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Proving Foundation Impact on Public Policy Empirically: The Case of the Robert Wood Johnson Foundation and Consumer Choice for Adults With Developmental Disabilities

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Key Points

· Foundations that work on national public policy issues face challenges in demonstrating impact.

· This case study of how the Robert Wood Johnson Foundation's initiative to support choice of program provider for developmentally disabled adults uses some advanced statistical techniques to demonstrate the impact of the foundation's funding.

· This study suggests that to get the greatest impact on policy change, foundations should consider offering modest competitive grants to governmental departments; spending the funds in regional groupings; and focus on jurisdictions that have demonstrated interest in the policy area by spending their own funds.

Introduction

How can foundations measure the impact they have on public policies nationwide? Many foundations require that their grantees conduct program evaluations on the activities they fund; some aggregate these to explore their impact. But is it possible to measure the impact that funding in just a few states can have on policies all across the nation? This case study offers a template for achieving this goal and observations about how foundations can best target their investments, given these empirical findings.

Background

Who should choose residential and day program providers for adults with developmental disabilities? This is an important question, though one that rarely gets media attention. About 3.5 million adults in the United States have intellectual or developmental disabilities (Centers for Disease Control and Prevention, 2003; U.S. Census Bureau, 2000). Many reside with their families and receive no state-funded services. But more than 400,000 do receive support through services provided with state and federal assistance that exceeded $38 billion in 2005 alone (Braddock, Hemp, Rizzolo, et al., 2005).

Service provision for adults with developmental disabilities has changed substantially over the past 40 years. Through the 1970s, government-funded services were provided almost exclusively in large state residential institutions. In that decade, however, tremendous changes began. Federal class-action lawsuits were used to advance the idea that people living in institutions were, in effect, being incarcerated without having been convicted of committing a crime. These suits forced states to provide services in community settings for at least some of their citizens with developmental disabilities. At the same time, Congress adopted changes in the Medicaid program that eventually made it possible for some federal funding to support adults with developmental disabilities

in programs outside the state institutions. By the early 1990s, a movement emerged favoring self-determination for adults with developmental disabilities, and further Medicaid changes made it possible, in theory, for adults with developmental disabilities to select their care providers. This was not common, however; in 1992, 42 states continued to mandate who the service provider would be for every individual who received government-funded services (Breihan, 2007).

One foundation supported self-determination as public policy. In 1993, the Robert Wood Johnson Foundation (RWJF) offered limited assistance to one region of New Hampshire to fund a trial effort permitting adults with developmental disabilities to choose their own service providers. This was followed three years later with a national request for funding proposals (RFP) for the Initiative for Self-Determination for People with Developmental Disabilities, offering funding that would cover some states' pilot projects to provide greater consumer choice of provider for groups of adults with developmental disabilities. This research tracks the impact that RWJ Foundation had on this issue from 1993 to 2004, when all but nine states offered some adults with developmental disabilities the opportunity to choose their service provider.

Foundations have been exhorted to use their resources to have a strategic impact in social justice and other public policy areas (Bailin, 2003; Ferris & Mintrom, 2002; Stauber, 2001; Weissert, 1995). Substantial research has been done about the patterns of adult developmental disability service provision and funding and about state policy innovation patterns for high visibility issues (Gray, 1973; Lakin, Prouty, Polister, & Smith, 2002; Lowi, 1964; Mintrom, 1997; Nice, 1997; Polister, Smith, Lakin, Prouty, & Smith, 2002; Sapat, 2004; Walker, 1969). Much literature exists about the importance of adults with developmental disabilities being able to make personal choices in basic decisions, such as where they will live. However, little empirical work has been presented at the intersection of these perspectives. This work addresses that gap by offering an empirical analysis of the impact of RWJF on the spread of increased consumer choice of service provider across the U.S. for young adults transitioning into adult developmental disabilities services.

Methodology

This study took place in two stages. The first part was to determine whether there really was a widespread change in the policy of states or whether change was restricted to a modest proportion of states, perhaps some of the group that received some funding from the RWJF. The second step was to analyze each state in detail to ascertain what factors could predict if and when that state would change its public policy. The only way to determine the impact of foundation funding was to also consider the other possible predictors.
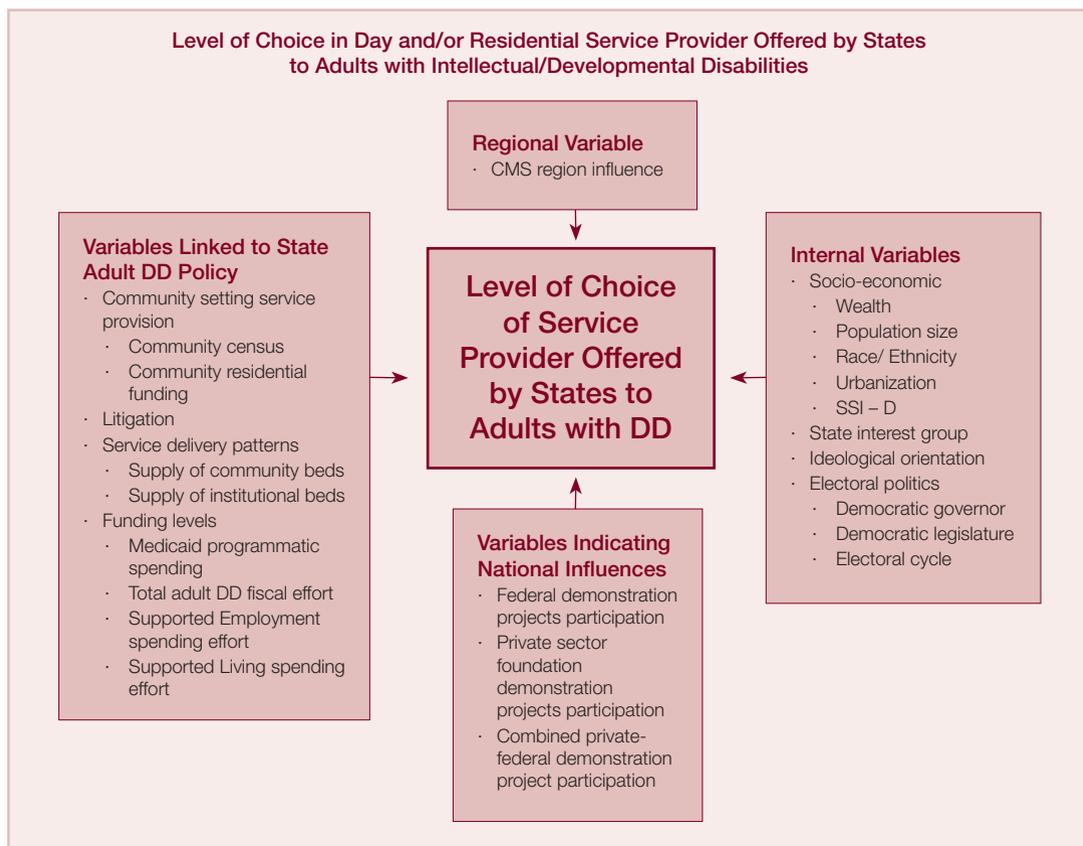
> *A movement emerged favoring self-determination for adults with developmental disabilities, and further Medicaid changes made it possible.*

Determining the Level of Choice (the Dependent Variable)

The first step in the analysis was determining whether choice of service provider was offered to new recipients of developmental disabilities funding in each state. The study focused on young adults transitioning from the educational system to residential services outside their parental home and/or day program services, because they are the new funding recipients the state can plan for in advance, given that they have been identified through the schools.

Telephone surveys of directors of the states' departments overseeing services for adults with developmental disabilities were the source of information about the level of choice of provider offered to transitioning young adults. I asked the state respondent who determines the selection of care provider for each transitioning individual. If the response was that the transitioning individual

Level of Choice in Day and/or Residential Service Provider Offered by States to Adults with Intellectual/Developmental Disabilities

Regional Variable
· CMS region influence

Level of Choice of Service Provider Offered by States to Adults with DD

Variables Linked to State Adult DD Policy
· Community setting service provision
  · Community census
  · Community residential funding
· Litigation
· Service delivery patterns
  · Supply of community beds
  · Supply of institutional beds
· Funding levels
  · Medicaid programmatic spending
  · Total adult DD fiscal effort
  · Supported Employment spending effort
  · Supported Living spending effort

Internal Variables
· Socio-economic
  · Wealth
  · Population size
  · Race/ Ethnicity
  · Urbanization
  · SSI – D
· State interest group
· Ideological orientation
· Electoral politics
  · Democratic governor
  · Democratic legislature
  · Electoral cycle

Variables Indicating National Influences
· Federal demonstration projects participation
· Private sector foundation demonstration projects participation
· Combined private-federal demonstration project participation

makes the choice, I followed up to determine the year that policy was initiated. The states were very cooperative; in every case the state director or that person's designee provided the information. Based on the responses to the survey, each state is coded for each of the years from 1992 to 2002. One of the complications of the study is that most states have different ways of determining who the service provider will be, based on disability, geographical region, and other factors. For this study, then, each state is coded for each year based on whether any substantial number of transitioning individuals could choose their provider. For those in which individuals were told which service provider to use, the level of choice was coded as "state-mandated." If individuals had the opportunity to choose the provider, whether the provider had to be taken from a list of preapproved alternatives or whether individuals were free to choose almost any provider (excluding spouses, for example), without being limited to a preapproved list, I

considered this to be "consumer choice."

Investigating the Predictors of Consumer Choice (Independent Variables)
To determine which factors to analyze in addition to foundation funding, I developed models based on four types of possible predictors of innovation. These included predictors representing

- State adult developmental disabilities policy in service delivery and funding-level patterns.
- Specific characteristics of each state, ranging from socio-economic measures to demand levels and interest group activity to partisan orientation.
- Region and trends among neighboring states.
- Impact of national influences.

Figure 1 illustrates this overall conceptual framework. The variables are described in greater detail in Appendix A.

Conducting the Statistical Analysis

The statistical technique used is more complicated than the usual linear regression models due to the wealth of information I was able to collect. Instead of having a random sample to test to see whether the data were representative of the whole, I had the data for all the variables for every state. In addition, this was not a one-time snapshot of the impact of the RWJ Foundation's program, but rather an exploration of states' actions across 11 years. Ironically, having all this data meant that I had to use a fairly unusual technique to analyze what was happening.

The empirical analysis tool was the pooled cross-sectional time-series technique of event history analysis, adapted from the work of Berry and Berry (1992). The analysis of factors associated with state adoption of choice entails a set of fixed effects linear probability models. This approach has the advantage of letting the analyst combine all the differences among the states that could impact policymaking — but that cannot be captured adequately by any practical number of independent variables — into one "unobserved effect" variable for each year of the study. In the fixed effects model, each year offers a new coefficient and a new average idiosyncratic change in the states (Wooldridge, 2003). This enabled me to consider whether the states were becoming more similar or more different over the 11-year span of the study. Unfortunately, gaining this advantage has a disadvantage: Independent variables that are constant over each of the series of 11 annual observations are "swept away" by the fixed effects transformation (Wooldridge, 2003). For example, maybe the size of the state interest group in this policy area has an impact on change that would be interesting to examine. But the size of the interest group (the Arc, formerly the Association for Retarded Citizens) in most states did not change very much during each year 1992 through 2002. This means that "interest group" drops out as a separate variable in this model. The impact of the size of the group still shows up in the yearly dummy variable, but it cannot be tracked separately.

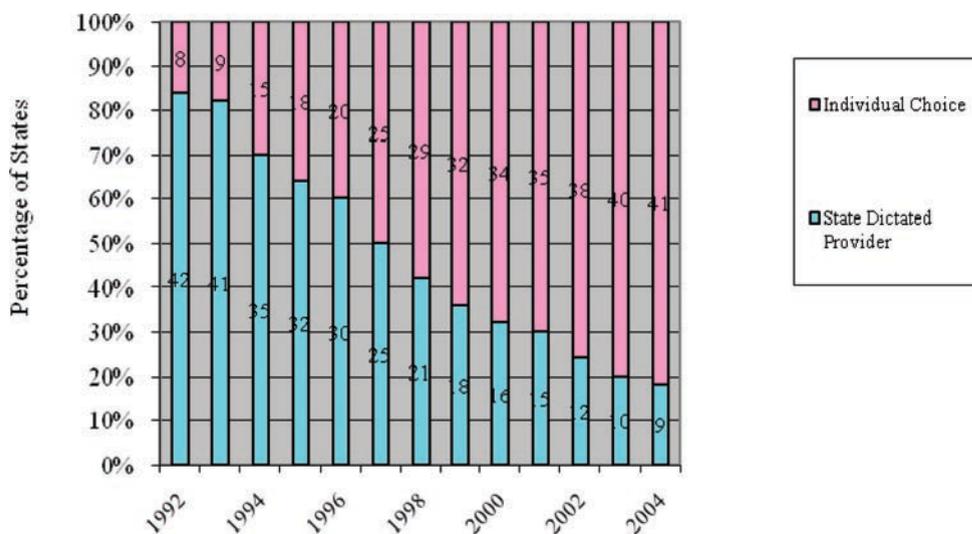In the fixed effects linear probability model, I also used three alternate specifications. In the first I used all my independent variables. In the second, I looked at all the variables except region (percentage of the states in the Centers for Medicare and Medicaid Services [CMS] region offering choice). In the third specification, I omitted both the dummy variables for year and the variable for region. I did this so that interesting results would not be overwhelmed and so not appear significant when compared with the first two most important variables.

> *This pattern suggests that the innovation of offering individual choice was emerging steadily as a national trend, one that accelerated after RWJF began offering grants in this field.*

Results

The number of states offering choice of residential services provider to young adults transitioning to adult developmental disabilities services grew from eight in 1992, the first year in which federal Medicaid funds could be used for noninstitutional residential placements, to 41 in 2004. This considerable change occurred without any federal mandate (Figure 2).

The spread of consumer choice was analyzed using an event history model of outcomes with time-varying covariates. As noted in the Methodology section, this means that variables demonstrating only limited variation within the time period studied for individual states cannot be analyzed usefully in a fixed effects model. Due to these impacts of the data structure, I used the fixed effects linear probability model to examine all the states using three specifications: the first with all the variables, the second excluding region, and the third excluding both region and the annual dummy variables. My reasoning was that the very strong results for region might be obscuring other, lesser but still important rela-

tionships. When region was excluded, more years' annual dummy variables emerged as significant. I wanted to have some sense of the relative importance of the other variables, so I used the model yet again, excluding both region and the annual dummy variables. See Appendix B for the table of results.

Specification 1: All Independent Variables
When the fixed effects model is used with all the variables, the percentage of states in the CMS region offering choice emerges as significant at the 0.001 level, as shown in Appendix B. This means that states followed the lead of their neighbors in their region (but not necessarily adjacent states). For each 10 percent increase in states offering individual choice in the region, the probability of a given state offering individual choice increases by 7 percent (coefficient of 0.700) by 2002, compared with the base year of 1992.

Specification 2: All Independent Variables Except Region
Were any other predictors important in addition to region? When "region" is eliminated, the dummy variables for the years from 1995 to 2002 are all significant. In addition, the coefficient for each year is larger than that for the previous year. This pattern suggests that the innovation of of-

fering individual choice was emerging steadily as a national trend, one that accelerated after RWJF began offering grants in this field.

Specification 3: All Independent Variables Except Region and Year
When the fixed effects model is used without the "region" or "year," three of the remaining variables emerge as significant and powerful. The most important of these was foundation funding. Participation in the RWJF-funded pilot projects increased by 18 percent the estimated likelihood that a state would offer consumer choice, compared with what would be expected without this participation (coefficient of 0.183).

Two variables associated with funding for adult developmental disabilities programming also emerged. The first significant variable represented funding for adult developmental disabilities programming in proportion to state wealth. In other words, if a state spent relatively more on programs for developmentally disabled persons, it was about 17 percent more likely to offer consumer choice (coefficient of 0.175). The second, the "ratio of state to federal community residential funding" has a significant negative coefficient. This indicates that for each 10 percent increase in the ratio of states spending their own money

rather than federal funds, states were 5 percent less likely to offer individual choice (coefficient −0.0513; see Appendix B for the table of results).

Implications

Quantitative Measurement of the Impact of Foundation Initiatives on Policy Is Possible

This approach to developing a quantitative measure of foundation impact on a policy area across the U.S. has some limitations but is largely practical. This study demonstrates that program evaluators can quantify the impact of the foundation's funding decisions. For the many policy areas in which foundations are involved that are not "hot button" issues, this model demonstrates that it is possible to prove impact empirically, bearing in mind that one needs high-quality information about the actions the states actually take. It is important to remember that this case study looks at an issue that is important to many of our most vulnerable citizens and one that involves billions of dollars. However, this is an issue that almost never reaches the front pages of newspapers or the blogosphere. The results are likely to be very different for issues that are highly politicized, issues in which the numbers of forces influencing the debate may be beyond what a program evaluator can truly capture.

Practical Suggestions for Effective Public Policy Grantmaking

The findings of this study suggest some practical guidelines for foundations that wish to achieve the greatest possible impact for their funding dollar in terms of influencing government policy across the U.S.

First, consider following the strategy of RWJF in this case study. Offer competitive grants to the relevant civil service departments, especially if they are not at the forefront of political debate. The impact this approach had is, if anything, underreflected in the statistical results. When I interviewed the directors of developmental disabilities departments in each state, many told me they were very much aware of RWJF funding and felt that this initiative was a real indication that individual choice, not state mandates, was the coming trend. Several shared that they felt their

state was not in a position to make a credible application for RWJF funding, but they were very interested in following the results of the states in their region that did receive the funds; these directors said this was the direction they wanted to pursue, too, in the near future.

The financial outlay for this RWJF initiative was relatively modest. Over the life of the project, only about $5 million was spent. The largest state awards were in the range of $400,000 over two or three years, even though the average state funding for adult disabilities services in 2002 was in excess of $250,000,000. This tremendous impact suggests that department heads may well be willing to make major policy changes, given relatively small amounts of seed money to try the innovation.

Though this case study is based on policy innovation at the state level, foundations should consider this approach at other levels of government as well. County or municipal departments could be offered the opportunity to compete for funds to try policy changes, assuming the application process was sufficiently painless.

> *This is an issue that almost never reaches the front pages of newspapers or the blogosphere.*

Second, resist the temptation to fund states scattered across the country. Rather, based on the findings from this study, states are more likely to "follow the pack" in their own region (a region based on the funding patterns of the federal government for the policy area, in this case CMS, even over a measure of contiguity). In this study, the proportion of states in the region that offered choice was a strong, significant predictor of what a given state would choose to do the following year. In other words, focus your funding on a regional basis to build up momentum for the policy you wish to encourage.

This does not mean that foundations should fund all the states in a given region. In New England, for example, smaller states (the first with RWJF funding) offered choice first. Massachusetts, the largest state in New England, was the last to make the change, but it did follow the lead of its neighbors in relatively few years. The same pattern was followed in the Midwest (CMS Region 7), where Nebraska and Kansas offered choice early on, and Iowa and Missouri followed suit within a few years.

> *States that already have made substantial investment in the policy area you care about will be easier to motivate to try your innovation, even though they do not follow your preferred policy currently.*

Third, begin with states that have demonstrated a real interest in the policy area that interests you before you ever issue an RFP. States that spent more for adult developmental disabilities services in proportion to the state's total personal income were significantly more likely to offer choice earlier. This suggests that, all other things being equal, states that already have made substantial investment in the policy area you care about will be easier to motivate to try your innovation, even though they do not follow your preferred policy currently. And, based on the regional momentum finding mentioned previously, their making the change will increase the chances that their neighbors will follow suit.

What, then, does not matter? The states that usually are considered the trendsetters were not early adopters of choice in this case study. California was one of the last to make the change. Variables representing electoral politics were not significant. Having a liberal governor did not make any significant difference. Foundations, then, may benefit from re-evaluating the states they frequently fund first.

In sum, empirical evaluations of the impact of foundation funding on public policy really can be achieved. This study offers a model for making this assessment in an important area that receives little publicity. Additional studies in other policy areas would be valuable to hone this model further.

To get the greatest impact for their investment in (non-hot button) policy change, foundations should consider offering modest competitive grants to governmental departments. All other things being equal, foundations should spend the funds in regional groupings, not scattered throughout the U.S. The funding should be focused on jurisdictions that have demonstrated interest in the policy area by spending their own funds. This indicator is more important than a state's general reputation for innovation.

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APPENDIX A Detailed List of Independent Variables

Predictors of state adult developmental disabilities policy in service delivery and funding-level patterns

· *Community residential census* (the number of persons with developmental disabilities [DD] residing with state funding in settings with 15 or fewer persons divided by the number of persons in the total population, in thousands).

· *Medicaid waivers spending effort* (federal and state Medicaid waiver funding for services to adults with DD divided by the total state personal income, multiplied by 1,000)

· *Total DD spending effort* (the level of spending for all adult DD services per $1,000 state personal income)

· *Ratio of state to federal community residential funding* (the level of state funding for community-based residential programs for adults with DD divided by federal funding for community-based residential programs)

· *Supported employment spending effort* (spending on supported employment, per $1,000 state personal income)

· *Supported living and personal assistance spending effort* (spending on supported living and personal assistants, per $1,000 state personal income)

Note. These variable choices were influenced by Braddock et al., unpublished data, 2002; Braddock and Fujiura, 1987; Braddock, Hemp, Parish, et al., 2000; Garrett, 2002; Grogan, 1994,; McGaughey & Mank, 2001; Parish, 2001; Sigelman, Roeder, & Sigelman, 1981.

Individual characteristics of each state

· *Percentage population Hispanic*
· *Percentage of population living in urban areas*
· *SSI-Disability funded census per total population*
· *ARC membership per population* (The Arc, formerly the Association for Retarded Citizens is the principal advocacy group for persons with developmental disabilities nationwide.)
· *Liberal* (This score was derived by averaging the scores given to each member of the congressional delegation of the state for each year by the Americans for Democratic Action [ADA]. The ADA ratings for each federal legislator is recorded on the ADA Web site. The scores for each state for both parties are then weighted on the basis of the partisan composition to the state legislatures.)
· *Democratic governor*
· *Election year* (This lagged variable is a dichotomous variable that equals 1 if it is the year after an election year for the governorship and 0 if it is not.

Note. These variable choices were influenced by Baumgartner & Jones, 1993; Berry & Berry, 1990, 1992; Braddock & Fujiura, 1991; Buchanan, Cappellini, & Ohsfeldt, 1991; DiLeo, 2001; Elazar, 1984; Gray, 1973; Harrington, Carrillo, Wellin, Miller, & LeBlanc, 2000; Heclo, 1978; Jacoby & Schneider, 2001; Ka & Teske, 2002; Kingdon, 1995; Lowi, 1964; Mohr, 1969; Mooney & Lee, 1995; Rigby, Brooks-Gunn, & Kagan, 2004; Sapat, 2004; Schneider, 1993; Schneider & Jacoby, 1996; Walker, 1969; Walker, 1983.

Region and trends among neighboring states

· *Percentage of the states in the CMS* (Centers for Medicare and Medicaid Services) *region offering choice*

Note. This variable choice was influenced by Berry & Berry, 1990; Daley & Garand, 2002; Glick & Hays, 1991; Jacoby & Schneider, 2001; Lutz, 1989; Mooney, 2001; Mooney & Lee, 1995; Rogers, 1995; Sharkansky, 1969.

National influences

· *Number of federally funded demonstration projects* (This lagged variable denotes the number of federal demonstration projects related to consumer choice that the state participated in before the year in question. These include community supported living arrangements (CSLA); programs in the eight states of California, Colorado, Florida, Illinois, Maryland, Michigan, Rhode Island, and Wisconsin; and the Florida 115 Demonstration authorizing an Independence Plus waiver.)
· *Number of Robert Wood Johnson Foundation-funded demonstration projects* (This lagged variable expresses the number of times that the state participated in a Robert Wood Johnson Foundation consumer choice demonstration project before the year in question. This includes the initial funding for New Hampshire from 1993 to 1996, beginning with the Monadnock Developmental Services project and the National Initiative on Self-Determination for Persons with Developmental Disabilities, funded in 18 additional states in 1997.
· *Cash and Counseling Demonstration Project* (This lagged variable records whether states participated in the foundation and federal demonstration grant program, sponsored jointly by the Robert Wood Johnson Foundation and the Office of the Assistant Secretary for Planning and Evaluation in the U.S. Department of Health and Human Services.)

APPENDIX B Results of Fixed Effects Linear Probability Model of Independent Variables Associated With Choice

Variables	Specification 1: All variables (standard error)	Specification 2: Excluding CMS region (standard error)	Specification 3: Excluding CMS region and year (standard error)
Year 1993	0.00963 (0.059)	0.0186 (0.061)	
Year 1994	0.0651 (0.061)	0.0908 (0.063)	
Year 1995	0.0703 (0.062)	0.166** (0.064)	
Year 1996	0.0416 (0.069)	0.198** (0.067)	
Year 1997	0.102 (0.073)	0.288*** (0.070)	
Year 1998	0.109 (0.077)	0.341*** (0.071)	
Year 1999	0.146 (0.082)	0.432*** (0.072)	
Year 2000	0.145 (0.087)	0.475*** (0.074)	
Year 2001	0.175* (0.089)	0.503*** (0.077)	
Year 2002	0.198* (0.097)	0.554*** (0.083)	
Developmental disabilities policy variables			
Supported employment spending effort	−0.041 (0.44)	0.0776 (0.45)	0.182 (0.49)
Supported living and personal assistance spending effort	−0.092 (0.080)	−0.107 (0.078)	0.0494 (0.085)
Ratio of state to federal community residential funding	−0.00940 (0.019)	−0.00597 (0.019)	−0.0513** (0.020)
Developmental disabilities spending effort	0.0251 (0.044)	0.0389 (0.045)	0.175*** (0.045)
Medicaid waiver spending effort	0.000303 (0.001)	0.000315 (0.0012)	0.00433*** (0.0012)
Percentage of states in the CMS region offering choice	0.700*** (0.11)		

APPENDIX B *continued.*

Variables	Specification 1: All variables (standard error)	Specification 2: Excluding CMS region (standard error)	Specification 3: Excluding CMS region and year (standard error)
Internal variables			
Democratic governor	−0.0496 (0.034)	−0.0300 (0.035)	−0.0478 (0.037)
Election year (lagged)	0.0416 (0.034)	0.0364 (0.035)	0.0376 (0.030)
Number of Robert Wood Johnson Foundation funded demonstration project(s)	0.0177 (0.051)	0.00650 (0.053)	0.183*** (0.048)
Number of federally funded demonstration projects	0.0250 (0.011)	0.128 (0.10)	0.113 (0.12)
Cash and Counseling Demonstration Project	−0.1776 (0.11)	−.245* (0.12)	−.0587 (0.12)
R^2	within = 0.3886	within = 0.3975	within = 0.1788
	between = 0.0028	between = 0.0094	between = 0.0002
	overall = 0.1422	overall = 0.1735	overall = 0.0326
	$F(11, 489) = 28.26$	$F(21, 479) = 15.05$	$F(32, 322) = 8.66$
	Prob > F = 0.0000	Prob > F = 0.0000	Prob > F = 0.0000

Note. CMS = Centers for Medicare and Medicaid Services.

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$.