

Helping State and Local Staff Team Up for Effective Data Analysis and Use

DECEMBER 6, 2018

Roy Fowler, Maine Vera Stroup-Rentier, IDC Tony Ruggiero, IDC

Presenters

Roy Fowler State Director Part C Maine Child Development Services

Vera Stroup-Rentier Technical Assistance State Liaison IDEA Data Center

Tony Ruggiero Technical Assistance State Liaison *IDEA* Data Center

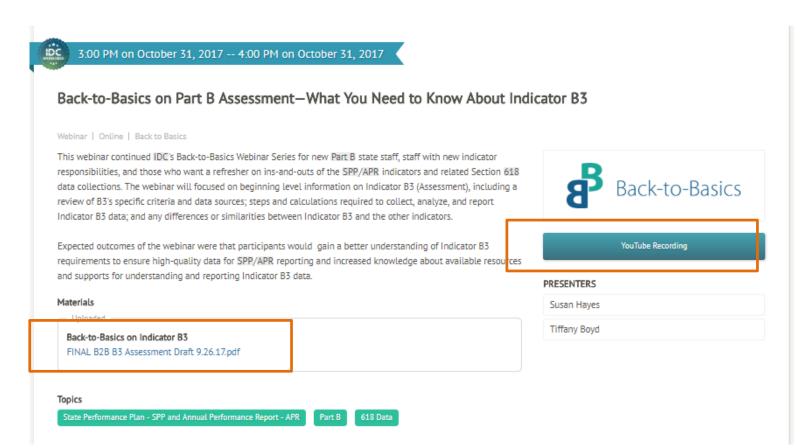


Helping State and Local Staff Team Up for Effective Data Analysis and Use

- Welcome and thank you for joining us
- We are recording this webinar
- Slides and recording from this presentation will be available on the IDC website
- We will be muting all participants
- Please type your questions in the chat box
- Please complete the online evaluation after the end of the presentation



Where to Find Webinar Slides and Recording





Agenda

- Participant Outcomes
- Data Analysis and Use
 - Planning
 - Tools and Products
- Maine's Results
 - Key Observations
 - Implications
- State Use of Tools and Products



Participant Outcomes

- Increase understanding of the benefits of using Part C state and local aggregate data and related data to make data-driven decisions at both state and local levels
- Increase understanding of the benefits of working together as a state and local team to address data analysis and use issues
- Increase knowledge about how to analyze and use data to identify questions and needs related to program and service delivery, develop plans to address those questions and needs, and begin to implement plans to improve program and service delivery
- Increase understanding of IDC technical assistance (TA)services and resources that can support data analysis and use



Data Analysis and Use

- IDC can provide Data Analysis and Use support through a targeted technical assistance request by individual states
- IDC worked with the state of Maine to improve data quality and its efforts around data analysis and use to inform program improvement
- Indicator 1: Timely Provision of Service

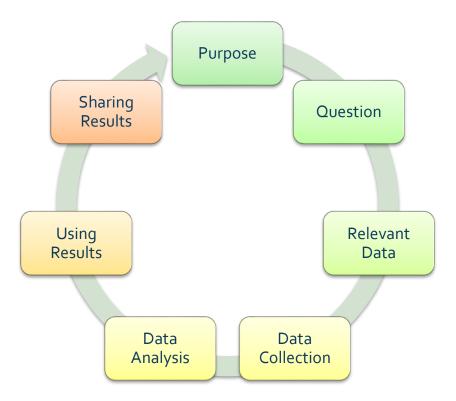


Data Analysis and Use (cont.)

- Purpose
- Primary Question
- Relevant Data Elements
- Data Collection Strategies
- Data Analysis
- Using the Results
- Sharing the Results



Cycle of Data Analysis and Use





Find Your Purpose

- Determine your overall objective for analyzing data
- Build off of your successes and examine your challenges
- Consider what is already known from the data and what is important to find out



Form Your Questions

- What are your pressing questions
 - Most eager to know about
 - Most crucial for policy and program decisions



Identify Relevant Data

- What do you mean by "data"
 - Factual information
 - Qualitative and Quantitative
- What data are needed to answer your questions
 - Data within your Part C program
 - Data you can access within your own agency or obtain from another agency/entity
 - Data elements that will require a new data collection effort



Planning for Data Collection

- Decide how you will gather the relevant data
 - Tools and measures
 - Sources of data
- Determine what existing processes for obtaining, managing, and storing data you can leverage
- Identify the "who" and "when" for data collection activities



Planning for Data Analysis

- Decide what methods you will use for examining your data
 - Based on the questions to answer and the type of data you collected
- Decide how you will organize the data
 - Patterns, trends, relationships

Analysis is rarely simple, but it can be systematic!



Planning to Use Results

- Decide what you will do with what you learn
- Decide how you will use the results for state and local programming
- Decide what process you will follow to apply the results to your work



Planning to Share Results

- Decide how you will communicate what you learn
- Decide who else will need to see these results
- Decide what formats will best communicate your results and the implications for your stakeholders



Outlier Analysis Tool





Maine Child Development Services

- 9 regional sites
- 7 early intervention program managers
- Transdisciplinary primary service provider (PSP) model used statewide
- New data system (CINC–Child Information Network Connection) implemented July 1, 2016





Data Analysis and Use Plan: Maine



Building Capacity for High-Quality IDEA Data

	STATE ANALYSIS AND USE PLAN								
Purpose	The purpose of the analysis is to increase the numbers of infants/toddlers								
What is our broad objective for conducting this analysis?	receiving services in a timely manner.								
Primary Question What specific question do we want to answer through this analysis?		How can we measure timely service delivery while maintaining fidelity to the primary service provider (PSP) model?							
	Our Plan	Who Is Responsible?	When Will It Be Completed?	Additional Resources					
Data Elements What data do we need to answer our question?	 Definition of timely service delivery for Maine and other states using the PSP model Compliance percentage for timeliness Number of consults by secondary 	 CDS State Director/Part C Technical Advisor, Roy Fowler CDS Deputy 	• April 4th 2018	 ITCA List Serve IDC OSEP DEC Recommended Practices 					



Data Elements and Collection Strategies

From the Child Development Services (CDS) Database

- Overall compliance percentage at the local and state levels
- Compliance percentage by service
- Number of Consults (Secondary Service Providers) on initial individualized family service plans (IFSPs)
- Number of untimely/unused Consults
- Compliance specific to Consults
- Service logs
- Communication logs

Other Sources

Staff efficiency sheets



Data Analysis Strategies

Descriptive Analysis

- Timely delivery of services by CDS Regional Site
- Timely delivery of services by discipline
- Impact of Consults/Secondary Service Providers on timely delivery of services
- Timeliness of consultations on initial IFSPs

Qualitative Analysis



- Review of staff efficiency/productivity percentages
- Review of Communication Logs



Plans for Using and Sharing the Results

- Develop clear guidance on the appropriate use of Consults on initial IFSPs
- Share the data with regional site-level Early Intervention (EI) teams
 - Identify the State and CDS Regional Site decrease in timely delivery of services
 - Share data that identifies the root cause of decrease



Plans for Using and Sharing the Results (cont.)

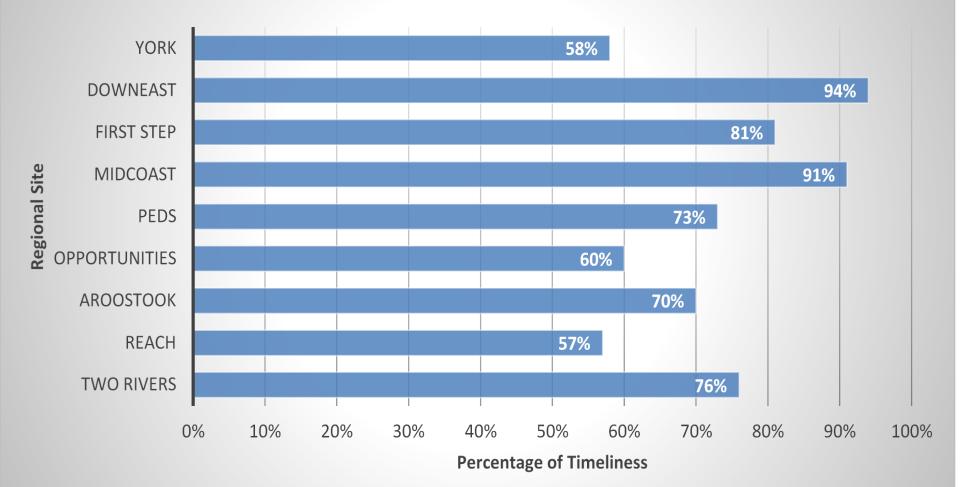
Inform local processes

- Review the developed guidance and implementation of that guidance
- Review a sampling of initial IFSPs and discuss the findings with the EI Team
- Assess the impact on CDS Regional Site's timely delivery of services at 3-, 6-, and 9-month intervals and review with the EI Team





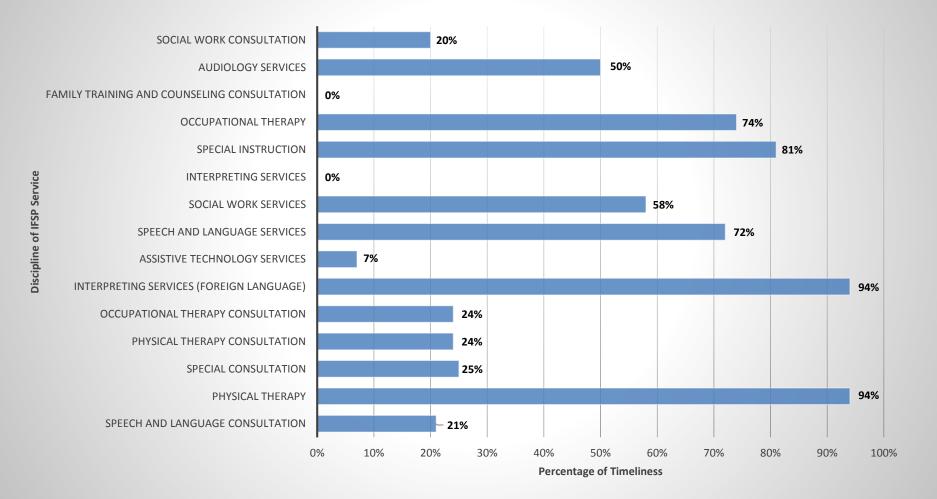
Timely Delivery of Services by Site





Results (cont.)

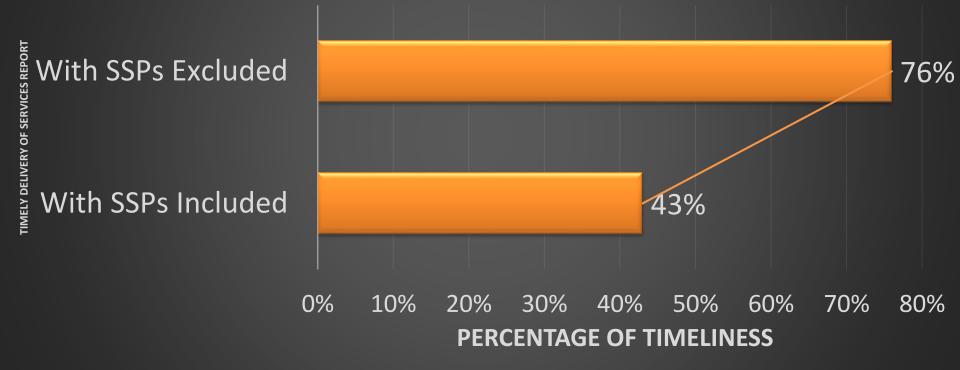
Timely Delivery of Services by Service Type







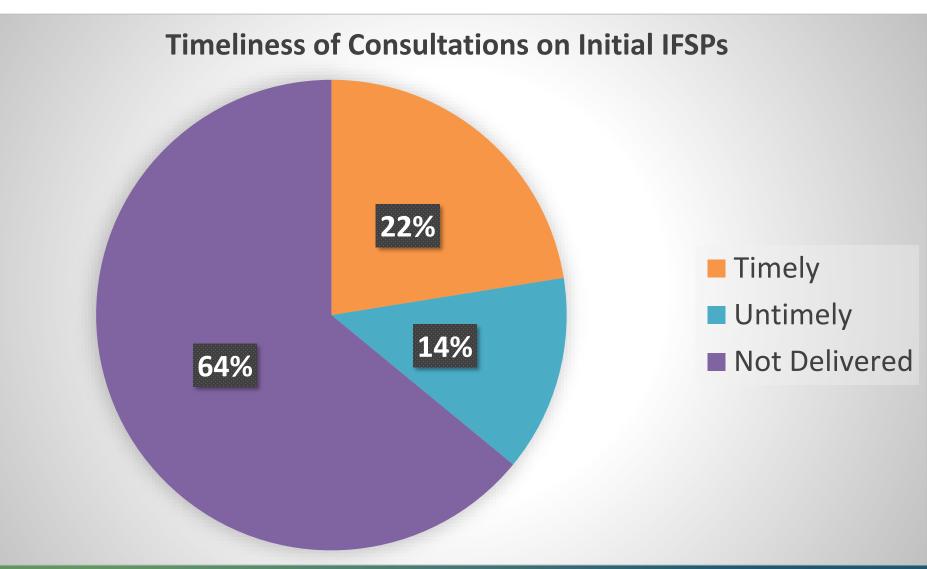
The Impact of Consultations (SSPs) On Timely Service Delivery





26

Results (cont.)





Key Observations From Our Results

- Consults identified on initial IFSPs have a significant impact on timely delivery of services
- Most Consults identified on initial IFSPs are either untimely or not delivered
- Primary Service Provider services are significantly more timely than Consults identified on the initial IFSP
- Staff with higher productivity percentages are more likely to provide timely services than those with low productivity



Digging Deeper: Outlier Analysis Tool



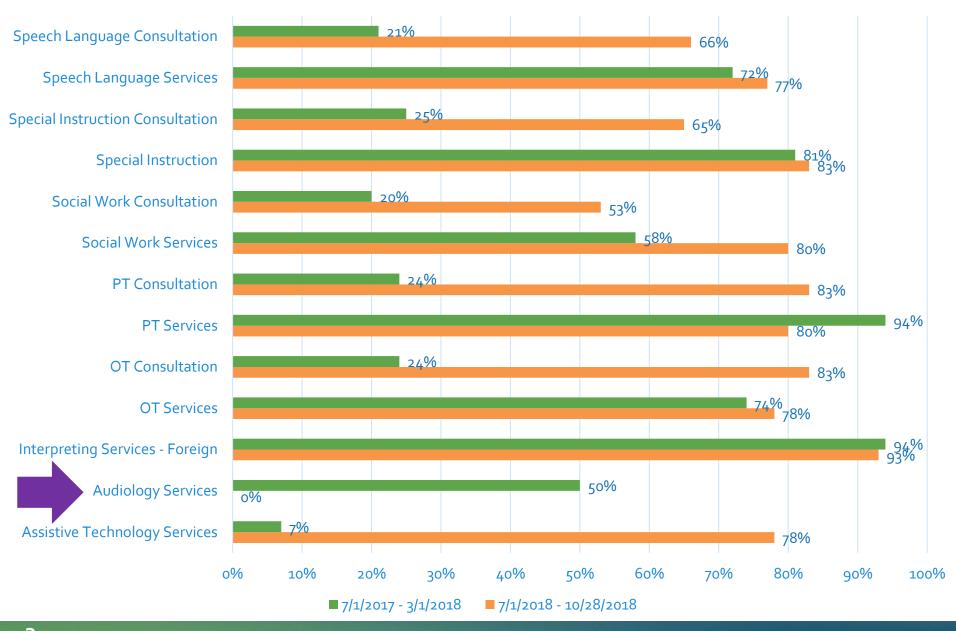


Outlier Analysis Tool

8												οι	itlier_an	alysis_	tool:1 [Read-Only]	- Exce	el		
File	Hom	e	Insert	Pag	e Layout	F	ormulas	Data	Review	View	Q	Tell	ne wha	it you v	want to	do				
1 2 -	B M	rial 3 I	_	- 10 ⊡ -	• A*		= = <u>=</u>		🖶 Wra	ip Text ge & Cer	nter 👻	\$	eral ▼ % Num		▼ .00 .000 .00 →.0	Condition Formattin		able 🔻	Cell Styles *	ln
	_		~		fx			-									-			
4A8				· · ·																
A	B	С		D	E F	G	H	I J	K L	M	N	O	P		Q		R	S	Т	
	-		-	-	E N h-Qualit	-	E R EA Data alysis	ΓοοΙ												
state outli	IDEA Data Quality: Outlier Analyses Tools are three technical assistance products IDC designed to be used by the state personnel responsible for the IDEA 618 and/or 616 data. This spreadsheet is a tool state staff can use to conduct outlier analyses with their local data.																			
1.							the "Past	_			-									
2.	shown: paste over with your own data																			
3.	Measu	ires s	should	be pas	sted into	colu	mns B thr								gh G c	ontain da	ta;			
4.	 paste over with your own data. The worksheet is set up to take up to 1,010 rows of data. An analysis will be automatically run for each column of data. The results will be shown in the Outlier Analysis worksheet. 																			
5.	5. Descriptive results will be shown at the top of each column.																			
<mark>0</mark> 6.		-			-		elow the o	-												
7.						s cu	rrently pro	tected w	vith a pas	ssword	To re	emov	e prote	ectior	n, the p	assword	is			
1	Pass				quotes. e Data He	ro	Outlier	Analysis	(+										4	
eady		NEM		Past		ie.	Outlet	Analysis	- E	/								-		



Timely Delivery by Service and Consultation Type





Timely Delivery by Site





Lessons Learned

- Access to a large amount of data is valuable only if the data are reliable, analyzed, and acted upon
- The use of data in decisionmaking ensures that resources are used efficiently and with proper focus

 A thorough analysis of data and an easily understandable presentation of the results of that data analysis increase buy-in to proposed guidance

 Ongoing monitoring of data allows for the identification of problems as they arise, the determination of the effectiveness of interventions, and potential need for adjustment of those interventions





Analysis and Use Plan



ANALYSIS AN	ND USE PLAN:
Purpose	
What is our broad objective for conducting this analysis?	
Primary Question	
What specific question do we want to answer through this analysis?	





Digging Deeper: Data Meeting Protocol



Data Meeting Protocol

Data Elements	Our Plan	Who Is Responsible?	When Will Work Be Completed?	Additional Resources
What data do we need to answer our question? What data does our Part C program have? What data can we access within our	 For each local program, number of referrals, by primary referral source: 1. Hospitals, including prenatal and postnatal care facilities 2. Physicians 3. Parents, including parents of 	Kesponsible? State Data Manager, Chadwick Boseman State Part C Coordinator, Letitia Wright Local Data Managers, Angela Basset	April 2018	Child Find state a local data State guidance document
own agency, or obtain from another agency/entity? What elements require a new data collection effort?	 Child care programs and early learning programs Public and private health agencies Other public agencies, including child protective services, foster care, homeless shelters, and domestic violence agencies Early Hearing Detection and Intervention (EHDI) 	Andy Serkis	Da Pro	ata Meeting Dtocol
	 Number of children referred using ASQ, by primary referral source [requires new state data element: Screening Tool] Number of children referred using ASQ and determined eligible, by primary referral source 		Timara Nemicor Debra Staver Kim Schroeder Westat: January 2018 Version 1.0	



Data Meeting Protocol (cont.)

Data	Our Plan	Who Is	When Will Work	Additional
Collection		Responsible?	Be Completed?	Resources
Strategies			•	
What tools and	Data are currently reported by local	State Data Manager,	May 2018	
sources will we	programs to the state and stored in	Chadwick Boseman		
use to gather	the state database, with the exception			
data?	of the new data element, entitled	Part C State Data		
	Screening Tool, which will be added	Analyst,		
What	to the data collection.	Michael B. Jordan		
existing				
processes	 Gather referral data from statewide 	Local Part C		
for	database for current and prior 2	Coordinators,	In data Canton in	
obtaining,	years' reporting cycles,	Forest Whitaker		
managing,	disaggregated by locality.	Lupita Nyong'o		
and storing	 Gather data on children referred 			0
data will	from local programs using ASQ	Local Data		× ×
we leverage	for current and prior 2 years'	Managers,	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Data Meeting
for this	reporting cycles, by primary	Angela Basset		Protocol
analysis?	referral source.	Andy Serkis		Protocol
	 Compile and verify data collected 			
	from localities.		O C	
	 Create new data element for 			
	children, referred using ASQ, who			
	were evaluated and determined			
	eligible, by primary referral			
	source.			Tamara Nimkoff Debra Shaver
				Kim Schroeder
				January 2018
			W westat	Version 1.0



Data Meeting Protocol (cont.)

Data Analysis Strategies	Our Plan	Who Is Responsible?	When Will Work Be Completed?	Additional Resources
What methods will we use for examining our data? How will we organize the data to find the relevant patterns, trends, relationships for answering our question?	 Run descriptive analyses on each data element to examine distribution (e.g., mode, mean, outliers, range, and variance). Calculate percentage of referrals by source, for each year, by local program. Calculate percentage of referrals by screening tool by source, for each year, by local program. Calculate percentage of eligible children by screening tool by source, for each year, by local program. Produce graphs of the data elements to examine the data (e.g., bar chart, dot plot) and to explore for potential trends among data elements over time (e.g., line graph, scatter plot by year). Determine the relationship between data elements indicated above through computation of correlation coefficients for each year. 	Part C State Data Analyst, Michael B. Jordan	June 2018	IDC Outlier Analysis Tool Data Meeting Protocol



Data Meeting Protocol (cont.)

Sharing Analysis Results	Our Plan	Who Is Responsible?	When Will Work Be Completed?	Additional Resources
Who else needs to see these results? What formats will best communicate our results and the implications with our stakeholders?	Findings and plans for improvement will be discussed at state ICC quarterly meeting (e.g., PowerPoint presentation, information brief, infographic).		August 2018	Updated state guidance manual materials Data Meeting Protocol
			₩ Westať	Tamara Nimkoff Debra Shaver Rim Schworder January 2018 Version 1.0



For a Deeper Dive in Data Analysis and Use

Contact your IDC State Liaison

https://ideadata.org/technical-assistance



Contact Us

Roy Fowler CDS State Director State IEU Child Development Services ME Department of Education State House Station #146 Augusta, ME 04333 (207) 592-6079 Roy.Fowler@maine.gov http://www.maine.gov/doe/cds/ Vera Stroup-Rentier Part C State Liaison IDEA Data Center (IDC) verastroup-rentier@westat.com (785) 224-0043 www.ideadata.org

Tony Ruggiero Part C State Liaison *IDEA* Data Center (IDC) robert.ruggiero@aemcorp.com (302) 531-5781 <u>www.ideadata.org</u>



For More Information

IDC Visit the IDC website http://ideadata.org/

Follow us on Twitter <u>https://twitter.com/ideadatacenter</u>

Follow us on LinkedIn <u>http://www.linkedin.com/company/idea</u> <u>-data-center</u>



Evaluation

 The poll questions will appear on the right-hand side.



The contents of this presentation were developed under a grant from the U.S. Department of Education, #H373Y130002. However, the contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the federal government.

Project Officers: Richelle Davis and Meredith Miceli



