Intervention fidelity in a Large-Scale Model Demonstration Project: Lessons Learned from Maryland PROMISE

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The Promoting the Readiness of Minors in Supplemental Security Income (PROMISE) project is a 5-year, two-group, randomized controlled trial funded by the U.S. Department of Education in October 2013. Six sites were awarded funding to test the effectiveness of a multicomponent experimental intervention for improving academic, career, and financial outcomes for youth with disabilities receiving supplemental security income (SSI) benefits and their families. Awardees include Arkansas, ASPIRE (a consortium of six western states), California, Maryland, New York, and Wisconsin.

Overview

Maryland Promoting Readiness of Minors in Supplemental Security Income (MD PROMISE) model demonstration project has implemented and is evaluating a collaborative, integrated community-based intervention. MD PROMISE is designed to increase the likelihood that youth who receive Supplemental Security Income (SSI) in Maryland, and their families, will experience better employment outcomes, increased earnings, and decreased public income support. The intervention was conceptualized from extant research identifying factors which promote competitive integrated employment outcomes for youth with disabilities. In order to effectively assess the impact of the intervention on the participating youth and families it is necessary to ensure that the large-scale statewide project upholds a strong measure of fidelity across implementation sites. That is, does the project deliver the intervention as intended and is it implemented the same way no matter the individual characteristics of the participants and no matter where they live? This brief reports on the implementation of MD PROMISE, illustrates measures of fidelity achieved in serving 997 transition age youth receiving SSI across the state, and offers implications for ongoing PROMISE evaluation and its potential influence on transition practice.

Participants

MD PROMISE recruited and enrolled 2006 Maryland youth between the ages 14 -16 receiving Supplemental Security Income (SSI) benefits and their families during April 2014 through February 2016. Eligible youth and their families who consented to participate were randomized into one of two groups: 1) enhanced services group (n= 997) and 2) usual services group (n=1009). The intervention services received by the enhanced services group are the subject of this brief which covers services delivered through September 30, 2018, the end of project implementation.

For more information on MD PROMISE visit: www.mdtransition.org

Intervention

The MD PROMISE intervention was organized through a team of professionals including a case manager, family employment specialist, benefits specialist, and, when necessary, school personnel who work cooperatively and intensively with youth and families to deliver PROMISE services. The MD PROMISE intervention featured components that recognize the need for research based comprehensive services to both youth and to their families and included the following:

Assertive case management: This entailed proactive and ongoing coordination of services for the youth and their families so that they can navigate through the services and supports available through the project and through the larger service delivery system for which they are eligible and which may be required to achieve desired outcomes.

Career and work-based learning experiences: These work experiences included a range of experiences in community-based workplaces such as job shadowing, work sampling, volunteer work, and service learning. However, the chief aspect of this intervention was at least one paid work experience in an integrated setting before leaving high school for participating youth.

Benefits counseling and financial literacy services: These services included provision of information and counseling on SSA work incentives, eligibility requirements of various programs, earnings rules, as well as financial coaching, counseling and planning.

Family training and information: This included supporting family members to have the skills and knowledge to support and to engage in transition planning and other related activities. In MD PROMISE, this was not a distinct service, but rather it was integral to and integrated through the assertive case management approach identified above.

Intervention Fidelity

In order to reinforce intervention fidelity, a key feature of MD PROMISE was a continuum of technical assistance (TA) provided through a TA liaison and designed to build the capacity of the intervention teams to effectively implement the PROMISE service components. The liaison provided guidance and support to project teams in each of five state regions to promote intervention fidelity and resolve implementation issues as they occurred, including field-based TA and one-on-one troubleshooting by the TA liaison with individual staff members.

Measuring Fidelity

At the start of the MD PROMISE project, six program services or components were identified as essential fidelity indicators measuring the extent to which the intervention was accurately and reliably implemented in adherence to the proposed model. They included:

1. *Family Plan* which was a regularly updated plan for identifying and coordinating services to meet both short and long term goals for participating youth and family members, including employment and education;

2. *Positive Personal Profile* which provided a way to establish work preferences,

work skills, and the need for accommodation and supports so that the work experience and job development activities for youth participants are asset-based and individualized;

3. *Unpaid work experience* which included work sampling, job shadowing, and service learning activities;

4. *Job Development Plan* which was based on the Positive Personal Profile and was the basis for pursuing employer contacts and opportunities for paid work experiences;

5. *Paid work experience* where the youth received a wage for work performed; and

6. *Benefits Counseling Services* to help the youth and family understand work incentives and income management as well as to navigate the SSA requirements for reporting earned and non-SSI income.

Recognizing that various factors could inhibit perfect service intervention delivery, we derived a ratio positing that receipt of three to five of these intervention components constitutes partial fidelity. That is, participants received a moderately strong, but not the full, dose of the intervention. Receipt of all six intervention components constituted ideal fidelity. MD PROMISE established overall goals for delivering each of the six intervention components as both a measurement for the calibration of the dose of intervention delivery and as a management tool for monitoring delivery of service components by project staff so that technical assistance and support could be targeted accordingly.

Results

The development of Family Plans, Positive Personal Profiles, and Job Development Plans varied little across the five state regions and were delivered at a consistently high rate. There was also little variability in the delivery of Benefits Counseling Services. The only area of moderate regional disparity was paid employment where the rate was slightly lower in the Southern and Western regions compared to the other three state regions.

Across disability categories, the percentage that experienced each of the six service components was at or near the established target (75%) with two exceptions. Sixty-two (62) percent of participants with autism spectrum disorders and 63% of those with sensory disability experienced paid work, compared to 73% of all other MD PROMISE participants. However, overall, consistent delivery of the six key program components was evident as illustrated in Table 1.

Finally, the levels of fidelity achieved were consistent across state regions as illustrated in the accompanying table. Ideal fidelity, that is, meeting all six fidelity measures, was achieved for 66% of MD PROMISE participants. Eleven percent (11%) received five of the six service components. The percentage of participants who received four or three service components was 7% and 4% respectively. Thus, at least partial fidelity was achieved for 88% of the participants, that is, they received at least three of the six service components (see Table 2).

Table 1: Service Delivery by Disability

Fidelity Component (n/%total enrolled)							
Primary Disability	Enrollment (n/% total enrolled)	Family Plans	Positive Personal Profile	Job Development Plan	Benefits counseling services	Unpaid Work Experience	Paid Employment
Autism Spectrum Disorders	98 10%	94 96%	81 83%	82 84%	81 83%	79 81%	61 62%
Sensory Disabilities	51 5%	48 94%	41 80%	42 82%	39 76%	39 76%	32 63%
Intellectual/ Developmental Disabilities	262 26%	249 95%	235 90%	232 89%	221 84%	212 81%	201 77%
Medical Disorders	60 6%	54 90%	50 83%	49 82%	48 80%	47 78%	42 70%
Mental Health/Behavioral Disabilities	484 49%	451 93%	423 87%	428 88%	391 81%	396 82%	361 75%
Other	42 4%	38 90%	34 81%	33 81%	31 74%	33 79%	27 64%
Total	997 100%	934 94%	864 87%	866 87%	811 81%	806 81%	724 73%

Implications

These results indicate that, overall, MD PROMISE interventions have been delivered with a consistent degree of fidelity. Since ideal fidelity was achieved by 66% of participants and at least partial fidelity was achieved by a total of 88%, there will be a solid basis on which to compare their outcomes with the cohort of participants who did not receive the PROMISE intervention but instead received services as usual. Essentially, MD PROMISE services were delivered proportionately to the youth and their families regardless of what region of the state they lived and regardless of the primary disability they reported. This means that inferences can be made in the final outcome analysis that will not be skewed by disability type and by locations within the state where PROMISE was implemented. In other words, neither disability nor location affected how completely the intervention was delivered.

Given these fidelity measures, it will be possible and advantageous to analyze outcome data not only as an aggregate of services delivered, but also by individual and combined service components. That is, we will be able to analyze outcomes as they relate to the receipt of all six components, a combination of components, or individual components. For example, an analysis will be possible of outcomes of participants who received paid work experiences alone or in combination with other components received.

One further inference can be drawn. Setting project targets and using quantitative data reports to monitor fidelity of the intervention can serve as powerful

management tools to suitably conduct the delivery of services consistent with transition program purposes. That is, any transition service, irrespective of association with a research initiative, would benefit from the use of performance management systems that would support similar quantitative reporting on staff activities, along with consequent professional development activities for transition and employment staff who are tasked with delivering program services.

Table 2: Service Fidelity by Component and Region

# Service Components Delivered	State Region (n/% total enrolled)					
	Baltimore	Eastern	Northern	Southern	Western	Total
Six	146 63%	102 68%	147 76%	92 58%	169 65%	656 66%
Five	31 13%	12 8%	14 7%	21 13%	33 13%	111 11%
Four	16 7%	13 9%	9 5%	9 6%	26 10%	73 7%
Three	9 4%	10 7%	6 3%	10 6%	6 2%	41 4%
Two	8 3%	3 2%	4 2%	3 2%	9 3%	27 3%
One	15 6%	4 3%	2 1%	13 8%	11 4%	45 5%
None	8 3%	6 4%	12 6%	10 6%	8 3%	44 4%
Total	**233**	**150**	**194**	**158**	**262**	**997**

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