The Return on Investment of Virginia’s Vocational Rehabilitation Program

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Presentation Objectives

• Provide a brief overview of Virginia’s vocational rehabilitation (VR) program
• Describe our innovative and rigorous approach to estimating ROI
• Present initial Virginia findings from a multi-state project for state VR agencies
• Discuss how the findings can inform VR program and policy decision-making
Vocational Rehabilitation in VA

- VR is Title IV of Workforce Innovation and Opportunity Act
- DARS is Virginia’s general agency
- Eligibility-based; documented disability that constitutes impediment to employment, and individual can benefit from services
- Individualized plans for employment
- Staff and community partners provide many services
The VR ROI Project

- Started in 2010 with 4 state VR agencies, including both in VA, plus MD and OK
- Funded by the National Institute on Disability, Independent Living, and Rehabilitation Research
- Initial objective was to test applicability of valid, methodologically rigorous processes for assessing ROI at state agency level
- Expanded with new funding in 2014 to 8 state VR agencies across 6 states (VA, MD, OK, DE, KY, TX)
- Current objective is to refine and test the ROI model with a more heterogeneous set of state agencies
Our Approach to Estimating ROI

• “This is not your grandfather’s ROI”
• Uses readily-available administrative data on:
  – Characteristics of VR program participants
  – VR services provided
  – Employment and earnings from state UI program records
• Conducts longitudinal analyses with up to 3 years of pre-VR employment data and at least 5 years of post-application data
• Employs state-of-the-science statistical controls to ensure that the outcomes are the result of VR rather than other factors
Our Approach (continued)

• Starts estimating VR’s impact after services begin, not when they end (uses applicant cohorts, not closure cohorts/exiters)
• Estimates employment & earnings impacts at the individual level
• Examines the impact of specific types of VR services on participants’ employment and earnings
• Examines the impact of VR on employment and earnings for individuals with different kinds of disabling conditions
• Estimates quarterly and annual rates of return (ROR) for specific populations as well as agency-wide
VR ROR in Virginia: FY 2000 Findings

Employment Rates for Served and Not Served Applicants with Mental Illness

Served

Not Served
VR ROR in Virginia: FY 2000 Findings

Average Quarterly Earnings (if Employed) for Served and Not Served Applicants with Mental Illness

Quarter Relative to Date of Application
VR ROR in Virginia: FY 2000 Findings

Extra Features

• Controls for Endogeneity/Selection
• Controls for other observed explanatory variables (e.g., gender, race, disability, local labor market conditions)
• Distinguishes effects of different types of service
• Uses all service information
VR ROR in Virginia: FY 2000 Findings

Service Effects on Labor Market Outcomes for People with Mental Illness

[Chart showing service effects with bars for different services: Diagnosis and Evaluation, Training, Education, Restoration, Maintenance, Other Services. The chart includes bars for employment short run, employment long run, quarterly earnings short run, and quarterly earnings long run.]
VA ROR in Virginia: FY 2000 Findings

Service Effects on SSI/DI Receipt for People with Mental Illness

- Diagnosis and Evaluation
- Training
- Education
- Restoration
- Maintenance
- Other Services

Short Run
Long Run
Distribution of Quarterly Rates of Return for People with Mental Illness

- 10 year horizon, including d&e, fc = $2400
- 5 year horizon, excluding d&e, fc = $2400
- 10 year horizon, excluding d&e, fc = $2400
- 10 year horizon, including d&e, fc = $3600
- 5 year horizon, excluding d&e, fc = $3600
- 10 year horizon, excluding d&e, fc = $3600
Service Effects on Labor Market Outcomes for People with Cognitive Impairments

- Short-Run Employment
- Long-Run Employment
- Short-Run log Quarterly Earnings
- Long-Run log Quarterly Earnings

Service categories:
- Diagnosis & Evaluation
- Training
- Education
- Restoration
- Maintenance
- Other Services
VR ROR in VA: FY 2000 Findings

Distribution of Quarterly Rates of Return for People with Cognitive Impairments

- Fixed Cost = $2000, Short-Run
- Fixed Cost = $2000, Long-Run
- Fixed Cost = $4200, Short-Run
- Fixed Cost = $4200, Long-Run
VR ROR in VA: FY 2000 Findings

Service Effects on Labor Market Outcomes for People with Physical Impairments

- Short-Run Employment
- Long-Run Employment
- Short-Run Quarterly Earnings
- Long-Run Quarterly Earnings
VR ROR in VA: FY 2000 Findings

Distribution of Quarterly Rates of Return for People with Physical Impairments

- 10-Year Horizon, FC=$2000
- 5-Year Horizon, FC=$2000
- 10-Year Horizon, FC=$3000
Next Steps

- Estimation of Models for FY 2007 data in Virginia (general & blind), Maryland, and Oklahoma
- Collection of Data for FY 2012 in same places along with Texas (general & blind), Kentucky, and Delaware
- Estimation of models for people with learning disabilities and for autism
ROI of a Collaborative Transition Program

- PERT (Post-secondary Education/Rehabilitation Transition) Program
  - Comprehensive career and independent living skills assessments at WWRC for high school students with disabilities selected by local school divisions
  - Community-based team implementation of assessment findings
  - Participants may receive additional VR services following PERT participation

PERT Impact on Finding a Job and on Income

- Increases chances of finding and keeping a job by 12%
- Combined with one more year of education the chance of getting and keeping a job increases by 38%
- After finding a job, participating in PERT will on average double the amount of a student’s earnings in the long run
Informing VR Policy and Practice

• The Virginia VR ROI “elevator speech”:
  80% of VR applicants in 2000 earned more as a result of VR services. For every $1,000 spent by DARS, the average (median) consumer earned $7,100 more over 10 years than they would have earned without VR services... And the top 10% earned $45,100 (or more) over the same period.

• PERT flyer – value to parents, students

• Developing strategies to use ROR findings to enhance program effectiveness
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