Collecting Quality Data: Why It Matters and Guidance to Improve Our Process

Nancy O’Hara and Todd Honeycutt

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Objectives

- Increased knowledge of what constitutes high quality data
- Increased knowledge of improving processes for collecting high quality data
- Increased knowledge of the use of high quality data for measuring program effectiveness
Data collection and reporting are predicated on having a fundamental understanding of their purpose

- What do you want to know?
- Who needs to know it?
- What will you do with it?
- What are the implications if the data are inaccurate, incomplete, or unavailable?
Why Is Collecting High Quality Data Important?

- To figure out what is really working and what could be improved
- To make well-informed policy decisions
- To identify, celebrate, and extend successes
- To leverage resources for the groups and agencies that need the most assistance
- To tell a story to people who are less familiar with our population and programs
- To apply for grants or request funding
Why Is Collecting High Quality Data Important?

- To promote system accountability
- To increase data use among staff and build a data-driven culture for continuous quality improvement
- To improve programs and address achievement gaps
- Because we love data! (and everyone else does, too, even if they don’t realize it)
What Happens When the Data Are Not High Quality?

- Inaccurate counts of participants
- Not right data to make decisions
- You may make wrong decisions about strategies
- Allocation of resources may not be equitable
- You won’t know when you are successful
- You may be unable to secure funding or additional grants
- Your accountability results may not be valuable
- Stakeholders may lose respect for the program
What Constitutes High Quality Data?

- **Timely**
  - Current within the identified time period
  - Submitted to the appropriate agency by the deadline
  - Collected and analyzed in a period when the data are useful for the intended purposes

- **Accurate**
  - Reliable and consistent across time, method, and location
  - Valid; represents what its intended to measure

- **Complete**
  - Represent the entire population being reported

- **Informative**
  - Relevant for decision making
What Do You Need to Collect High Quality Data?

- Systematic documented processes
- Data system(s)
  - Cross-department data sharing and matching
  - Cross-agency data sharing and matching
- Validating and editing
- Dedicated staff with clear responsibilities and accountability for data entry and quality
- Training
- Technical assistance or support
Ways to Ensure Quality Data

- Use web-based or computer-assisted technology for data collection
- Use forced-choice items rather than free-text fields
- Establish and enforce double entry or checking protocols
- Build automatic reminders, reports, data validation protocols, and help screens
- Include fields to document who updated the data and when
- Use existing forms, measures, and procedures
- If using a new measure, pilot test it with a small group
Improving the Quality of State-Level Data

- Start with local-level data
- Build the local culture of data use in a nonthreatening manner
- Ensure that those who enter the data are comfortable and do not feel threatened by the data
- Teach local-level staff how to perform error checks and validation before submitting data to the state
- Provide assistance with analyzing and understanding local data
Using Data for Program Evaluation

- Answer essential questions
  - Identify data elements that correspond to questions
- Data access must be timely
- Data stakeholders must understand the data and methods
- Keep data collection simple
- Data visualization can improve and increase stakeholder usage and comprehension
  - Tables, figures, and maps convey relevant messages and actionable information
Understanding the Types of Youth Seeking VR Services

- Examples of data quality and analysis
- Research funded through VR Practices and Youth Rehabilitation Research and Training Center (http://vrpracticesandyoungouth.org/)
  - The Center conducts research and technical assistance to improve VR service delivery that improves the lives of transitioning youth with disabilities and their families
Research Goal

- Identify long-term employment and program outcomes for transition-age VR customers
- Examine variation across initial educational attainment and employment status, as well as other critical characteristics
- How can the findings inform WIOA implementation?
VR Agencies Offer Many Programs for Youth with Disabilities

- Review of 2015 VR state plans
- Identified 244 programs for youth with disabilities
  - Three-quarters of programs emphasized employment
  - Three-quarters of programs targeted youth with disabilities
- Evidence of evaluation activities for only 10 percent of agencies

Source: Sevak et al. (forthcoming)
Little Evidence of Using Data for Youth Program Evaluation

- Review of published literature on the effectiveness of youth VR programs identified 7 such programs across 13 articles
- Little rigorous evidence to date on the effectiveness of those programs
- Common themes:
  - Targeted specific youth populations
  - Involved multiple agency partners

Source: Mann (2015)
Better Evidence Could Help VR Agencies Decide How to Implement WIOA

- WIOA requires VR agencies to focus more of their limited resources on youth
  - Pre-employment transition services (PETS)
  - Target both in-school and out-of-school youth
  - Improve workplace skills
  - Provide supported employment opportunities

- WIOA requires tracking new outcomes
  - Employment and earnings after exit
  - Skill and credential gain
Most Youth VR Applicants Are Enrolled in High School or Not Working But Have High School Diploma

<table>
<thead>
<tr>
<th>Proportion of Youth Applicants</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled in high school</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No high school diploma, not working or in school</td>
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<tr>
<td>No high school diploma, working or in school</td>
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<tr>
<td>High school diploma, working</td>
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<tr>
<td>High school diploma, in post-secondary school</td>
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<tr>
<td>High school diploma, not working or in school</td>
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<tr>
<td>Missing education or employment data</td>
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</tr>
</tbody>
</table>

Note: Data from RSA-911, FY 2004-2013, for VR applicants from 2004 to 2007, ages 14 to 24, eligible for services. N=582,912.
VR Agencies Vary Widely in Youth Applicant Types

Proportion of Youth Applicants in High School

Note: Data from RSA-911, FY 2004-2013, for VR applicants from 2004 to 2007, ages 14 to 24, eligible for services. N=582,912.
## How Do Youth Differ on Background Characteristics?

<table>
<thead>
<tr>
<th></th>
<th>Enrolled in high school</th>
<th>No high school diploma, not working or in school</th>
<th>No high school diploma, working or in school</th>
<th>High school diploma, working</th>
<th>High school diploma, in post-secondary school</th>
<th>High school diploma, not working or in school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>39%</td>
<td>38%</td>
<td>39%</td>
<td>45%</td>
<td>45%</td>
<td>41%</td>
</tr>
<tr>
<td>White</td>
<td>73%</td>
<td>66%</td>
<td>76%</td>
<td>83%</td>
<td>72%</td>
<td>72%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 to less than 19 years</td>
<td>86%</td>
<td>50%</td>
<td>79%</td>
<td>23%</td>
<td>50%</td>
<td>21%</td>
</tr>
<tr>
<td>19 to less than 22 years</td>
<td>14%</td>
<td>29%</td>
<td>17%</td>
<td>41%</td>
<td>37%</td>
<td>42%</td>
</tr>
<tr>
<td>22 to less than 25 years</td>
<td>0%</td>
<td>20%</td>
<td>4%</td>
<td>36%</td>
<td>12%</td>
<td>37%</td>
</tr>
<tr>
<td>Impairment</td>
<td></td>
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</tr>
<tr>
<td>Learning/cognitive disability</td>
<td>49%</td>
<td>35%</td>
<td>48%</td>
<td>35%</td>
<td>43%</td>
<td>27%</td>
</tr>
<tr>
<td>Mental health/psychiatric disability</td>
<td>10%</td>
<td>23%</td>
<td>13%</td>
<td>17%</td>
<td>14%</td>
<td>23%</td>
</tr>
<tr>
<td>Development/intellectual disability</td>
<td>29%</td>
<td>22%</td>
<td>22%</td>
<td>19%</td>
<td>21%</td>
<td>24%</td>
</tr>
<tr>
<td>Other physical disability</td>
<td>7%</td>
<td>9%</td>
<td>9%</td>
<td>16%</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>SSA benefits at VR application</td>
<td>22%</td>
<td>28%</td>
<td>17%</td>
<td>15%</td>
<td>24%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Note: Data from RSA-911, FY 2004-2013, for VR applicants from 2004 to 2007, ages 14 to 24, eligible for services. N=582,912.
### How Do Youth Differ on Outcomes?

<table>
<thead>
<tr>
<th>VR outcomes</th>
<th>Enrolled in high school</th>
<th>No high school diploma, not working or in school</th>
<th>No high school diploma, working or in school</th>
<th>High school diploma, working</th>
<th>High school diploma, in post-secondary school</th>
<th>High school diploma, not working or in school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not receive services</td>
<td>32%</td>
<td>36%</td>
<td>32%</td>
<td>29%</td>
<td>27%</td>
<td>33%</td>
</tr>
<tr>
<td>Received services, not employed at exit</td>
<td>30%</td>
<td>33%</td>
<td>29%</td>
<td>22%</td>
<td>34%</td>
<td>31%</td>
</tr>
<tr>
<td>Received services, employed at exit</td>
<td>38%</td>
<td>31%</td>
<td>38%</td>
<td>49%</td>
<td>40%</td>
<td>36%</td>
</tr>
</tbody>
</table>

**SSA outcomes**

| Began receiving SSI benefits within 5 years       | 8%                      | 7%                                               | 6%                                         | 4%                          | 6%                                         | 7%                                         |
| Began receiving SSDI benefits within 5 years     | 8%                      | 8%                                               | 8%                                         | 10%                         | 8%                                         | 13%                                        |
| SSI benefits foregone due to work within 5 years  | 41%                     | 41%                                              | 47%                                        | 72%                         | 46%                                         | 50%                                        |
| SSDI benefits foregone due to work within 5 years | 6%                      | 8%                                               | 10%                                        | 22%                         | 16%                                         | 14%                                        |

Note: Data from RSA-911, FY 2004-2013 and DAF, for VR applicants from 2004 to 2007, ages 14 to 24, eligible for services. N=582,912.
What Are the Implications for VR and WIOA?

- Some agencies may be better prepared to deliver PETS (they serve more high school youth)
- Increasing service provision to in-school youth or out-of-school youth who are not working could result in poorer employment outcomes overall for the agency
- Not clear what services and programs are best for youth (or different kinds of youth)
Special Education Data

- **Graduation data**
  - Can you compare data from state to state?
  - Do you have long-term data to look at trends over time?
  - Can achievement data inform graduation data?

- **Dropout data**
  - Comparable from state to state?
  - Multiple methods for calculating
  - 24 states have dropout data for five or more years based on the same method of calculation
Special Education Data

- Post-school outcomes
  - Usually survey data or administrative database
  - Sample or census
  - Respondent rates can be a challenge
  - Representativeness of the respondents is a challenge to many states
SSIP Evaluation

- 13 states are focusing on graduation rates
- 2 states are focusing on post-school outcomes
  - Upon closer look, many states discovered issues with data quality in their data collection related to graduation, dropout, or post-school outcomes
  - Plans to improve quality of the data collected
  - New data being collected to evaluate effectiveness of the SSIP strategies
What are the important questions you want to answer for your programs?

What data do you already have to answer those questions?
  - Are those data of high quality?

What data do you need? How might you obtain those data?

Where and how should you focus your efforts on improving data quality, availability, and use to inform program improvements?
Contact Information

Nancy O’Hara  
IDEA Data Center (IDC)  
www.ideadata.org  
Nancy.ohara@uky.edu  
770-337-3367

Todd Honeycutt  
Center for Studying Disability Policy  
Mathematica Policy Research  
609-945-3397  
thoneycutt@mathematica-mpr.com  