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.

1. Identify high-priority business problem
2. Hypothesis for solution
3. Build & test rapidly with real users
4. Learn
5. Deploy
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**

- Identify high-priority business problem
- Hypothesis for solution
- Build & test rapidly with real users
- Learn
- Deploy

HCBS 2019 | Baltimore
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.

- Focused reviews of service plans
- Detailed data analysis of enhanced staffing services leading to policy and operational reviews
- Review of the operationalization of a home and community habilitation service
- Operational Dashboard for data driven decision making

Predictive analytics for individuals with complex needs
Behavioral health underutilization when a BH need is driving HCBS service utilization
Exploratory program integrity analytics

Policy
Data
Operations
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

<table>
<thead>
<tr>
<th>Average</th>
<th>1: Behavioral DX, Mild ID</th>
<th>2: Law Enforcement Involvement</th>
<th>3: Mild ID</th>
<th>4: Moderate ID</th>
<th>5: Profound ID</th>
<th>6: Severe ID</th>
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<td></td>
<td>188.00</td>
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<td>13.66</td>
<td>13.87</td>
<td>13.36</td>
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</table>

**Consumer Demographics**

- Number of consumers: 188.00
- % high cost consumers: 0.27
- Avg. ISP amount: 155,571.14
- Avg. age: 24.36
- Avg. age at first assessment on the waiver: 15.09

**Other Indicators**

- % consumers with RTF crime: 0.01
- % with Hx: 0.07

**Incident Information**

- Incident: % law enforcement: 0.07
- Incident: % psychiatric hospital visit: 0.06
- Incident: % non-psychiatric hospitalization: 0.04
- Incident: % abuse: 0.08
- Incident: % individual to individual abuse: 0.12
- Incident: % ER visit: 0.21
- Incident: % neglect: 0.07

**Last Disability Assessment**

- Last disability assessment: mild: 0.59
- Last disability assessment: moderate: 0.26
- Last disability assessment: severe: 0.06
- Last disability assessment: unspecified: 0.06

**Diagnosis Data**

- Dx: % IED: 0.02
- Dx: % major depression (recurring): 0.00
- Dx: % adjustment disorder w/ anxiety: 0.00
- Dx: % anxiety: 0.34
- Dx: % bipolar: 0.33
- Dx: % major depression (single episode): 0.19
- Dx: PDD (nos): 0.12
- Dx: % impulse control: 0.11
- Dx: % PTSD: 0.09
Sample Analysis: The consumer “heat map” can be used to identify distinguishing characteristics within (and across) groups

### Consumer Group

<table>
<thead>
<tr>
<th>Consumer Group</th>
<th>1: Behavioral DX, Mild ID</th>
<th>2: Law Enforcement Involvement</th>
<th>3: Mild ID</th>
<th>4: Moderate ID</th>
<th>5: Profound ID</th>
<th>6: Severe ID</th>
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<tbody>
<tr>
<td>Number of consumers</td>
<td>266.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>% high cost consumers</td>
<td>0.46</td>
<td></td>
<td></td>
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<tr>
<td>Avg. ISP amount</td>
<td>205,751.21</td>
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<td>Avg. age</td>
<td>24.61</td>
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<td>Avg. age at first assessment on the waiver</td>
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<td></td>
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<tr>
<td>% consumers with RTF</td>
<td>0.01</td>
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</tbody>
</table>

### Other Indicators

- Crime: % with Hx = 0.39
- 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
- Incident: % neglect = 0.24

### Incident Information

- Last disability assessment: mild = 0.63
- Last disability assessment: moderate = 0.40
- Last disability assessment: severe = 0.03
- Last disability assessment: profound = 0.00
- Last disability assessment: unspecified = 0.04

### Diagnosis Data

- Dx: % IED = 0.08
- Dx: % major depression (recurring) = 0.05
- Dx: % adjustment disorder w/ anxiety = 0.04
- 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

<table>
<thead>
<tr>
<th>Consumer Count*</th>
<th>BH Spend One year</th>
<th>Average Waiver Spend One year</th>
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<tbody>
<tr>
<td>190 Consumers with additional habilitation</td>
<td>118 Consumers (62%) with additional habilitation for BH reasons</td>
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<tr>
<td>27</td>
<td>$0</td>
<td>$321,742</td>
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<tr>
<td>58</td>
<td>&lt; $5K</td>
<td>$329,403</td>
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<td>16</td>
<td>$5 - $30K</td>
<td>$314,000</td>
</tr>
<tr>
<td>10</td>
<td>$30 - $100K</td>
<td>$318,534</td>
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<tr>
<td>7</td>
<td>Over $100K</td>
<td>$302,475</td>
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<tr>
<td>118</td>
<td>$2M</td>
<td>$38M</td>
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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?

**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

**Insights**

**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.
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.

- **65%** Cases with historical non-use of at least one service
- **39%** Cases with 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.

Total of 1039 cases reviewed
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 redesign 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.
Sample Analysis: In-depth data visualizations highlighted trends which required policy and operational follow-up

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<td>Short Term Staffing Initial Authorization Process</td>
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<tr>
<td>Local office does review</td>
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<tr>
<td>Headquarters office Process Long Term Staffing Renewals</td>
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<tr>
<td>Abbreviated PA Process for Long-term Medical Requests</td>
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<td>Long Term Enhanced Staffing Costs Incorporated into the Residential Rate after 2 Years</td>
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**Initial Requests**

**Renewal Requests**

**Area of Significance**

- **Key Process Features**
- **Staffing Changes**
- **Policy Impacts**
- **Technology and Tools**
- **Strategic Decisions**
- **Potential Risks**

**Process Re-Design Options**

- **Short Term Staffing Initial Authorization Process**
- **Local office does review**
- **Headquarters office conducts review**
- **Retirements – No PA**
- **Headquarters office Process Long Term Staffing Renewals**
- **Abbreviated PA Process for Long-term Medical Requests**
- **Long Term Enhanced Staffing Costs Incorporated into the Residential Rate after 2 Years**

**Legend**

- **No Change**
- **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?