MAKE YOUR EVALUATION DATA WORK FOR YOU!

Leveraging Online Data Collection Systems

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Reunite, Reignite, Re-energize: Innovating for the Future
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1

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Learning Objectives

1. Identify best practices for implementing online data collection systems with multiple data sources and multiple end users with varying needs

2. Compare different methodologies used for storing and managing data and discuss costs and benefits to different procedures.

3. Understand how to leverage the data reporting advantages of online data systems to inform short- and long-term practices, with an eye toward maximizing user efficiency and data privacy.

Session Outline

- Presenter Introductions & Georgia PREP
- Data Collection & Management in Program Evaluation
- Understanding Your Evaluation Data Ecosystem
- Leveraging Continuous Data Reporting
- Best Practices & Practical Guidance

Meet Your Presenters

David Fikis – Georgia State University
- Doctorate in Educational Policy Studies (concentration in Research, Measurement, and Statistics)
- Master's in Instructional Design & Technology
- Georgia PREP Eval Team (2011)
- PREP Expertise: Database Design, Quantitative Methods

Tessa Johnson – Georgia State University
- Master's in Educational Research
- Georgia PREP Eval Team (2014)
- PREP Expertise: Quantitative Methods

Georgia's Personal Responsibility Education Program (GA-PREP) Overview

Georgia's PREP Initiative

Overall Goal

The overall goal of Georgia PREP is to reduce the occurrence of pregnancy, HIV and STIs among high risk youth ages 10-19 (up to 21 if pregnant and/or parenting) in Georgia through free access to medically accurate, age-appropriate, and evidence-based teen pregnancy prevention programs and supplemental adult preparation subjects that are inclusive and culturally appropriate.
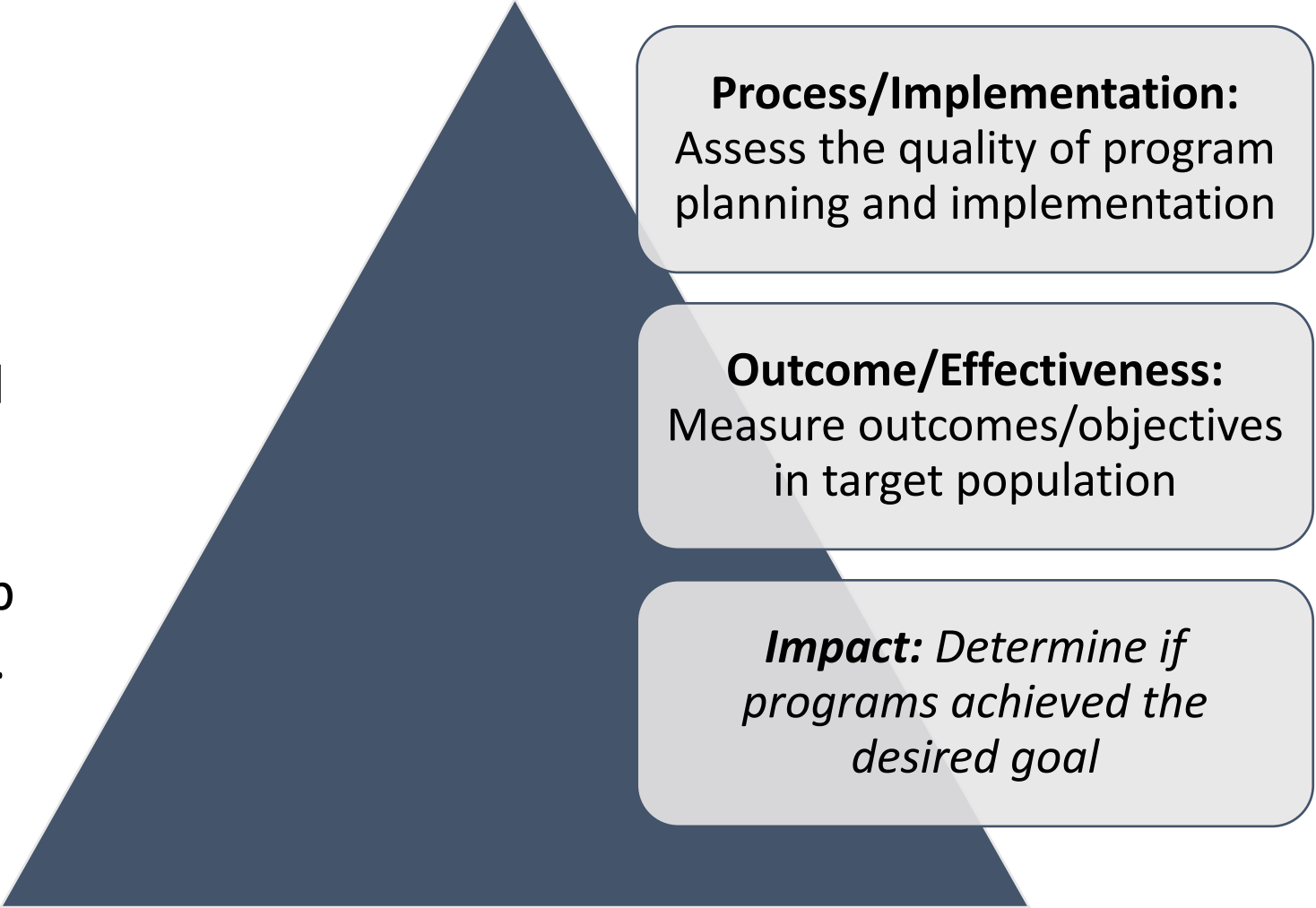
Evaluating Georgia PREP

The evaluation aims to answer these overarching questions:

1. Did Georgia PREP increase the capacity of funded youth-serving organizations to deliver evidence-based sex education curricula?

2. Did Georgia PREP reduce risky behaviors among participating youth that lead to the occurrence of pregnancy, HIV, and sexually transmitted infections (STIs)?

Types of Program Evaluation

In this workshop, we will primarily discuss data collection and management activities related to **Process/Implementation** and **Outcome/Effectiveness** program evaluations, though the key ideas in this workshop can extend to other activities.
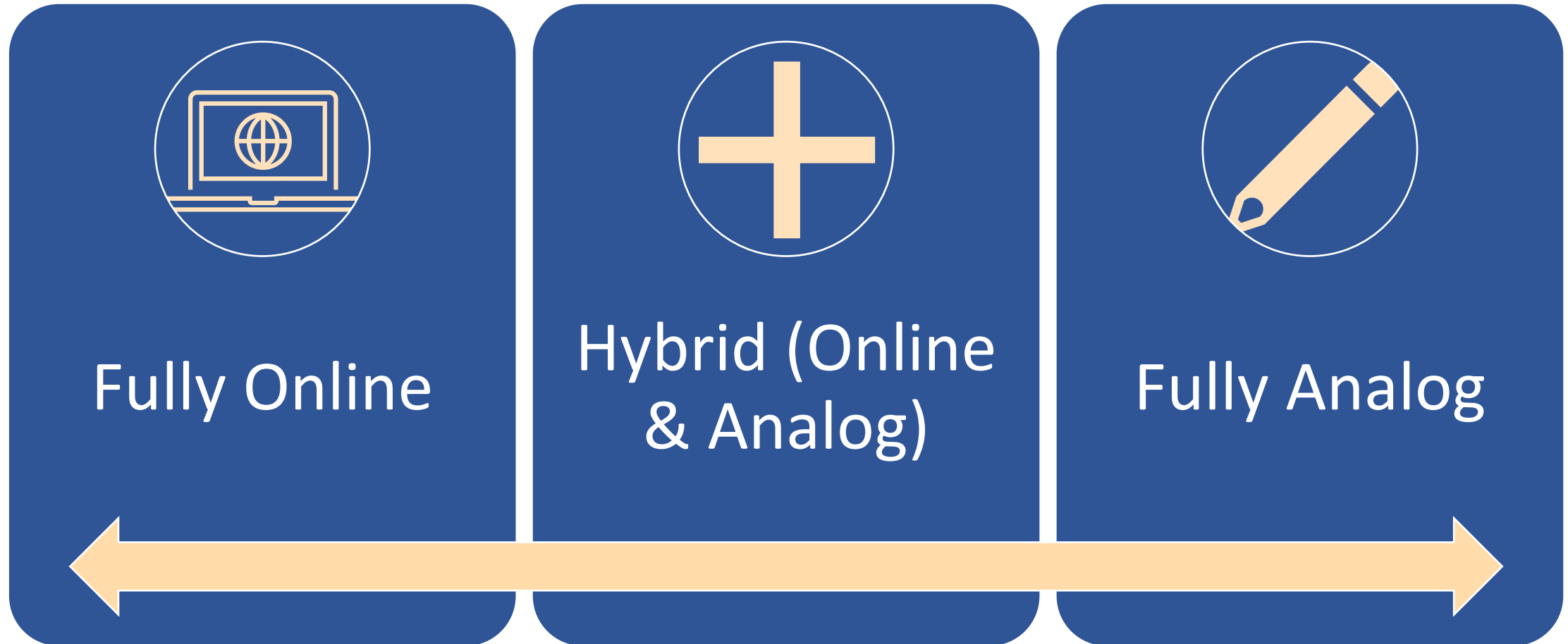
Process/Implementation: Assess the quality of program planning and implementation

Outcome/Effectiveness: Measure outcomes/objectives in target population

Impact: *Determine if programs achieved the desired goal*

Data Collection & Management Systems

Fully Online

Hybrid (Online & Analog)

Fully Analog

Georgia PREP's Evaluation Evolution

Mostly Analog (2011-2015)

- Paper & pencil surveys
- Paper/spreadsheet-based attendance & registration
- Survey software for MPRs & Fidelity Monitoring
- Data tracked in excel & hand-checked for accuracy
- Monthly & annual reporting

Hybrid (2015-2021)

- Paper & pencil surveys moved to online during COVID-19
- Online database developed (internal evaluation use only)
- Online attendance & enrollment system contracted out but discontinued

Fully Online (2021-present)

- Georgia Performance Measures Management System Recordkeeping (GaPR) developed & maintained by eval staff
- Collects session data (attendance/fidelity)
- Houses links for online surveys & MPRs
- Live, continuous reporting

Moving to a Fully Online System

Advantages

- Reduce the distance between data & its source
  - Example: youth fill out online questionnaire & data are immediately stored in online database

- Live, continuous reporting
  - Multiple stakeholders may be able to take advantage of viewing data reports on a regular basis to inform program practices

Disadvantages

- Web accessibility is not universal, especially in targeted populations for Georgia PREP
  - When wifi access is limited, hand data entry or other workarounds may be provided

- Specialized training is required to use data collection & management systems
  - Staff turnover impacts training – consider "train the trainer" models

GROUP ACTIVITY: Needs Assessment, 1
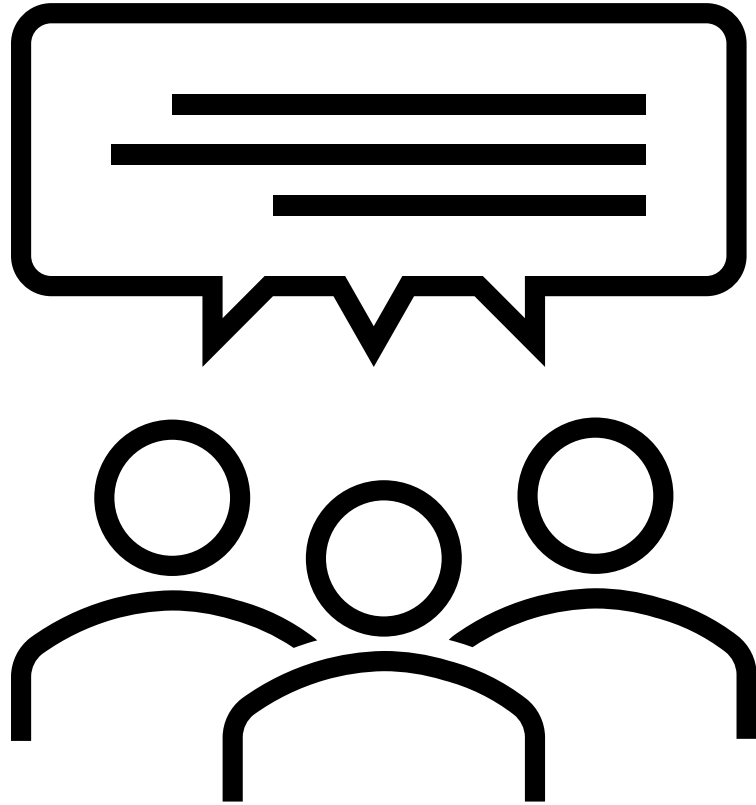
In the next 5 minutes:

- Briefly fill out the section labeled "Describe your data collection & management system" on your needs assessment handout

- Do you use a fully analog, hybrid, or fully online model?

- Take a moment and list any unmet needs, such as duplicated data sources, gaps in reporting, or lack of privacy protection

- Discuss with the folks around you!

Your Evaluation Data Ecosystem
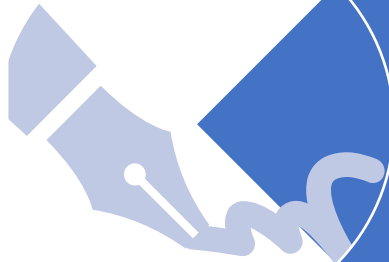
Data Ecosystem

Data Sources
- ✓Surveys
- ✓Attendance records
- ✓Interviews

Stakeholders
- ✓Participants
- ✓Program Staff (Grantees & Sub-Awardees)
- ✓Evaluators
- ✓Funders / Project Officers

Data Sources: Questions to Ask

Obtaining Data

- Who provides the data?
- Who collects the data?
- Who enters the data & where are data stored?
- What is the type of data (numeric or narrative?)
- What is the frequency of data collection?

Reporting Data

- Where are data reported?
- How often are data reported?
- Who receives the reports & what do they do with them?

GaPR Tour: Data Sources

Georgia Performance Measures Management System Recordkeeping

Welcome

Welcome to Georgia Performance Measures Management System Recordkeeping (GaPR). On this site, you will be able to enter information about your PREP implementation(s)

These data are pursuant to the completion of federally-required performance measures reporting. It is the goal of the Evaluation Team to:

- Protect confidentiality
- Collect required data
- Respect your time

Example: Georgia PREP Data Sources

Data Source	Who Provides the Data?	Who Collects the Data?	Where Are The Data Collected and Stored?	Type of Data (Numeric vs. Narrative)	Frequency of Data Collection	Where Are The Data Reported?
Youth Surveys	Youth	Facilitators, Admins	Online Survey Software	Numeric	Entry & Exit	GaPR, Annual Report, PMMS
Fidelity Monitoring	Facilitators, Admins	Facilitators, Admins	GaPR	Numeric	Each Session	GaPR, Annual Report
Attendance, Reach, Dosage	Facilitators, Admins	Facilitators, Admins	GaPR	Numeric	Each Session	GaPR, AR, PMMS, PPR
Monthly Programmatic Reports	Admins	Admins	Online Survey Software	Numeric & Narrative	Monthly	GaPR, Monthly Report, Annual Report
Training Evaluations	Facilitators, Admins	Directors, Evaluators	Online Survey Software	Numeric & Narrative	As Needed	Training agency, Annual Report
Staff Interviews	Facilitators, Admins	Evaluators	Local Database	Narrative	Annual	Annual Report

Stakeholders: Questions to Ask

Data Entry
- Who provides data?
- Who collects data?

Data Retrieval
- Who retrieves data from an online system?
- What level of granularity is needed (aggregate, individual, anonymized, etc.)
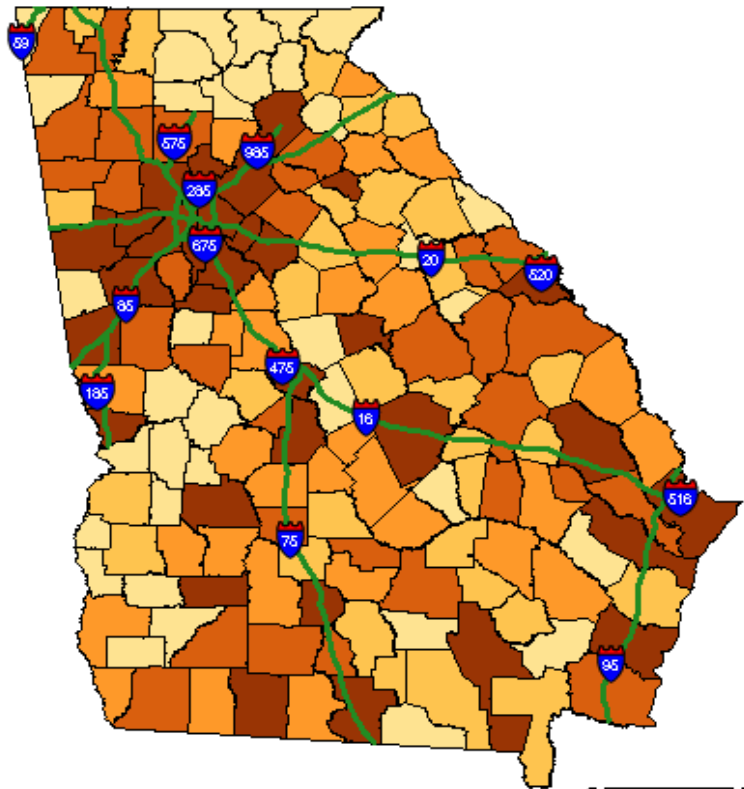
Data Reporting
- Who reports on data?
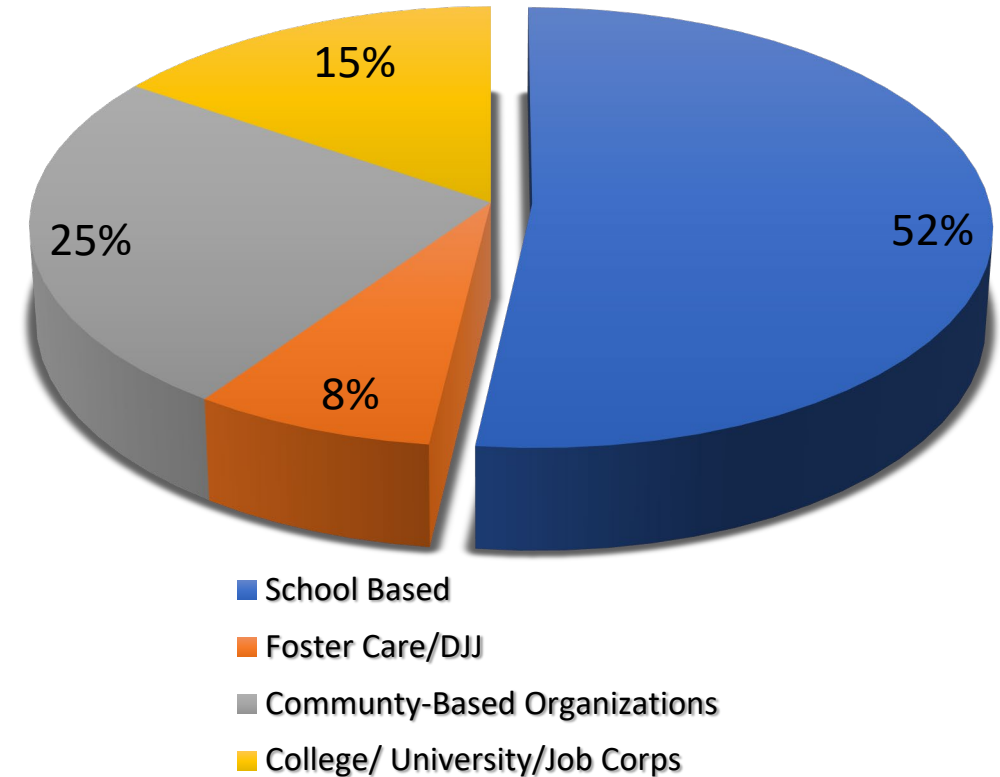- Who received reports & how are reports used?

Data Policies
- What internal/organizational policies exist regarding data storage?
- What internal/organizational policies exist regarding data privacy?

Statewide Stakeholders

GA-PREP is being implemented statewide in various types of implementation settings.

Implementation Settings

- 15%
- 25%
- 52%
- 8%

- ■ School Based
- ■ Foster Care/DJJ
- ■ Communty-Based Organizations
- ■ College/ University/Job Corps

20

GA-PREP Implementation Partnerships

- Foster youth in group homes

- Department of Juvenile Justice youth in detention centers

- School setting (Middle and High Schools)

- Parks and Recreation

- Churches

- Colleges/Universities

Example: Georgia PREP Stakeholders

| Stakeholder Level	Stakeholder	Engaged in Data Entry?	Engaged in Data Retrieval?	Users or Providers of Data Reports?	Issue or Follow Data Policies?
Participant	Youth Participants	YES	NO	NO	NO
Sub-Awardees	Facilitators	YES	NO	YES	YES
	Administrators	YES	YES	YES	YES
Partner Staff	Evaluators	NO*	YES	YES	YES
	Professional Development	NO	NO	YES	NO
Grantees	State Coordinators & Directors	NO*	YES	YES	YES
Funders	Project Officers	NO	NO	YES	YES
Organizations	DFCS, GSU, IRB, FYSB	NO	NO	YES	YES

22

Considerations for Online Data Systems

Data Sources

- What systems exist that can collect & store data?
  - Georgia PREP: Online survey software for youth & staff surveys
- What systems need to be built to collect & report on data sources?
  - Georgia PREP: GaPR developed with bespoke dashboards, session log data entry, and attendance & enrollment systems

Stakeholders

- Annual training for current staff with booster training options in the event of staff turnover
  - Train the trainer models, office hours, and on-demand training
- To increase data security, limit the number of stakeholders with access to raw data retrieval
  - Provide stakeholders with data dashboards & reports rather than raw data

SELF-REFLECT: Data Sources & Stakeholders
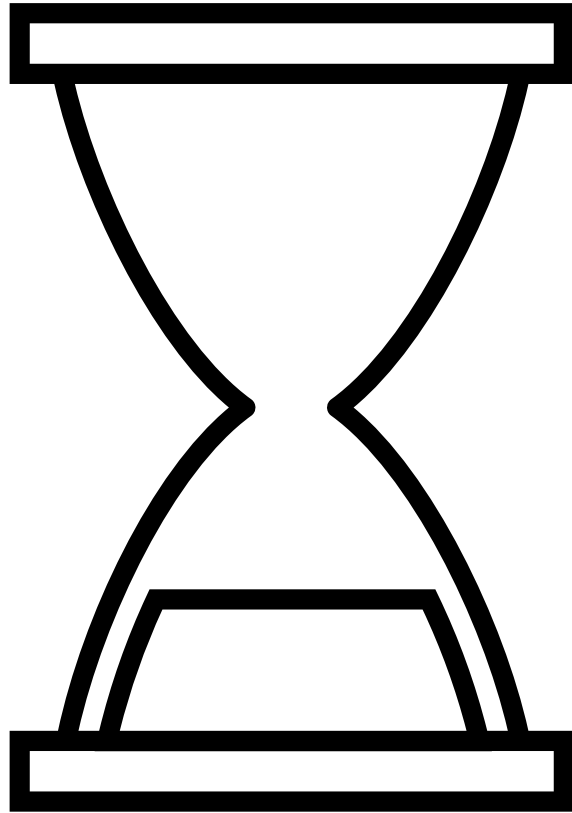
In the next 5 minutes:

- Briefly fill out the Data Sources & Stakeholders handouts based on your program

- Where is your role located on these charts?

- Depending on your role, you might not know all the sources & stakeholders – include the ones that relate to you!

- Jot down key stakeholders impacted by data on your needs assessment worksheet

- Are there any barriers or challenges you face with your current data systems?

Rethink Reporting with Online Data Systems

Continuous
- Data dashboards provide live snapshots of program activities
- Works well with quantitative/numeric data
- Useful for tracking implementation progress and session-by-session youth retention

Intermittent
- Provide additional context on program activities
- Include narrative data from monthly reporting and staff interviews along with numeric program data

GaPR Tour: Data Dashboards

Table 1: Enrollment and Survey Dashboard (Rates as of May 3, 2023)

| Provider | Cohorts | | Total | | Graduation Rate | Entry Survey | | Exit Survey | |
	Started	Finished	Initiates	Graduates		Completed	Coverage	Completed	Coverage
	7	7	108	114	105%	8	7%	2	1%
	1	1	0	30	—	0	—	0	0%
	6	6	108	84	77%	8	7%	2	2%
	1	0	0	0	—	0	—	0	—
	0	0	0	0	—	0	—	0	—
	1	0	0	0	—	0	—	0	—

GROUP ACTIVITY: Data-Informed Practices
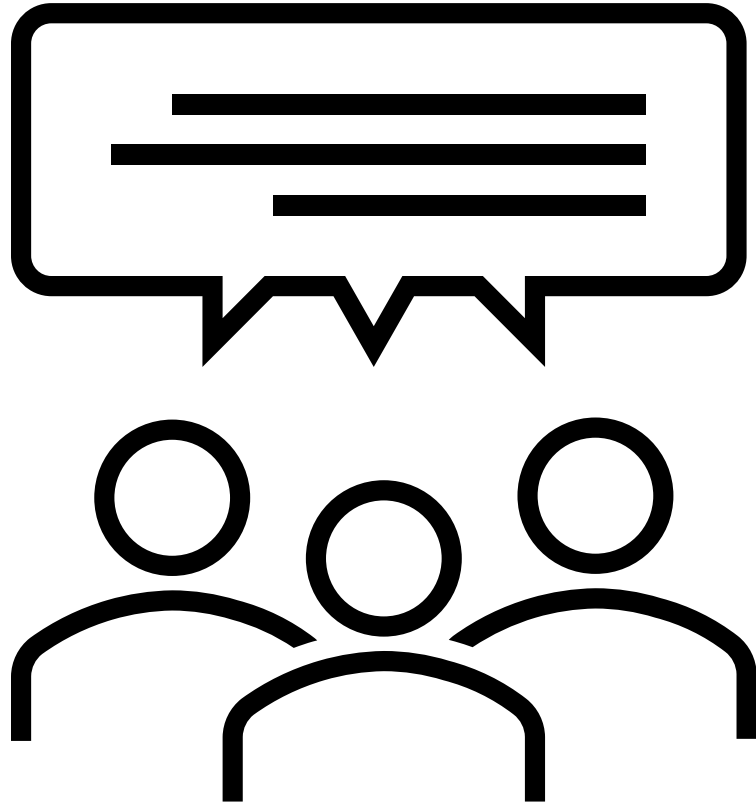
In the next 5 minutes:

- Connect with the folks around you!

- How are you using data to inform your program practices?

- How might live, continuous reporting change your current practices?

Data Dashboards: Consider Privacy & Safety

Youth Surveys & Individual Records

- Data sources that collect individual, sensitive information should be fully anonymized
- Aggregated data can be re-identified!
- Follow IRB & organization suppression rules

Implementation Details & Enrollment/Attendance

- Program implementation data (i.e., dates, times, locations) can be paired with individual youth attendance to reveal a person's whereabouts
- Limit access to data retrieval for non-essential personnel
- Follow IRB & organization policies

Web-Querying, Aggregation, & Suppression, 1

- Web querying refers to data systems that provide aggregated summaries of individual data to users based on requests (e.g., displaying the total number of youth in foster care for each program implementation)

Example Site	Cohort #1		Cohort #2		Cohort #3	
# Youth In Foster Care	11		0		15	

See Matthews, Harel, & Aseltine (2016) for a demonstration in health contexts.

Web-Querying, Aggregation, & Suppression, 2

- Depending on the query, aggregated data can reveal information about individuals when cell counts are sufficiently small (e.g., displaying total number of youth in foster care for each program implementation broken down by age group)

Example Site	Cohort #1		Cohort #2		Cohort #3	
	Age 10-13	Age 14+	Age 10-13	Age 14+	Age 10-13	Age 14+
# Youth In Foster Care	10	1	0	0	7	8

See Matthews, Harel, & Aseltine (2016) for a demonstration in health contexts.

30

Web-Querying, Aggregation, & Suppression, 3

- Most organizations will have suppression review policies (e.g., "rule of 10" – hide cell counts lower than 10)

- To avoid disclosing personal information, consider limiting the ability of non-essential database users to disaggregate data

Example Site	Cohort #1		Cohort #2		Cohort #3	
	Age 10-13	Age 14+	Age 10-13	Age 14+	Age 10-13	Age 14+
# Youth In Foster Care	10	1	0	0	7	8

See Matthews, Harel, & Aseltine (2016) for a demonstration in health contexts.

Useful Dashboards → Open Communication

DO's & DON'T's	Example Technical Questions
DO: Meet regularly with stakeholders and developers to establish rapport	What are the major reports required by the program funder?
DO: Provide examples of desired reports	Which variables are required to be reported?
DO: Regularly check data for accuracy	How are those variables operationally defined?
DO: Train stakeholders on using dashboards	Which data source(s) will be used to calculate the variables?
DON'T: Assume – if you have a question, ask!!	How are variables checked for accuracy?

Keys to Success in Online Data Reporting

Maintain Open Communication with Stakeholders

Hire Dedicated Database Development Staff

Limit Data Access to Necessary Tools Only

Provide Regular Training and Technical Assistance
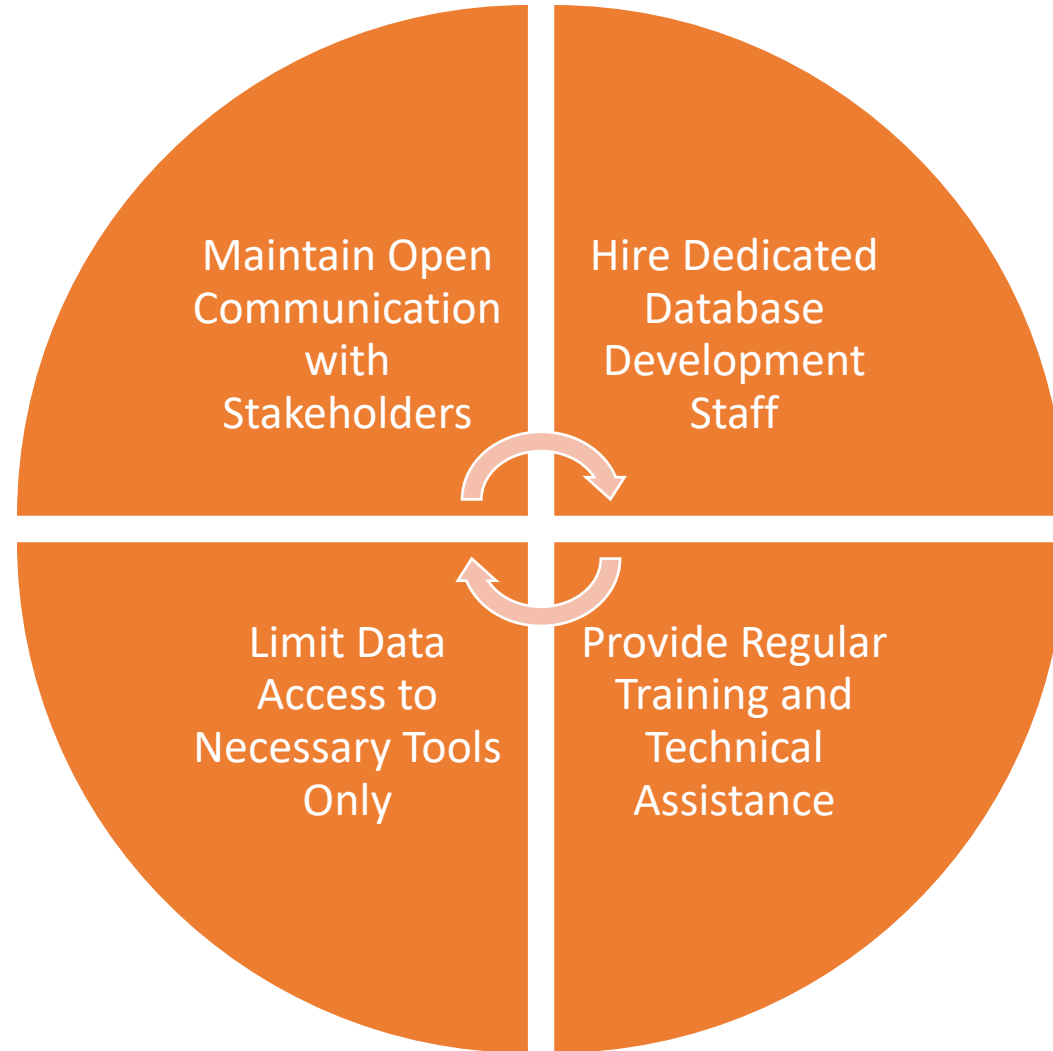
Optimizing Data Systems

Stakeholders should have access to the data & tools they need when they need them

- Data systems can provide stakeholders with pertinent reports & resources

Data systems should be accurate and interpretable

- Train stakeholders on data entry to reduce confusion

Data systems should aim to reduce the burden of data entry, collection, management, and reporting on stakeholders

- Improving design of data entry & collection tools can reduce burden on staff
- Review data sources to ensure the same information is not being collected from multiple sources (unless specifically intended)

SELF-REFLECT: Needs Assessment #2
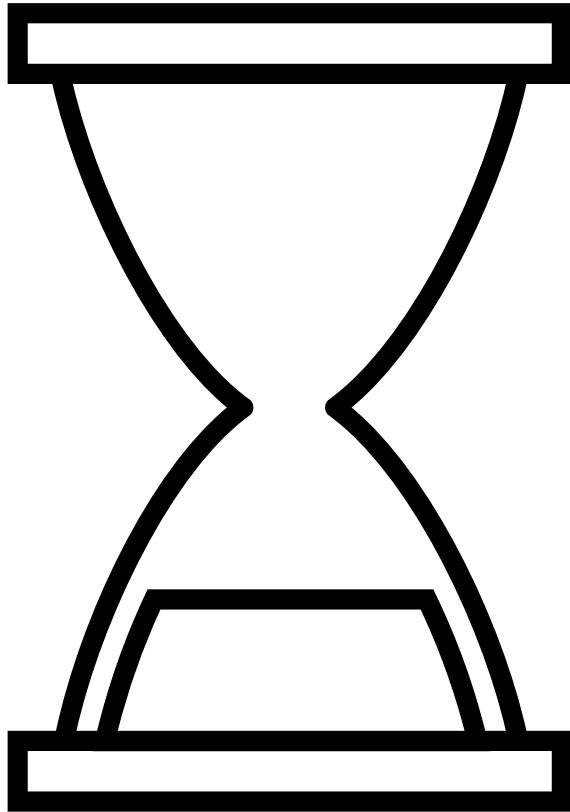
In the next 5 minutes:

- Return to your needs assessment handout and reconsider your current data collection system

- Determine any resources needed/available to update your current data system

- Identify action items – what would you like to change about your current system and how would you change it?

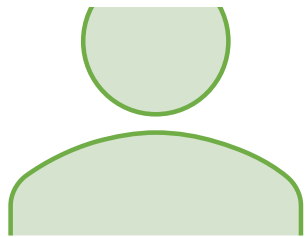# Best Practices & Practical Guidance
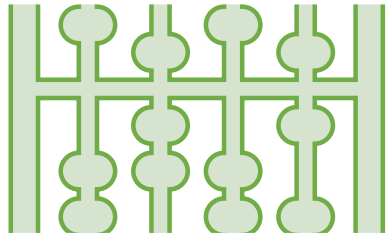
Conduct a data system needs assessment

- Engage stakeholders at all levels
- Review current practices and determine resources & capacity for updates
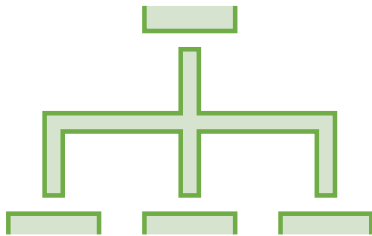
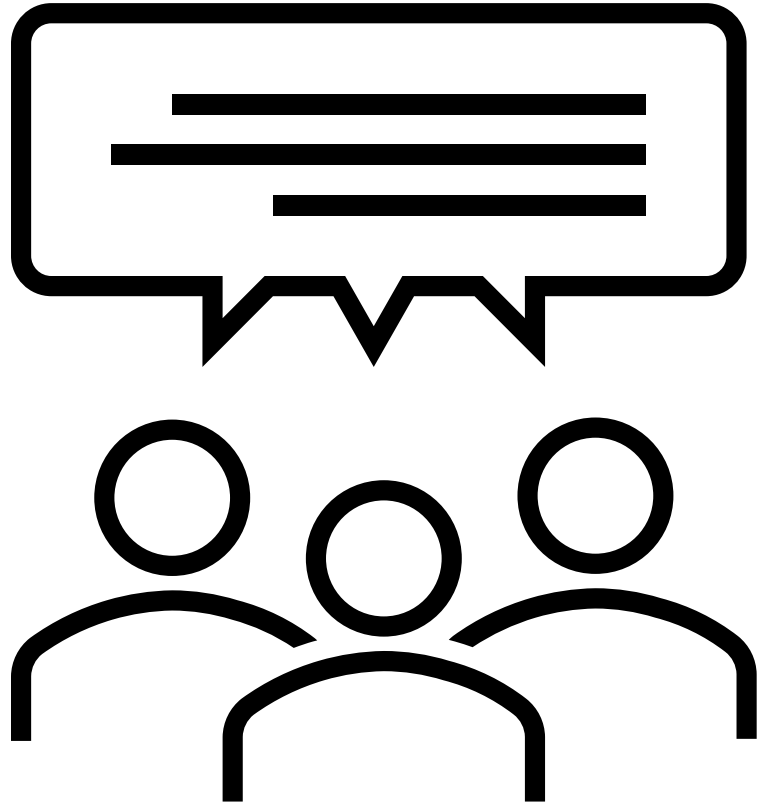## Review organizational policies regarding data privacy

- If organizational policies differ, follow the most conservative/protective policies

Work with dedicated staff to ensure data systems are maintained

- Train and maintain data in accordance with organizational policies

GROUP ACTIVITY: Best Data Practices

In the next 5 minutes:

- Connect with the folks around you!
- What are some of the best practices you're already using in your program?
- What are some practices you can learn from each other?
- What are some things we missed?

Full Group Q & A

Contact us!

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Tessa Johnson: tjohnson138@gsu.edu

Conclusions

- The Georgia PREP evaluation collects data on the processes conducted by sub-awardees and outcomes of youth enrolled in the program

- Online data collection and management systems offer several advantages, but moving away from analog systems should be done with intention

- Needs assessments are one way to ensure that the program will benefit from any data system changes or adaptations

Citations

- Matthews, G. J., Harel, O., & Aseltine, R. H. (2016). Privacy protection and aggregate health data: a review of tabular cell suppression methods (not) employed in public health data systems. *Health Services and Outcomes Research Methodology, 16*, 258-270.

Session Evaluation

Please complete a brief evaluation form for all workshops and panels on Tuesday, May 23 and Wednesday, May 24 by scanning the QR code below or visiting the following link:

https://tinyurl.com/SessEval232323