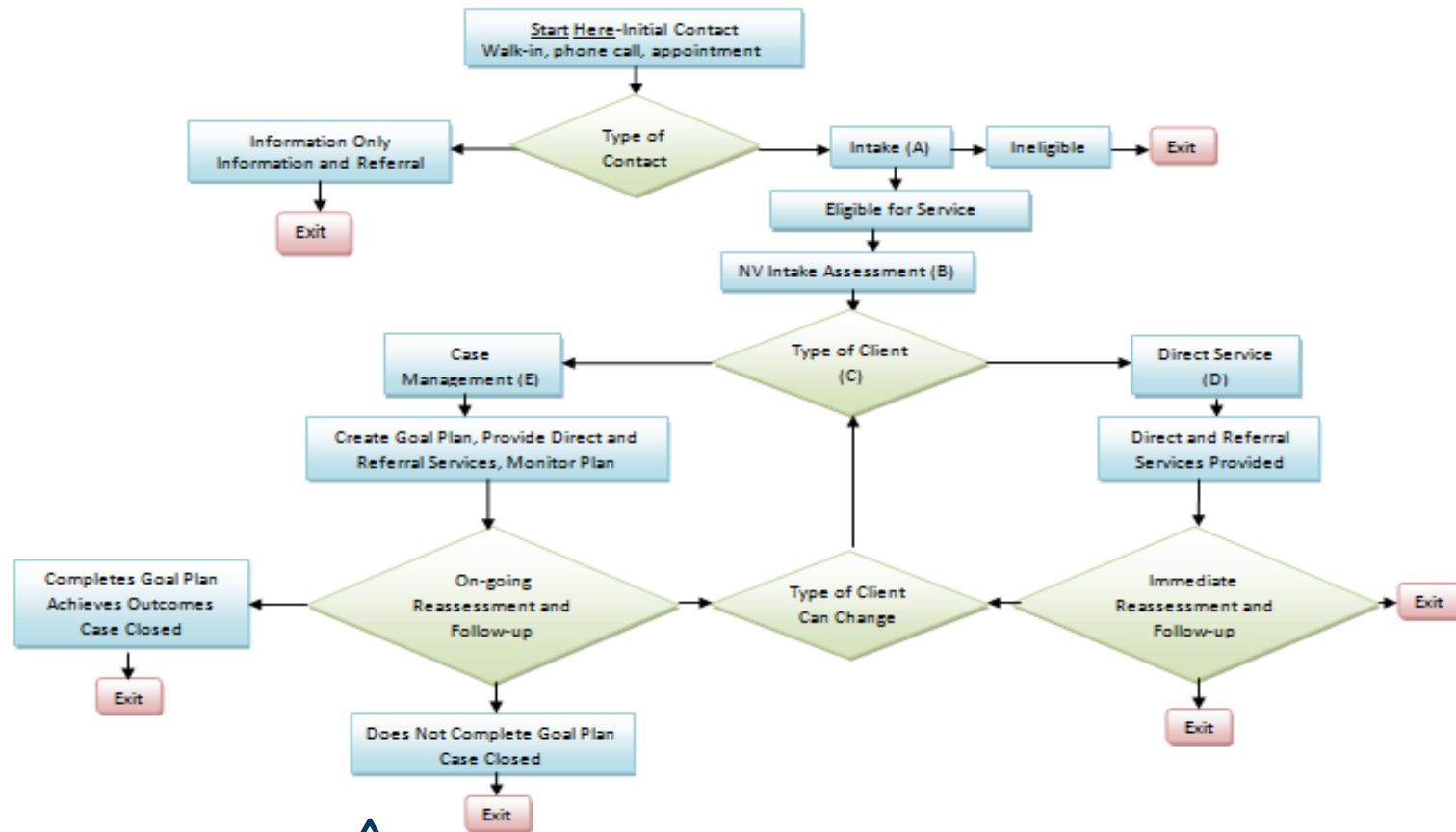
- is a graphical representation.
- depicts relationships among its different components.
- can show the path or flow of information, materials, money, personnel, etc.

Using Mapping

- Brainstorming
- Problem Solving
- Planning
- Reflecting
- Visualizing



Sample Flow Chart of Client and Information Flow



What Happened?

How did individuals, families and communities change?



Activity: What NPIs Did You Report?

- Look at last year's NPI report.
- Identify the NPIs that have data that was submitted to the state (and to NASCSP/OCS)
- What's new for 2018?



Outcomes Specified by a Funding Source

- Sometimes the source of your funding gives you a target that you are expected to hit.
- This can be good news, because it is easy to determine.
- It may be bad news if the imposed target is difficult to hit, or if there are other outcomes that you want to track.

Who Changed?



*At the Family level:
How many? (unduplicated count)
What is their demographic profile?*



Who did you serve?

- How many did you serve?
- Out of the number served, how many achieved the outcome?
- How many will you serve next year?
- How many do you think will achieve the outcome?
- Identify demographic profile (client characteristics).



What Services Achieved Results?

Why did the change happen?

Identification of agency activities that are meaningful at the family level



Knowing About The Services

What do you know about the services?

- Specific office or facility
- Specific caseworker or other designated staff
- Type of service delivery (group, individual)
- Amount of service (frequency, duration)

Activity

Identifying Services

- In the new CSBG Annual Report, agencies are asked to identify the number of individuals who received services
- We will look at the Module 4, Family Level, list of services to find what the agency has been doing.



How Do You Know?

What measurement tools did you use? How did you measure? Who measured? When did you measure?



Variety of Indicators

Process indicators

- provide evidence of whether the program unfolded according to plan.

Service Delivery indicators

- provide straightforward information about what a program is providing. *How much? How many? How often?* are the kinds of questions we can answer with service delivery indicators.

Customer Satisfaction indicators

- provide information about whether a program met its customers' expectations.

Impact indicators

- provide evidence of whether the program had the impact (achieved outcomes or results) it was intended to have.

How Do You Measure?

What measurement tools do you use to document success (or movement towards success)?

How do you collect and store this kind of data?

Can you compare data over time?



What Did We Learn?



Analyzing and applying data is essential to sustainability



On-going Monitoring Is Essential

- Monitoring should be built in early, involve people at all levels of the organization, and give leadership the ability to quickly take corrective action or move to build on success.
- There must be systematic feedback—a way of self-control from events back to planning.”

Peter F. Drucker-The Drucker Foundation Self-Assessment Tool, 1999

Agency Capacity

Does the agency have the proper tools to engage in proper data collection, storage and analysis?

An important aspect of agency capacity lies with the agency staff.

- Are they properly informed, assigned and equipped?
- Do they provide services of high quality that meet the needs of the customers ?

Applying the Techniques

Getting to the answers:

- What happened?
- Who changed?
- What services or strategies produced the change?
- How do you know?

What We May Not Know ... YET!!

- What services produced the outcomes/results?
 - One? More than one?
 - How can we track the multiple services connected to each customer?
- Who achieved the results?
 - What was the age, income level and income source of those who achieved? What about education level? etc.
- Did the individuals who achieved one outcome achieved any others? How many individuals achieved multiple outcomes?

Accountability Data

- Are we focused on “Changing Lives”?
- Are we following up to show the long term impact of our work?
- Once we are finished collecting our NPIs, can we compare the NPIs to the agency plans? Can we see what needs to be done next year to expand?
- Can we tell what set of services give the best opportunity for results?

Go Back to Your Local Theory of Change

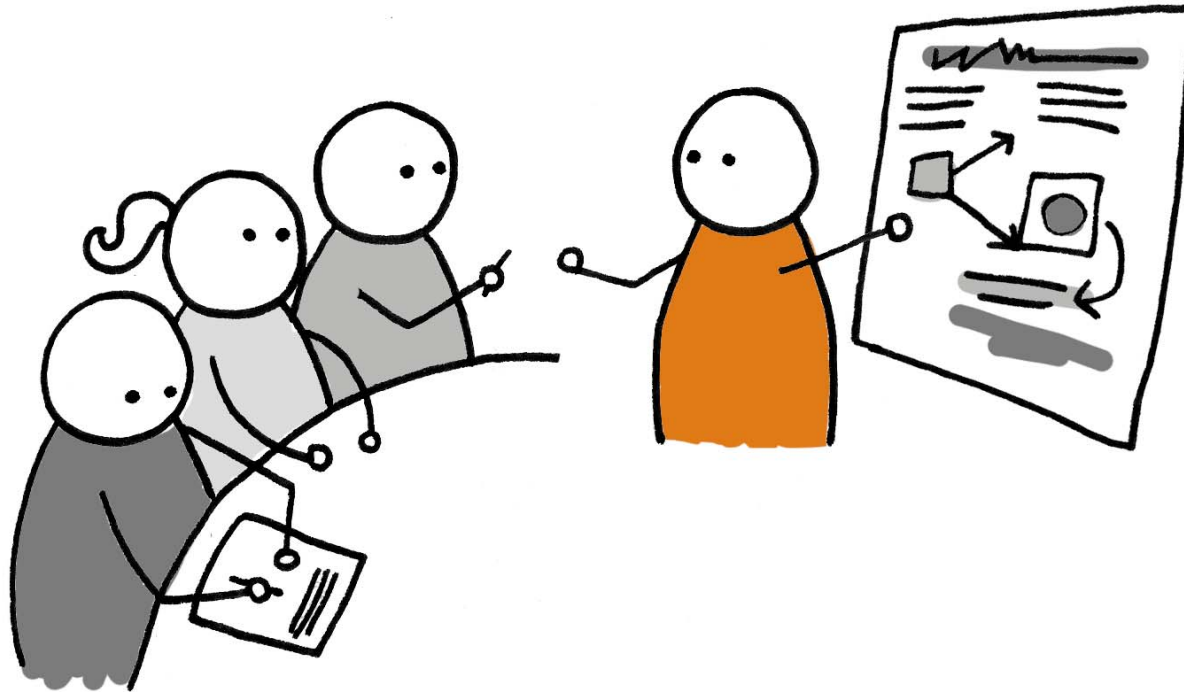
- Does the information you have derived from your data support your assumptions?
- Is the information you have derived from your data consistent with your plans?
- Did you reach the goals you established? Were they they right goals?

Think about your next Community Needs Assessment

- What do you want to collect data about that you haven't before?
- Was anything missing from your previous data collection efforts?

NEXT STEPS

Applying what you have learned



For More Information

Barbara Mooney, Director
Association of Nationally Certified ROMA Trainers
barbaramooney@windstream.net

Frederick Richmond, President
The Center for Applied Management Practices
frichmond@appliedmgt.com

Courtney Kohler, Senior Associate
Community Action Partnership
ckohler@communityactionpartnership.com

Jarle Crocker, Director T/TA
Community Action Partnership
jcrocker@communityactionpartnership.com

