



HCBS 2019

How LTSS Directors Can Use Data Collection to Make Policy, Training & Service Delivery Improvements

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Wednesday, August 28, 2019

Today's Agenda



Topics

Current HCBS Regulatory Environment

Common Challenges Faced by HCBS Directors

Analysis Solutions and Approaches

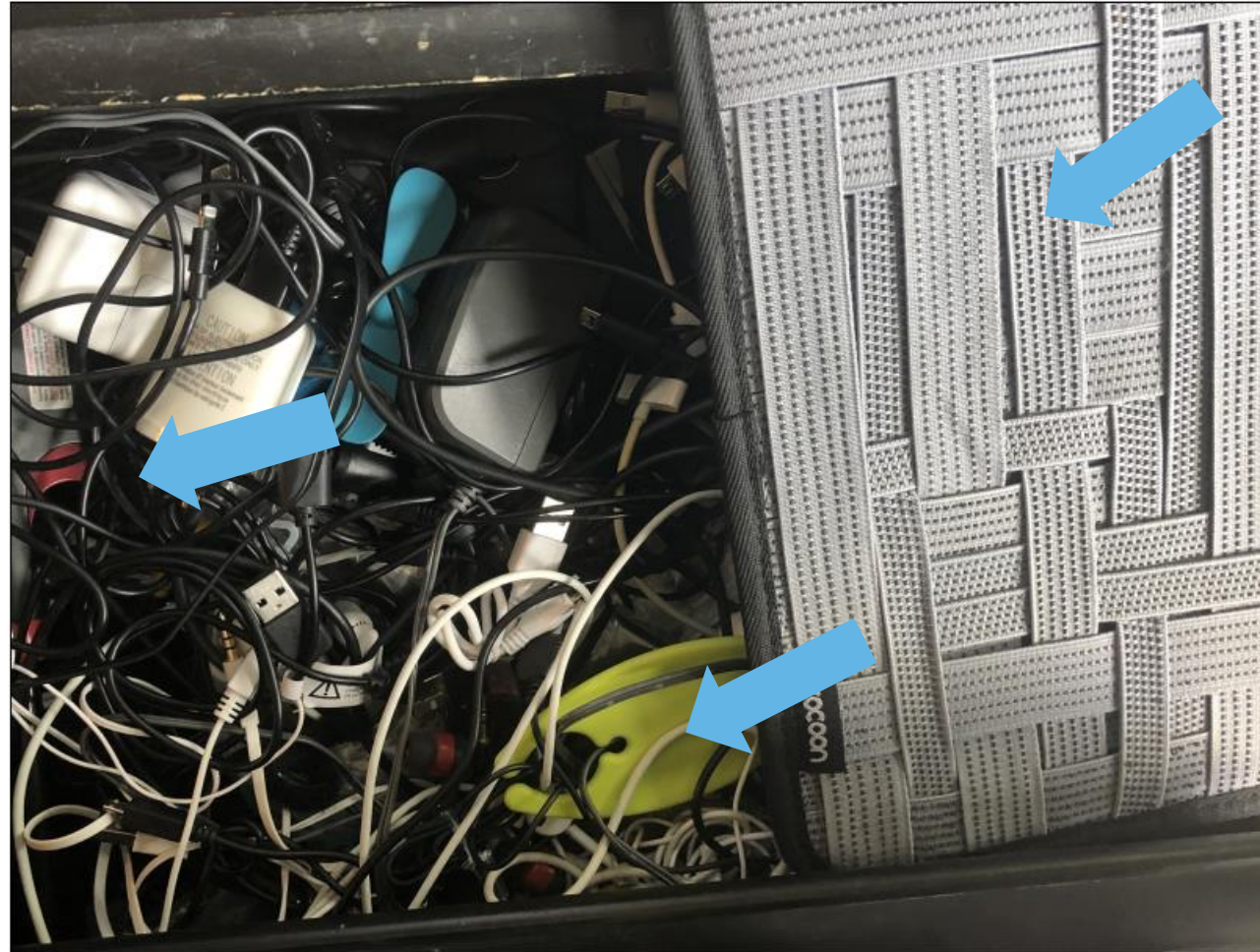
Practical Examples

Implementation Strategies



Does this feel like your data?

The cord drawer at Lindsay's house

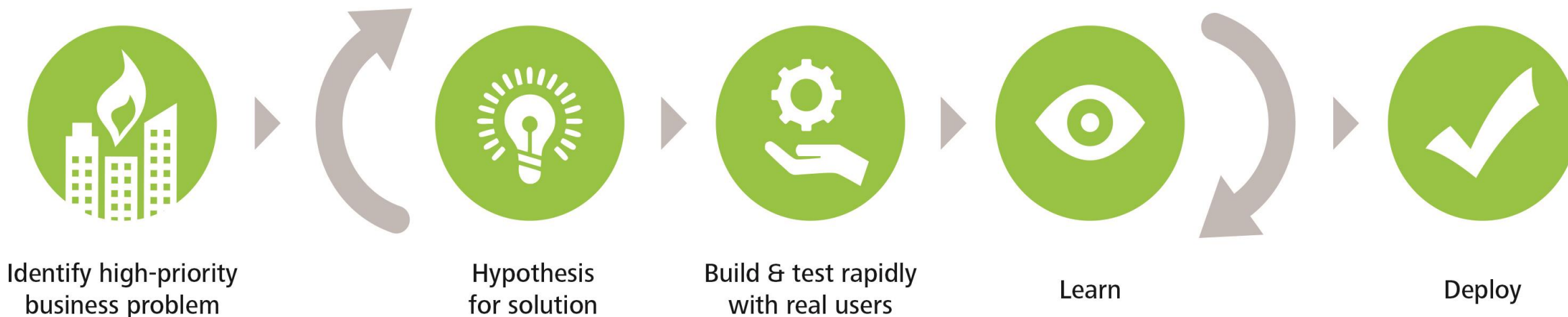


Why doesn't anyone use the tools she bought to organize them?



An agile approach to HCBS analytics means you can start where you are

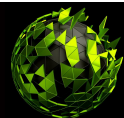
Agile is a group of methods based on iterative and incremental development, where requirements and solutions evolve through collaboration between self-organizing, cross-functional teams.



State and federal regulations and policies are working to ensure quality and integrity in HCBS programs

Current drivers:

- Recent federal regulations focus on quality and oversight of programs
 - HCBS Final Rule
 - Medicaid and CHIP Managed Care Final Rule
- Costs and demands continue to increase (integrated, community options; self-directed services)
- Desire to increase efficiency in service delivery (rebalancing, MLTSS)
- Desire to increase quality of services and outcomes for individuals
- Increased focus on program integrity



States may experience challenges while working to improve the quality and efficiency of service delivery

Common challenges:

- Limited understanding of individual risks and how to comprehensively mitigate them
- Limited ability to identify provider trends and proven outcomes from corrective actions
- Little connection between services received and proven outcomes
- Few states use oversight processes that effectively and efficiently monitor HCBS quality
- Data is not always accessible, reliable, and consolidated to support holistic review of individuals, providers, and systems
- Insufficient funding to meet growing complexity of needs
- HCBS workforce recruitment and retention issues



States are looking to data analytics to provide greater insights into their programs and align policies, operations, and resources

Common focus areas for hypothesis-driven analysis:

Utilization trends across programs

Quality outcomes and performance management

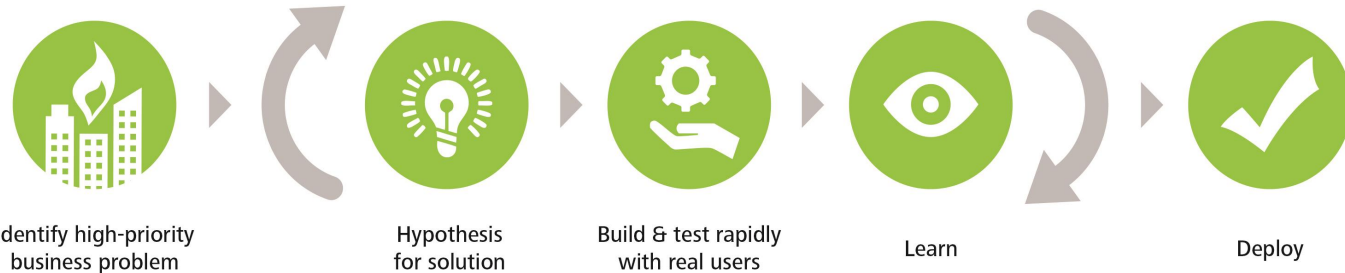
Modeling analysis for policy and programs "what if"

Program integrity (fraud, waste, and abuse)

Eligibility and enrollment patterns

Operational efficiency opportunities

YOU know your program best...follow your hunches

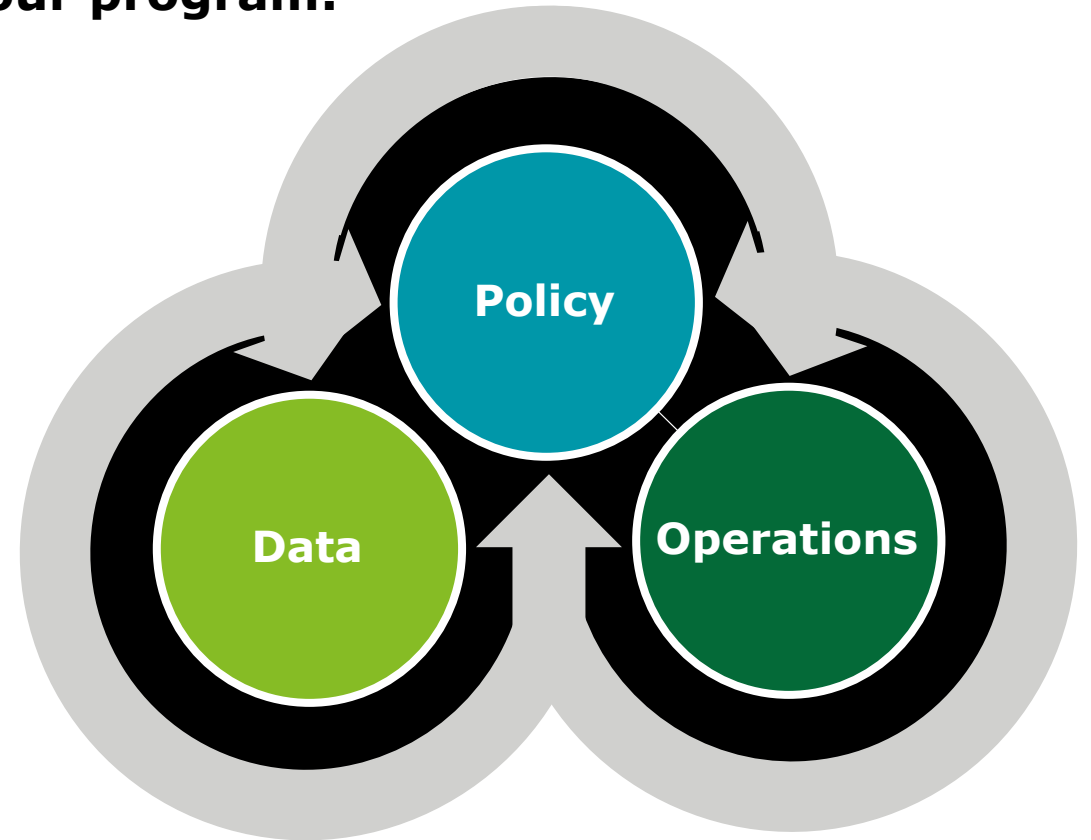


Depending on the question, states employ different analysis solutions

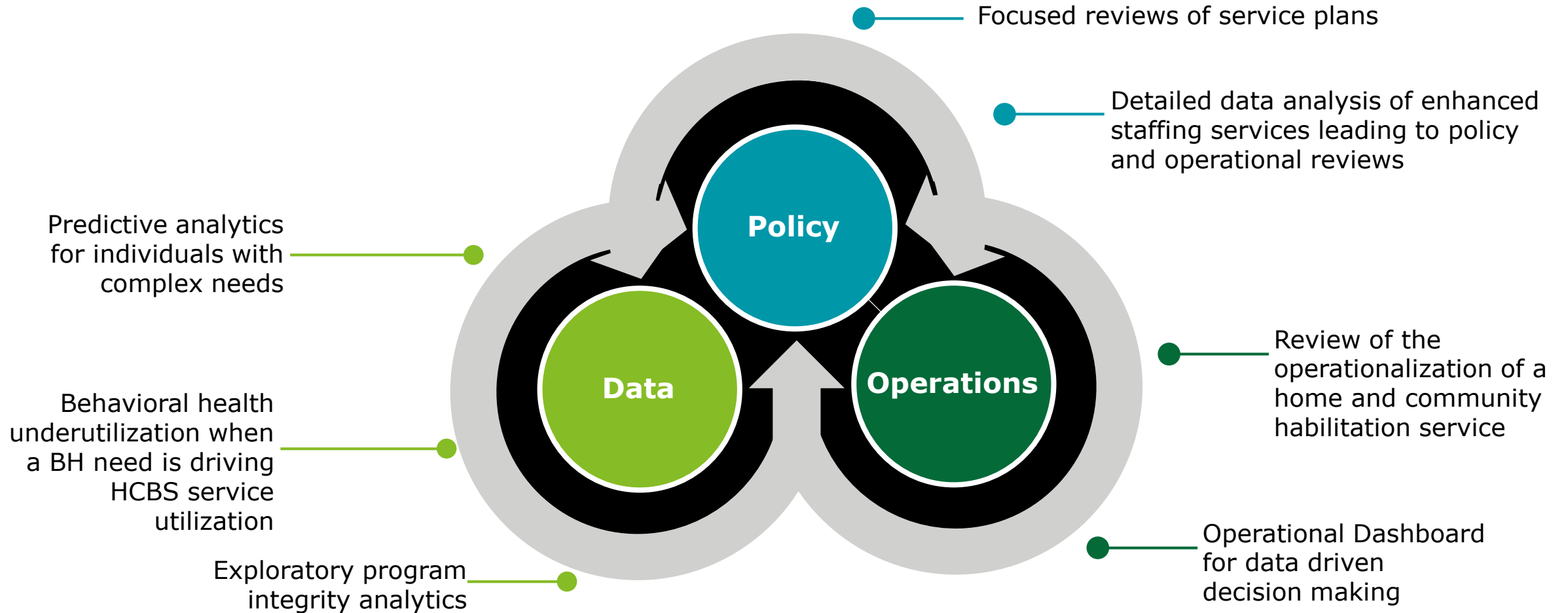
Analysis solutions can take multiple forms and often can be combined to provide a full picture of a state's HCBS program

Use a multi-prong approach to understand your program:

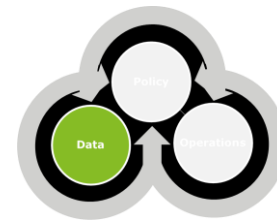
- ✔ **Data Analysis.** Data provides actual numbers/facts to surface things unknown
- ✔ **Policy Analysis.** Policy analysis can help explain the numbers
- ✔ **Program Operations Review.** Sometimes program operations are the issue—not the policies or service definitions



Practical project examples articulate how states can use data analysis along the continuum to gather in-depth insights into their programs



Rich data analytics techniques paired with historical data sets can increase understanding of high-need individuals to enhance the effectiveness of how all individuals are served



Challenge: How can better understanding the indicators of high-cost service plans help states better serve all individuals?

Approach

- Identify select consumer characteristics that are leading indicators of high-cost individual support plans
- Determine options to mitigate the cost of serving these high-need individuals
- Use statistical segmentation techniques (for example- clustering and classification and regression trees (CART))

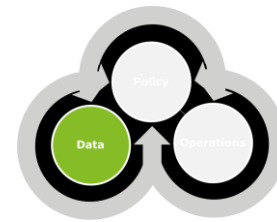


Insights

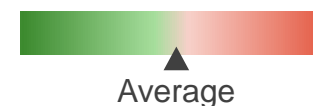
- Helped to better understand waiver individuals with very complex needs
- Identified some patterns
- Provided guidance on how to refine future analyses and where to target discussion across programs to better support individuals throughout and across life stages



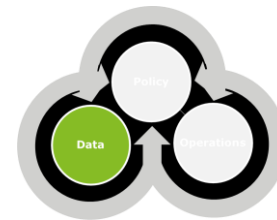
Sample Analysis: Statistical clustering helps identify natural divisions in the individual population and places individuals in similar groups



		1: Behavioral DX, Mild ID	2: Law Enforcement Involvement	3: Mild ID	4: Moderate ID	5: Profound ID	6: Severe ID
Consumer Demographics	Number of consumers	188.00	266.00	1,469.00	1,030.00	324.00	524.00
	% high cost consumers	0.27	0.46	0.20	0.18	0.31	0.18
	Avg. ISP amount	155,571.14	205,751.21	128,604.28	127,892.06	163,133.30	132,024.34
	Avg. age	24.80	24.61	23.90	24.96	24.77	24.63
	Avg. age at first assessment on the waiver	15.09	14.74	13.66	13.87	13.36	12.70
Other Indicators	% consumers with RTF	0.01	0.01	0.03	0.00	0.00	0.00
	Crime: % with Hx	0.07	0.30	0.00	0.00	0.00	0.00
Incident Information	Incident: % law enforcement	0.07	0.34	0.01	0.00	0.00	0.00
	Incident: % psychiatric hospital visit	0.06	0.29	0.00	0.00	0.00	0.00
	Incident: % non-psychiatric hospitalization	0.04	0.07	0.00	0.00	0.17	0.00
	Incident: % abuse	0.08	0.22	0.05	0.04	0.01	0.02
	Incident: % individual to individual abuse	0.12	0.12	0.06	0.06	0.02	0.04
	Incident: % ER visit	0.21	0.35	0.08	0.06	0.13	0.07
Last Disability Assessment	Incident: % neglect	0.07	0.24	0.04	0.03	0.02	0.04
	Last disability assessment: mild	0.59	0.53	0.74	0.00	0.06	0.00
	Last disability assessment: moderate	0.26	0.40	0.07	1.00	0.02	0.00
	Last disability assessment: severe	0.06	0.03	0.00	0.00	0.04	1.00
	Last disability assessment: profound	0.03	0.00	0.00	0.00	0.88	0.00
Diagnosis Data	Last disability assessment: unspecified	0.06	0.04	0.19	0.00	0.01	0.00
	Dx: % IED	0.02	0.08	0.00	0.00	0.00	0.00
	Dx: % major depression (recurring)	0.00	0.05	0.00	0.00	0.00	0.00
	Dx: % adjustment disorder w/ anxiety	0.00	0.04	0.00	0.00	0.00	0.00
	Dx: % adjustment disorder	0.09	0.02	0.00	0.00	0.00	0.00
	Dx: % anxiety	0.34	0.00	0.00	0.00	0.00	0.00
	Dx: % bipolar	0.33	0.01	0.00	0.00	0.00	0.00
	Dx: % major depression (single episode)	0.19	0.03	0.00	0.00	0.00	0.00
	Dx: PDD (nos)	0.12	0.01	0.00	0.00	0.00	0.00
	Dx: % impulse control	0.11	0.00	0.00	0.00	0.00	0.00
Dx: % PTSD	0.09	0.01	0.00	0.00	0.00	0.00	



Sample Analysis: The consumer "heat map" can be used to identify distinguishing characteristics within (and across) groups



		Consumer Group					
		1: Behavioral DX, Mild ID	2: Law Enforcement Involvement	3: Mild ID	4: Moderate ID	5: Profound ID	6: Severe ID
Consumer Demographics	Number of consumers		266.00				
	% high cost consumers		0.46				
	Avg. ISP amount		205,751.21				
	Avg. age		24.61				
Other Indicators	Avg. age at first assessment on the waiver		14.74				
	% consumers with RTF		0.01				
	Crime: % with Hx		0.30				
Incident Information	Incident: % law enforcement		0.34				
	Incident: % psychiatric hospital visit		0.29				
	Incident: % non-psychiatric hospitalization		0.07				
	Incident: % abuse		0.22				
	Incident: % individual to individual abuse		0.12				
	Incident: % ER visit		0.35				
Last Disability Assessment	Incident: % neglect		0.24				
	Last disability assessment: mild		0.53				
	Last disability assessment: moderate		0.40				
	Last disability assessment: severe		0.03				
	Last disability assessment: profound		0.00				
Diagnosis Data	Last disability assessment: unspecified		0.04				
	Dx: % IED		0.08				
	Dx: % major depression (recurring)		0.05				
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	Dx: % adjustment disorder		0.02				
	Dx: % anxiety		0.00				
	Dx: % bipolar		0.01				
	Dx: % major depression (single episode)		0.03				
	Dx: PDD (nos)		0.01				
	Dx: % impulse control		0.00				
Dx: % PTSD		0.01					

The average cost of Group 2 is **\$205K**

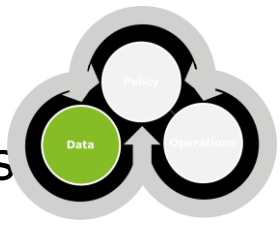
High % of consumers with a **criminal history/law enforcement incidents**


High % of consumers with history of **abuse/neglect**

Presence of **IED, recurring major depression, and adjustment disorders with anxiety diagnoses**



Patterns of underutilization of waiver-funded behavioral support services uncovered through data analysis prompted analysis into behavioral health services utilization



 **Challenge:** How pervasive is the pattern of low behavioral health and behavioral support services spending when behavioral health concerns are high?

Approach

- Determined that previous data analysis revealed chronic underutilization of behavioral support services
- Conducted additional analysis to compare waiver spending to behavioral health services (outside the waiver)

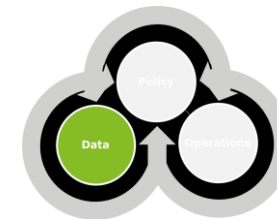


Insights

- Underutilization of waiver behavioral support services was often discovered even when BH needs were identified as the reason for high need of non-BH services
- Opportunity exists to increase care coordination/integration and educate individuals and families of behavioral health support services



Sample Analysis: Findings of consistently underutilized behavioral support services often paired with other intensive staffing services



1

Long-term enhanced staffing in a licensed residential setting at a 1:1 and a 2:1 staffing level. Many individuals have both staffing levels authorized on the plan

2

Home and Community Habilitation at a 1:1 and a 2:1 staffing level and a 1:1 enhanced staffing level

3

Short-term enhanced staffing in a licensed residential setting at a 1:1 and a 2:1 staffing level. Many individuals have both staffing levels authorized on the plan

4

Licensed Day Habilitation at a 1:1 and a 2:1 staffing level

Behavioral Reason Code

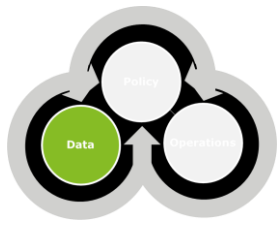
190 Consumers with additional habilitation

118 Consumers (62%) With additional habilitation for BH reasons

Consumer Count*	BH Spend One year	Average Waiver Spend One year
27	\$0	\$321,742
58	< \$5K	\$329,403
16	\$5 - \$30K	\$314,000
10	\$30 - \$100K	\$318,534
7	Over \$100K	\$302,475
118	\$2M	\$38M



Exploratory analytics proved to be a valuable approach to proactively identify fraud, waste, and abuse in the Medicaid and HCBS programs



Challenge: How can we proactively detect fraud, waste, and abuse in Medicaid programs?

Insights

Approach

- Selected Medicaid services for analysis
- Conducted four proof of concepts: Attendant Care Waiver Service, Short Hospital Observations Stays, Federal Qualified Health Centers, and Managed Care Services
- Generated qualitative and quantitative findings
- Transferred findings and models to program integrity unit for review and disposition



FFS Cost Recovery:

- Rules-based models can identify claims for immediate short-term recovery
- Prioritized leads can be proactively pushed to investigative staff

FFS Cost Avoidance and Prepayment:

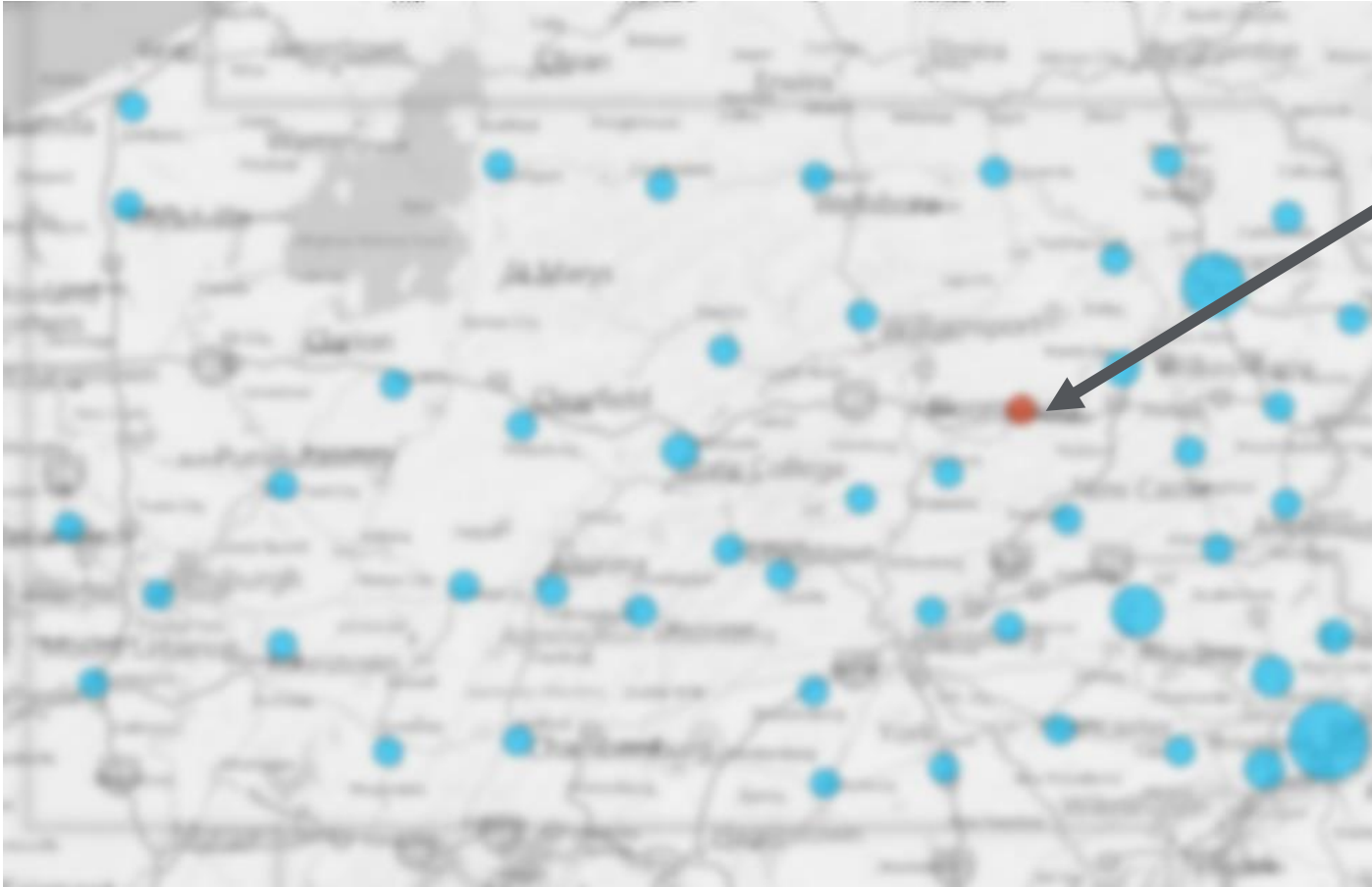
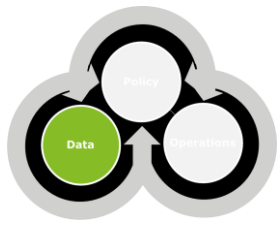
- Anomalous patterns can be used to identify broad areas for cost avoidance
- Models developed can be migrated to pre-payment edits to achieve maximum cost avoidance

Managed Care:

- Encounter data collected was sufficient to support oversight of managed care and identify potential FWA
- Several areas of potential FWA identified spanned MCOs, necessitating a state-wide view for analysis



Sample Analysis: The billings for the urgent care center crossed multiple MCOs; only a state-wide analysis could determine the problem and the extent

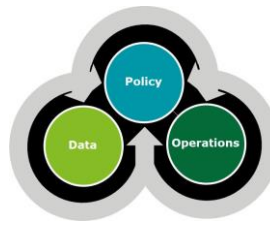


Location of suspicious urgent care center

Blue circles represent beneficiaries visiting urgent care center for narcotics prescriptions, with the size of the circle representing the volume of narcotics purchased



Focused reviews of service plans provided in-depth knowledge into programs and led to policy and operational analysis opportunities



Challenge: How do we better understand our consumers and providers through their service authorization and utilization?

Approach

- Identified the available data elements
- Selected a set of parameters to pull a sample group to analyze such as authorized dollars, specific service types, geography, etc.
- Used data visualization tools to identify patterns for further analysis
- Uncovered themes among individuals and providers through ad-hoc data analysis using a variety of parameters

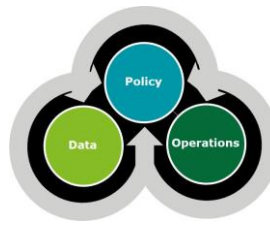


Insights

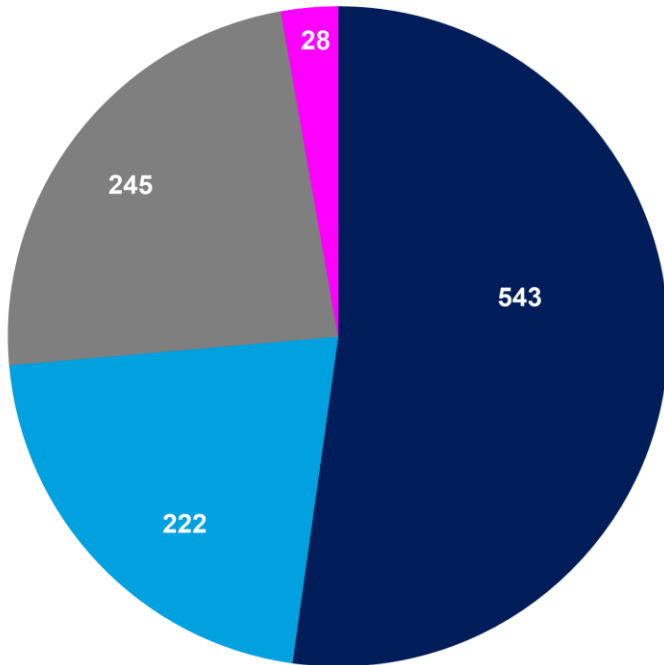
- Underutilization of particular services across many individual service plans
- Opportunities to better assist an individual to meet independence-related goals/outcomes
- Opportunities exist for SCs to revisit the service plan to refocus the plan—and its goals/outcomes—on an individual's current situation



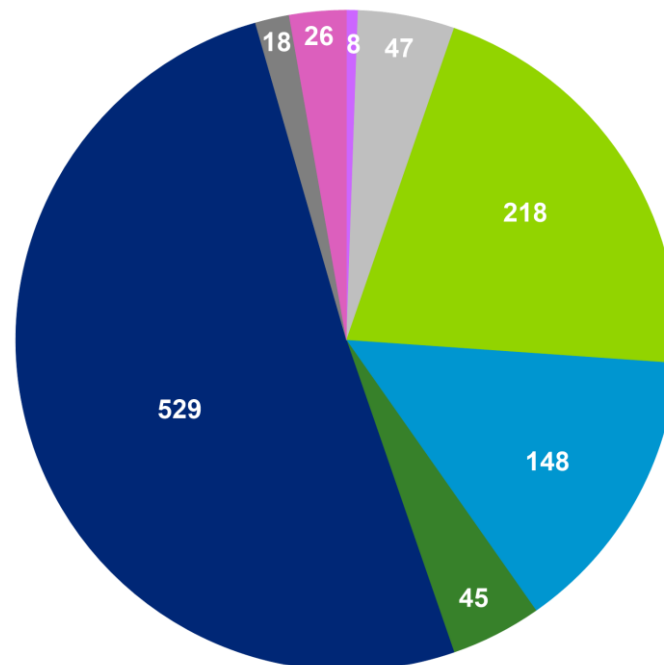
Sample Analysis: Individual service plans were analyzed via comprehensive case reviews to understand how Supports Coordinators worked with individuals to build service plans



Number of Cases Reviewed by Department



Number of Cases by Primary Program



Total of 1039 cases reviewed

65%

Cases with historical non-use of at least one service

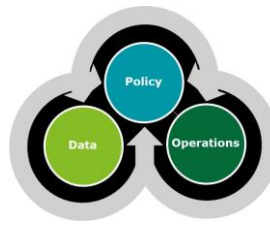
Behavioral Support was the service most often cited with Historical Non-Use, occurring in 85 cases or 28% of all Historical Non-Use cases.

39%

Cases with non-use of at least one service



Initial data analysis to understand the increasing costs of an intensive service revealed the need for operational review and process redesign efforts



Challenge: How can the state effectively evaluate the need for highly intensive residential staffing services?

Approach

- Examined residential enhanced staffing among waiver consumers via data analysis to uncover other trends or patterns
- Used findings to identify operational areas for review
- Conducted interviews and analyzed current processes for inefficiencies
- Developed six conceptual process re-design options



Insights

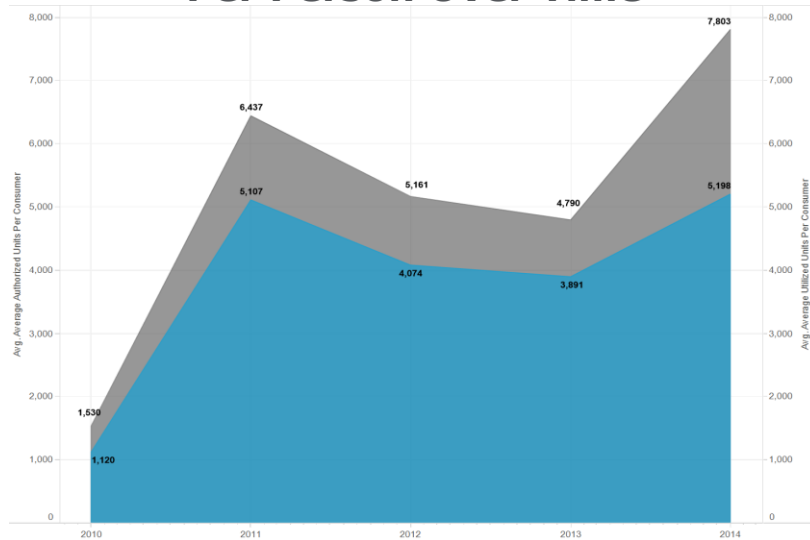
- Enhanced staffing tended to be a provider-driven process
- Most requests are for medical and behavioral issues
- Most individuals receiving enhanced staffing resided in a three- or four-person group home; it appeared that the service was being used to provide more flexible staffing for the provider



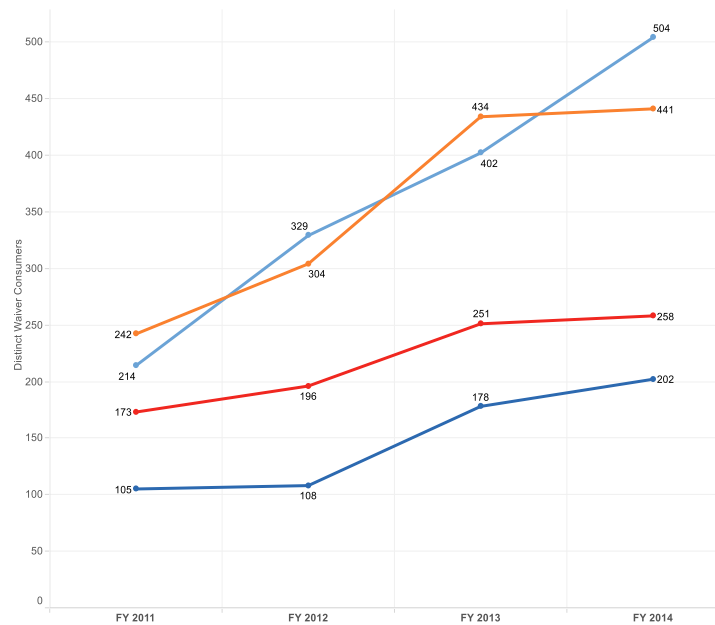
Sample Analysis: In-depth data visualizations highlighted trends which required policy and operational follow-up



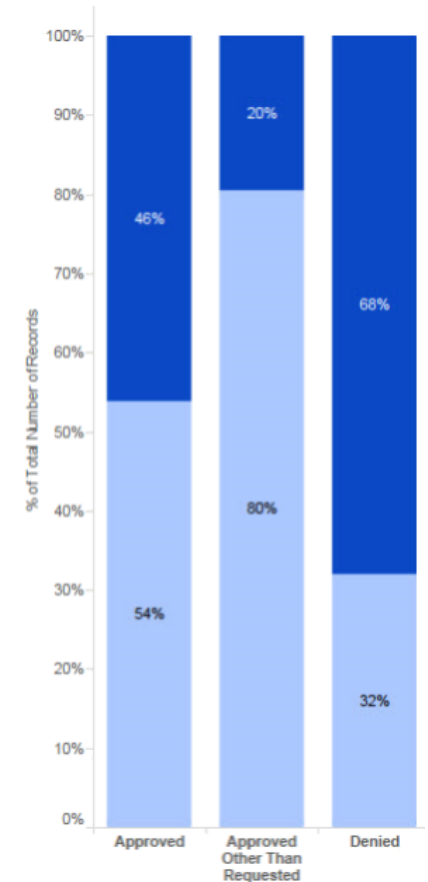
Avg. Authorized and Utilized Units Per Person Over Time



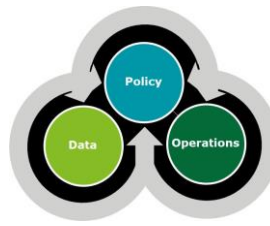
Growth of Individuals Receiving Enhanced Staffing by Region



Percentage of All Prior Authorization Approvals/Denials by Type of Reviewer



Sample Analysis: In-depth data visualizations highlighted trends which required policy and operational follow-up



Process Re-Design Option		Area of Significance					
		Key Process Features	Staffing Changes	Policy Impacts	Technology and Tools	Strategic Decisions	Potential Risks
Initial Requests	Short Term Staffing Initial Authorization Process	Yellow	Grey	Red	Red	Red	Yellow
	Local office does review	Yellow	Yellow	Red	Yellow	Red	Yellow
	Headquarters office conducts review	Red	Red	Red	Yellow	Red	Red
	Retirements – No PA	Green	Grey	Red	Green	Red	Yellow
Renewal Requests	Headquarters office Process Long Term Staffing Renewals	Green	Yellow	Yellow	Green	Yellow	Green
	Abbreviated PA Process for Long-term Medical Requests	Yellow	Green	Green	Green	Yellow	Yellow
	Long Term Enhanced Staffing Costs Incorporated into the Residential Rate after 2 Years	Yellow	Green	Red	Yellow	Red	Red

No Change There are no changes related to the area

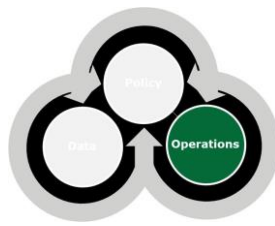
Small Change Some changes occur but they do not significantly disrupt the day to day operations of the current stakeholders


Moderate Change Operational changes in which buy-in will be needed for adoption. There are some challenges to implementing change.

Significant Change Significant changes and impacts to the current state exist. Buy-in will be critical for success. Challenges will be time consuming to address and will require leadership support



Operational reviews are as valuable to states as data-driven analyses in uncovering opportunities to improve program quality



 **Challenge:** Are our providers consistently delivering the home and community habilitation service to meet the desired goals and outcomes of individuals?

Approach

- Used targeted parameters to select providers for review
- Requested three months of provider progress notes
- Reviewed provider progress notes to understand operationalization of the service definition

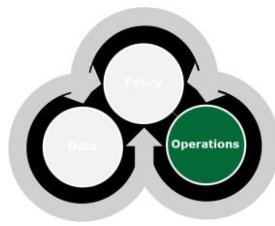


Insights

- Informed areas that procedures could be strengthened, including implementing a standard progress note template
- Identified quality issues for specific providers
- Identified areas for future provider training to address misunderstanding of service definitions



Sample Analysis: Detailed review of provider progress notes provided insight into implementation of a community habilitation service



1

SERVICE PROVIDED OUTSIDE OF ACCEPTABLE HOURS

2

DURATION OF SERVICE MISSING OR UNCLEAR

3

INCONSISTENT DOCUMENTATION

4

ACTIVITIES PERFORMED IN THE RESIDENTIAL SETTING

5

ACTIVITIES DOCUMENTED DO NOT SUPPORT THE OUTCOMES

6

ACTIVITIES BILLED THAT DO NOT MEET SERVICE DEFINITION

7

DOCUMENTED ACTIVITIES DO NOT PROVIDE INTEGRATION INTO THE COMMUNITY



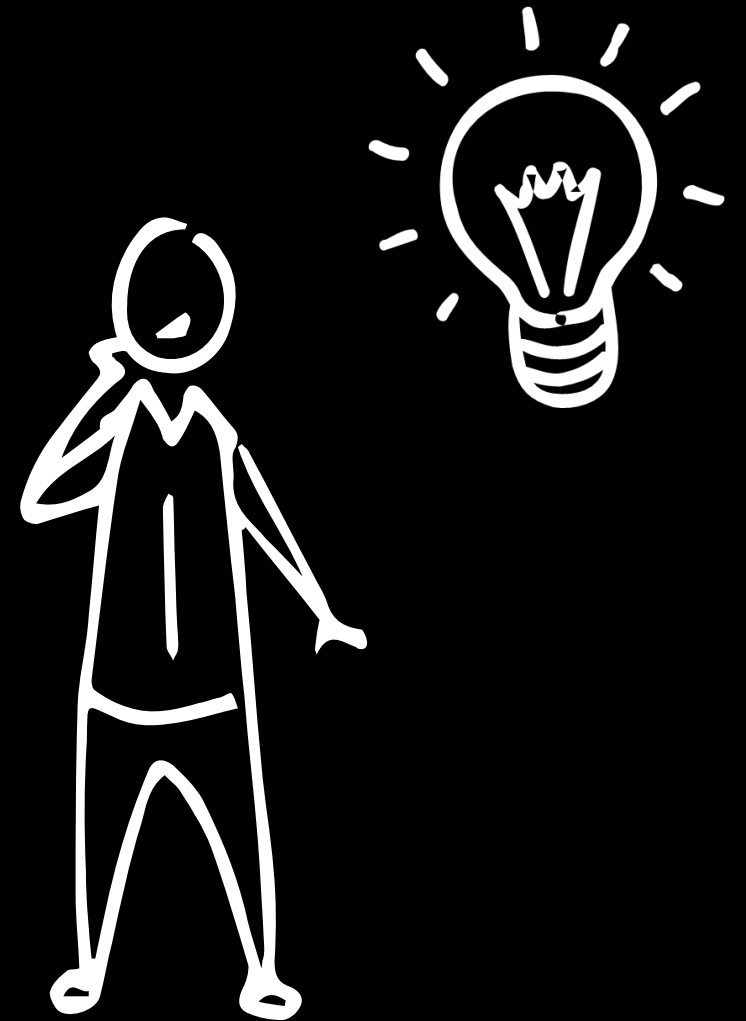
States should consider a variety of factors to incorporate data analysis into a strategy to enhance program oversight and decision-making

What you likely need to be successful:

- Clean data – or at least know its limitations
- Integrated data
- Tools (visualization, etc.)
- Executive sponsorship
- Program-level support and buy in
- Project management support
- Enhanced communication with internal and external stakeholders



Questions?





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