Research BRIEF

Todd Honeycutt and Purvi Sevak

Measure Twice, Cut Once, Part 3:
Developing Performance Metrics to Monitor Pre-Employment Transition Services

This brief describes performance metrics that staff at state vocational rehabilitation (VR) agencies can use to assess their provision of pre-employment transition services. These services—which are authorized under the Rehabilitation Act of 1973, as amended by Title IV of the Workforce Innovation and Opportunity Act of 2014—are intended to prepare students with disabilities for life after school. But they represent a major change in how VR agencies operate. VR agencies must now provide five required pre-employment transition services and, if funds are available, may provide nine other authorized services to secondary and postsecondary students with disabilities (see table at the end of the brief). Each agency must use at least 15 percent of its federal VR grant award on such services. Any student with a disability can receive these services if he or she is eligible or potentially eligible for VR services—meaning that students with disabilities do not have to apply to the VR program before receiving pre-employment transition services.

Given this increased emphasis on pre-employment transition services, staff at VR agencies might be wondering how best to measure them. Who is—and who isn't—receiving these services? Is the VR agency on track to use 15 percent of its federal funds on these services, as required? Are providers delivering the services that they are contracted to provide? Do all students with disabilities have access to each of the required services, or are some students with disabilities in certain schools or regions not being served? Are the services having the effect that VR agency staff want?

VR agencies already collect rich data on pre-employment transition services that staff could use to answer many of these questions. The agencies compile data on the characteristics of the people they serve, the types of services provided, and expenditures by type of service. These data enable staff to monitor the differences in pre-employment transition services by student characteristic, geography, provider, or counselor; changes in the types or number of these services over time; and spending on various types of pre-employment transition services (as well as relative to the 15 percent federal grant award). VR agency staff could use these data to assess patterns in use and spending compared with their expectations for these services. In many instances, and depending on how the data are prepared, these analyses could be completed using readily accessible software.

This brief identifies six performance metrics that a VR agency could use to assess its provision of pre-employment transition services across three domains: quantity, cost, and access (see Figure 1 on page 2). We describe the metrics for each domain, provide the rationale for them along with illustrative examples, suggest ways to interpret or use the metrics, and discuss options to extend the metrics.

Performance metrics for pre-employment transition services

QUANTITY
- Number of pre-employment transition services provided
- Number of unique students with disabilities who received pre-employment transition services

COST
- Aggregate cost of pre-employment transition services
- Cost per student with a disability who received pre-employment transition services

ACCESS
- Students who received pre-employment transition services by geographic location
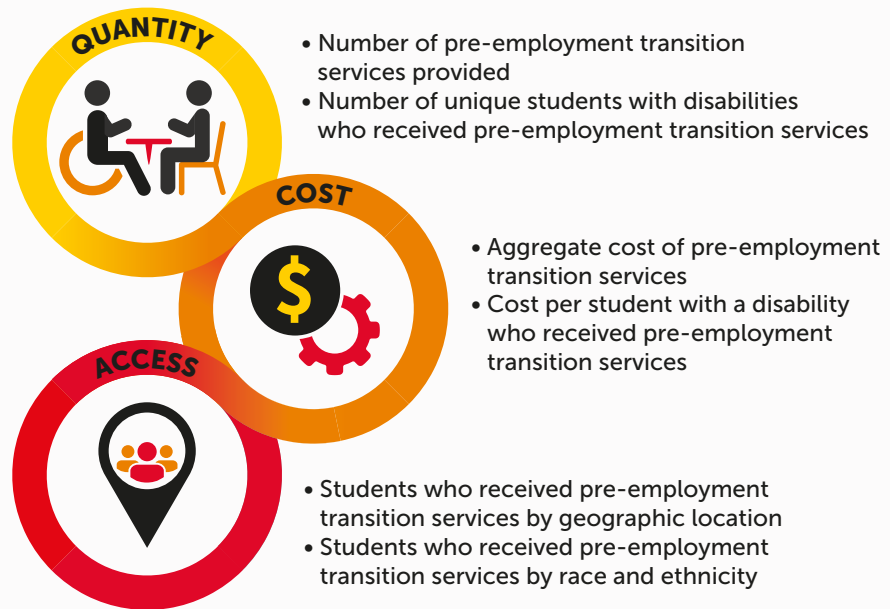- Students who received pre-employment transition services by race and ethnicity

Figure 1.

PERFORMANCE METRICS ON QUANTITY

The performance metrics on quantity are designed to capture details on the volume of pre-employment transition services that a VR agency provides. These metrics reflect two different, but complementary, perspectives on quantity: (1) the number of services provided, which may be a metric that staff and providers already use to process provider payments, and (2) the number of unique students with disabilities who received these services. Table 1 on page 3 shows one way to calculate these two metrics for specific services and over time.

VR agency staff could use these metrics to answer several questions:

- Does the distribution of services and students with disabilities over time reflect the VR agency's expectations?

- Are the same students with disabilities receiving pre-employment transition services quarter after quarter? Is that pattern to be expected based on the types of services?

VR agency staff might consider extending these performance metrics to examine patterns of service receipt at more granular levels. For example, they might look at service receipt by type of student (such as students with disabilities receiving only pre-employment transition services versus students receiving both pre-employment transition and VR services) or provider type (such as school or community rehabilitation program).

Number of pre-employment transition services provided and unique students with disabilities who received the services during a program year, by quarter

Service	Q1 (July–September)	Q2 (October–December)	Q3 (January–March)	Q4 (April–June)	Total for program year
Job exploration counseling					
Number of services provided	426	147	375	215	1,163
Number of unique students with disabilities	284	98	250	144	621
Work-based learning experiences					
Number of services provided	132	119	156	168	575
Number of unique students with disabilities	110	99	130	140	328
Counseling on post-secondary education					
Number of services provided	53	275	30	299	657
Number of unique students with disabilities	33	172	19	187	335
Workplace readiness training					
Number of services provided	971	592	841	992	3,396
Number of unique students with disabilities	540	329	467	551	1,142
Instruction in self-advocacy					
Number of services provided	172	147	108	138	565
Number of unique students with disabilities	163	140	103	132	511
Total					
Number of services provided	1,754	1,280	1,510	1,812	6,355
Number of unique students with disabilities who received any pre-employment transition services	1,030	767	894	1,042	3,526

Note: The annual total number of unique students with disabilities will be less than the sum of students in all quarters if any students with disabilities received that service in more than one quarter. The total number of students with disabilities who received any pre-employment transition services will be less than the sum of unique students with disabilities across individual pre-employment transition services if any student received more than one individual service during the period. The table contains hypothetical data for a VR agency.

Table 1.

PERFORMANCE METRICS ON COST

The performance metrics on cost reflect the level of funding that a VR agency spends on pre-employment transition services. These metrics capture the aggregate cost—the VR agency's total spending—and the cost per student with a disability.

This information could be helpful in several ways. First, staff could use the metrics to determine whether providers are on target to spend at least 15 percent of the VR agency's federal funds on pre-employment transition services, as required. Staff could keep track by comparing actual service costs with their expectations for spending over time. Second, these metrics indicate which services account for the most spending. Finally, staff could monitor the metrics to identify any changes

in costs, which they might not otherwise know about. Table 2 shows the types of data that staff can generate by using these metrics to assess work-based learning experiences, by quarter, over a program year.

As with the performance metrics for quality, staff could use the metrics for cost at a more granular level to examine similarities or differences by type of student, counselor or office, type of provider, or contract type. They could also disaggregate these metrics by who provides the service: VR agency staff or vendors.

Work-based learning experiences: aggregate cost and cost per student with a disability during a program year, by quarter

Work-based learning experiences	Q1 (July–September)	Q2 (October–December)	Q3 (January–March)	Q4 (April–June)	Total for program year
Number of participating students with disabilities	110	99	130	140	328
Aggregate cost	$150,518	$145,693	$175,335	$189,167	$660,713
Cost per student with a disability	$1,368	$1,472	$1,349	$1,351	$2,014

Note: The table contains hypothetical data for a VR agency.

Table 2.

PERFORMANCE METRICS ON ACCESS

The final set of performance metrics touch on issues of access from two perspectives: (1) geographic area and (2) race and ethnicity. These metrics could be useful for VR agency staff who are interested in "statewideness," or the potential for all students with disabilities in a state to access these services. We describe each metric below.

1. Pre-employment transition services by geographic area

VR agencies' records contain a host of geographic data—including school, county, office, and urban or rural status. These data can provide insights on the number of students with disabilities served or the cost of services in each geographic area, indicating whether the agency is making these services available to all students with disabilities, as required.

Measuring the share of students with disabilities who could possibly benefit from these services versus the share who actually received services allows staff to track equitable access to services across the state. Table 3 on page 5 shows one way to measure this, using county as the geographic area of analysis. The table shows (1) the number of students with disabilities who received pre-employment transition services by county during a program year; (2) the number of high school students in the county who have an individualized education program (IEP); and (3) the ratio of the first two numbers, which is the performance metric. The geographic area selected and the statistics for a table like this will vary depending on the needs of the VR agency and the availability of data.

Note that the performance metric requires a count of all students or youth in the geographic area as a means for comparison. This count is the foundation for a standardized unit of measurement, which is the performance metric calculated in the third column.[1] (See the box on page 5 for more details.)

Number of students with disabilities who received pre-employment transition services relative to the number of high school students with IEPs in a program year

	Students with disabilities who received pre-employment transition services	High school students with IEPs	Ratio of students with disabilities who received pre-employment transition services to high school students with IEPs
County 1	322	4,005	8%
County 2	149	680	22%
County 3	26	643	4%
County 4	299	1,295	23%
Total	**796**	**6,623**	**12%**

Note: The table contains hypothetical data for a VR agency.

Table 3.

The calculations in Table 3 require a count of how many students are in a given geographic area. To get these numbers, staff can consult two primary sources of information. Neither source can accurately identify the true population of students with disabilities who are potentially eligible for pre-employment transition services, but each may provide a reasonable estimate. Any statistics derived from these sources must be interpreted with this limitation in mind.

- From the U.S. Census Bureau, VR agency staff could obtain fairly accurate estimates of the transition-age population by geographic area (such as county).[2] One limitation of these estimates is that they might not indicate a youth's school enrollment or disability status, although some records from the Census Bureau have this information.[3]

- The U.S. Department of Education and its state counterparts collect and distribute statistics on the number of students with IEPs by high school.[4] This source may provide good estimates of the population that is potentially eligible for pre-employment transition services, although the statistics do not include high school students with 504 plans and students with disabilities who are enrolled in postsecondary education.

Despite their limitations, both data sources could provide consistent statistics by which to compare resource costs and identify gaps in services.

2. Pre-employment transition services by race and ethnicity

VR agency staff might be interested in ensuring that all students with disabilities—regardless of race and ethnicity—have equal access to pre-employment transition services. The Rehabilitation Services Administration requires VR agencies to report data on race and ethnicity for everyone who applies for VR services, as well as for students with disabilities who received only pre-employment transition services. Staff may want to monitor the percentages of students with disabilities who received each pre-employment transition service by race and ethnicity. They can then look for any sizeable differences in the characteristics of students with disabilities who received one service or another. Such differences, if they exist, might point to potentially underserved populations, which could be a result of low provider availability or service capacity.

There are six data elements on race and ethnicity. VR agency staff could use these elements as they are or combine them into categories that are relevant to the state and student population. The example in Table 4 uses four mutually exclusive categories for race and ethnicity derived from the six data elements. Staff might compare the proportions of students with disabilities by race and ethnicity who received a specific pre-employment transition service with the proportion of all students (or youth) by race in the state, as listed in the final row of Table 4.[5] This information could be obtained from the same sources described in the section on geographic area.

VR agency staff might want to extend this type of analysis into other areas. For example, if an agency collects other variables on students with disabilities, such as gender and type of disability, staff could use similar approaches to measure access among these groups. In particular, staff might consider conducting such analyses for students who received both VR and pre-employment transition services, given that much more data are collected for them than for students who received only pre-employment transition services.

Race and ethnicity of students with disabilities who received pre-employment transition services during a program year

Service	Hispanic (any race)	White non-Hispanic	Black non-Hispanic	Other or multiple races	Total
Job exploration	22%	56%	21%	1%	100%
Work-based learning experiences	25%	57%	17%	1%	100%
Counseling on post-secondary education	28%	58%	13%	1%	100%
Work readiness training	29%	59%	11%	1%	100%
Instruction in self-advocacy	27%	55%	17%	1%	100%
Total pre-employment transition services	**26%**	**57%**	**16%**	**1%**	**100%**
State youth population	**24%**	**59%**	**13%**	**4%**	**100%**

Note: The table contains hypothetical data for a VR agency.

Table 4.

CONCLUSION

The performance metrics presented in this brief, if implemented, would paint a composite picture of a VR agency's provision of pre-employment transition services. Staff could use these metrics to shed light on the effectiveness of their agency's efforts to provide transition services. Monitoring quantity, cost, and access could help them assess whether their agency is meeting its goals for these services and whether and how to improve service provision.

This brief, along with the other two briefs in this series, is intended to provide VR agency staff with ideas for measuring pre-employment transition services, but the examples are just a starting point. An agency could conduct a wide array of analyses to understand these services, limited only by the data elements that it collects. Staff can use the resources below to extend their analyses:

- The VR Program Evaluation Coach, an online tool to help VR agencies assess their programs: https://vrevalcoach.com/

- An issue brief on performance management issues for VR agencies: https://www.mathematica-mpr.com/our-publications-and-findings/publications/performance-management-for-state-vocational-rehabilitation-agencies-serving-transition-aged-youth

- An issue brief on VR agencies' early implementation of pre-employment transition services: https://www.mathematica-mpr.com/our-publications-and-findings/publications/state-vocational-rehabilitation-agencies-early-implementation-experiences-with-pre-employment

- The Workforce Innovation Technical Assistance Center, which provides resources related to pre-employment transition services: http://www.wintac.org/

- The Program Evaluation and Quality Assurance Technical Assistance Center, which provides training, technical assistance, and resources for data analysis and evaluation: https://peqatac.org/

Definitions of required and authorized pre-employment transition services	
The five required pre-employment transition services	1. Job exploration counseling
	2. Work-based learning experiences, which may include in-school or after-school opportunities, or experiences outside the traditional school setting (including internships), provided in an integrated environment to the maximum extent possible
	3. Counseling on opportunities for enrollment in comprehensive transition or postsecondary educational programs at institutions of higher education
	4. Workplace readiness training to develop social skills and independent living
	5. Instruction in self-advocacy, which may include peer mentoring
The other nine authorized pre-employment transition services	1. Implementing effective strategies to increase the likelihood of independent living and inclusion in communities and competitive, integrated workplaces
	2. Developing and improving strategies for individuals with intellectual disabilities and individuals with significant disabilities to live independently; participate in postsecondary education experiences; and obtain and retain competitive, integrated employment
	3. Providing instruction to VR counselors, school transition personnel, and other persons supporting students with disabilities
	4. Disseminating information about innovative, effective, and efficient approaches to achieving the goals of WIOA
	5. Coordinating activities with transition services provided by local educational agencies under the Individuals with Disabilities Education Act (20 U.S.C. 1400 et seq.)
	6. Applying evidence-based findings to improve policy, procedure, practice, and the preparation of personnel in order to better achieve the goals of WIOA
	7. Developing model transition demonstration projects
	8. Establishing or supporting multistate or regional partnerships involving states, local educational agencies, designated state units, developmental disability agencies, private businesses, or other participants to achieve the goals of WIOA
	9. Disseminating information and strategies to improve the transition to postsecondary activities for members of traditionally unserved populations

Source: Rehabilitation Services Administration. "Pre-Employment Transition Services." RSA-VR-1. 2016. Available at https://www2.ed.gov/policy/speced/guid/rsa/supporting/rsa-vr-1-pre-employment-transition-services.pdf. Accessed January 8, 2019.

ENDNOTES

[1] Table 3 refers to this measure as a "ratio" instead of a "rate" because the options for the denominator do not reflect an accurate assessment of the population of students with disabilities who are eligible for VR and pre-employment transition services.

[2] These numbers might need to be interpolated if the statistics are aggregated by age groups (such as age 15 to 19 and age 20 to 24).

[3] The U.S. Census Bureau publishes statistics on the characteristics of youth ages 15 to 19 at the county level, including race and ethnicity, marital status, school enrollment, idleness (neither in school nor in the labor force), and labor force participation. These statistics might be useful for identifying the relative demand for VR services, including pre-employment transition services.

[4] School-specific data can be obtained through the National Center for Education Statistics: https://nces.ed.gov/datatools/.

[5] This statistic is calculated as the number of students with disabilities in each race and ethnicity category who received a specific service divided by all students with disabilities who received a service.

For more information, contact Todd Honeycutt, Senior Researcher, at thoneycutt@mathematica-mpr.com

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