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This study is designed to determine whether participation in MEPD reduces health care costs

Over 2,000,000 person months are used to estimate the cost effects of MEPD

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Costs of Health Care

Medicaid for Employed People with Disabilities

Effects of employment on health care costs

Current Study

Nationally and locally, comparisons of costs for people with disabilities who work and those who do not work have indicated that working people have lower health care costs. These preliminary findings suggest that working increases productivity while decreasing costs.

This report presents the results of a study to determine whether participation in MEPD reduces health care costs. Though previous studies suggest health care cost reductions may result, no studies have been undertaken that model the relationship between MEPD enrollment and cost. Lack of sophisticated methods to control for selection bias into the program and account for treatment effects on the untreated, may provide overstated results that are not generalizable.

Methods

Data

The unit of analysis for this study was a per member month, with the dependent variable being per member per month (PMPM) Medicaid costs. We used Medicaid claims and enrollment files from calendar years 2000-2011 for individuals in SSI-related Medicaid or MEPD. This yielded 2,010,161 months of data for 66,014 individuals. We excluded months in which an enrollee resided in a nursing or residential care facility (due to the high costs of residential care) or was enrolled in a program that provided reduced benefits such as IowaCare (the Medicaid expansion for adults). We performed an additional regression that also removed months when the enrollee was on Medicare Part A and/or Part B, Part D is assumed when a recipient is on Part B.

The Iowa Medicaid Buy-In Program, Medicaid for Employed People with Disabilities (MEPD), is available to adults under 65 who are disabled and have income from work or are self-employed. Currently 'work' is loosely defined as any work for which someone is paid, regardless of the status of the employer. For example, the person paying for the work is not required to have an Employer Identification Number (EIN). Enrollees pay a sliding scale premium for health coverage if their monthly income is over \$1,354.

Previously reported data (Haubrich, 2009) indicated that the average MEPD enrollee earned about \$160 per month, with 24% earning enough to pay a premium. In addition, most are self-employed and work less than 10 hours per month.

Analyses

We used a fixed effects regression modeling technique that included age, age squared (to allow for a curvilinear relationship between age and costs), and a variable for each month of enrollment up to 60 months. The variable Month61 includes all months after the 60th.

Model 1 includes all months except those spent residing in a facility or group home and those on reduced benefits. Model 2 additionally removes months on Medicare. Within each model enrollees who were on SSI-related Medicaid and switched to MEPD are considered the treatment group, while those who remained in the SSI-related Medicaid program are the control group. We did not include individuals who were enrolled in MEPD during their first month in the Medicaid program. In Tables 1 and 2 the value in column "Total Costs" represents the difference in costs between the treatment and control groups.

Over 11,000 people have enrolled in the Medicaid program through MEPD and are not included in the cost analyses.

Results

Enrollment files reveal that since the inception of the program in March 2000, 30,586 people have been enrolled for at least one month in the program, 113 people have been enrolled continuously from March 2000 through the end of calendar year 2011 (142 months of enrollment), and 11,086 people were initially enrolled in Medicaid through the MEPD program having never been in any other Medicaid eligibility category.

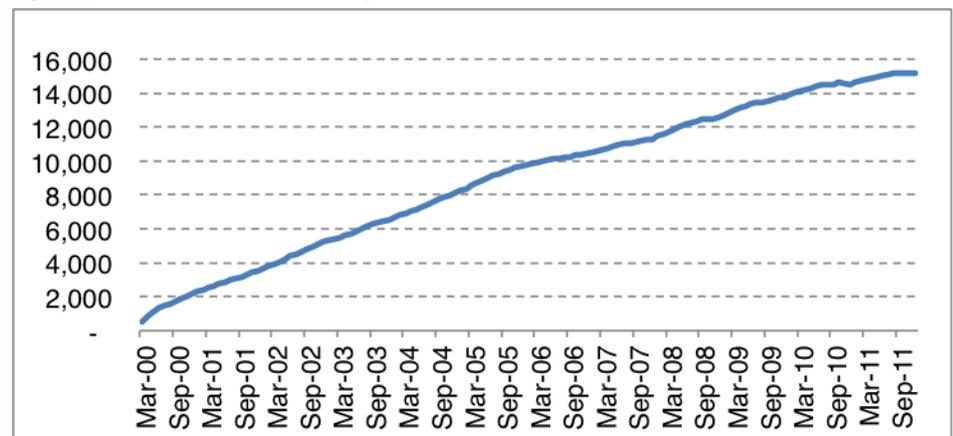
Though many people switched to MEPD from another Medicaid eligibility category or after a gap in coverage following some other Medicaid eligibility category, very few went to another category when they left MEPD.

Where from? Where to?

Upon entering the MEPD program 11,086 people came directly into MEPD, 7,390 entered from an SSI related Medicaid program, 5,058 entered from spend down, 2,722 entered from IowaCare and 1,036 entered from Family Medical Assistance Program.

Upon leaving the MEPD program 922 people went to ICF/MR level of care/waiver, 894 went to an SSI related Medicaid program, 843 went to SSI-D related 300%, NF level of care and 837 went to SSI-A, NF, eligible for payment.

Figure 1 Number of MEPD enrollees by month, 2000-2011



Cost Results

Tables 1 and 2 show the regression results for total health care costs with and without the Medicare enrolled months included. Including Medicare months increases the reduction in Medicaid costs from MEPD significantly because people in MEPD are more likely to be enrolled in Medicare and Medicaid's fiscal responsibility is limited to the Medicare premium and costs for allowed services not covered by Medicare. However, many policymakers still consider the reduction in costs to represent savings to the state Medicaid program.

Medicaid costs were reduced \$161 per member per month for enrollees entering MEPD from another Medicaid eligibility category when Medicare enrolled months were excluded.

Analyses including Medicare enrolled months revealed a \$332 per member per month reduction for the same population.

In calendar year 2011 there were 129,359 member months of MEPD eligibility for people not initially enrolled through MEPD. By multiplying the average savings of \$161 per month by the 129,259 eligible months, we estimate the cost reductions for the first model excluding Medicare-enrolled months would be over \$20 million during 2011, while cost reduction estimates from the model including Medicare-enrolled months would be twice that. These data do not include the group of MEPD enrollees who are initially enrolled in Medicaid through the MEPD program.

Regression Results

Table 1. Model 1-Total costs excluding Medicare enrolled months

	Total Costs	
Age	-38.3***	(-4.00)
Age ²	0.47***	(6.30)
Month1	-162.3	(-0.96)
Month2	158.7	(0.57)
Month3	-15.1	(-0.05)
Month4	67.9	(0.29)
Month5	313.4	(0.95)
Month6	-89.1	(-0.37)
Month7	-149.9	(-0.66)
Month8	-576.5*	(-1.84)
Month9	-822.8**	(-2.34)
Month10	48.9	(0.15)
Month11	215.7	(0.70)
Month12	-480.2	(-1.13)
Month13	-362.2	(-0.74)
Month14	-288.7*	(-1.87)
Month15	92.4	(0.36)
Month16	144.4	(0.43)
Month17	-279.4**	(-2.15)
Month18	-246.8	(-1.38)
Month19	-67.7	(-0.38)
Month20	154.8	(0.68)
Month21	-370.4***	(-3.28)
Month22	-202.2	(-1.53)
Month23	-302.3	(-1.35)
Month24	329.8	(0.62)
Month25	196.3	(0.61)
Month26	-114.2	(-0.87)
Month27	-121.6	(-0.57)
Month28	209.4	(0.41)
Month29	-398.0***	(-3.28)
Month30	-403.2***	(-3.50)
Month31	-128.8	(-0.48)
Month32	-402.8***	(-3.04)
Month33	-433.8***	(-3.55)
Month34	-444.7***	(-3.55)
Month35	-433.1***	(-3.46)
Month36	-76.4	(-0.25)
Month37	-293.9*	(-1.75)
Month38	-407.1***	(-2.86)
Month39	-400.6**	(-2.29)
Month40	-421.4***	(-2.99)
Month41	-208.9	(-1.26)
Month42	-262.4	(-1.57)
Month43	1860.4	(1.23)
Month44	10995.8	(0.99)
Month45	-75.0	(-0.40)
Month46	-118.8	(-0.58)
Month47	-256.1*	(-1.83)
Month48	48.7	(0.13)
Month49	-196.1	(-1.23)
Month50	41.5	(0.15)
Month51	-83.6	(-0.29)
Month52	-207.4	(-0.50)
Month53	-48.0	(-0.14)
Month54	-456.3**	(-2.30)
Month55	-277.7	(-0.75)
Month56	-361.8	(-1.22)
Month57	-634.7**	(-2.57)
Month58	-694.4***	(-2.62)
Month59	-210.3	(-0.46)
Month60	-754.4***	(-3.02)
Month61	-539.3***	(-2.85)
trend	-0.063	(-0.07)

‡ statistics in parentheses
* p<0.10, ** p<0.05, *** p<0.01

Table 2. Model 2-Total costs including Medicare enrolled months

	Total Costs	
Age	-17.8***	(-3.27)
Age ²	0.23***	(5.42)
Month1	-33.5	(-0.78)
Month2	40.2	(0.83)
Month3	-69.2*	(-1.65)
Month4	-37.2	(-1.01)
Month5	28.5	(0.63)
Month6	-39.4	(-0.98)
Month7	-31.6	(-0.70)
Month8	-119.0***	(-2.97)
Month9	-156.6***	(-3.71)
Month10	-52.9	(-1.15)
Month11	-109.7***	(-2.99)
Month12	-139.7***	(-2.93)
Month13	-141.7***	(-3.13)
Month14	-162.8***	(-5.77)
Month15	-94.0**	(-2.12)
Month16	-145.4***	(-3.97)
Month17	-152.2***	(-4.26)
Month18	-74.2	(-0.68)
Month19	-195.5***	(-5.01)
Month20	-204.5***	(-5.45)
Month21	-294.3***	(-10.96)
Month22	-297.7***	(-9.97)
Month23	-312.9***	(-8.46)
Month24	-385.0***	(-12.31)
Month25	-391.5***	(-13.03)
Month26	-397.4***	(-11.89)
Month27	-422.5***	(-16.57)
Month28	-413.4***	(-13.73)
Month29	-429.2***	(-16.20)
Month30	-440.5***	(-18.40)
Month31	-442.8***	(-17.27)
Month32	-455.3***	(-18.36)
Month33	-452.9***	(-18.07)
Month34	-467.8***	(-19.81)
Month35	-465.9***	(-19.65)
Month36	-447.8***	(-18.27)
Month37	-459.9***	(-19.02)
Month38	-471.1***	(-20.26)
Month39	-473.3***	(-20.17)
Month40	-471.2***	(-19.27)
Month41	-477.5***	(-19.18)
Month42	-482.9***	(-20.28)
Month43	-427.1***	(-9.27)
Month44	-201.0	(-0.72)
Month45	-479.3***	(-18.71)
Month46	-483.0***	(-20.58)
Month47	-483.2***	(-20.75)
Month48	-468.2***	(-18.40)
Month49	-479.7***	(-21.00)
Month50	-476.0***	(-19.90)
Month51	-490.5***	(-20.73)
Month52	-492.3***	(-20.47)
Month53	-491.1***	(-20.84)
Month54	-500.2***	(-21.74)
Month55	-506.1***	(-21.32)
Month56	-477.8***	(-15.08)
Month57	-512.4***	(-21.61)
Month58	-524.8***	(-22.50)
Month59	-511.8***	(-21.15)
Month60	-515.3***	(-22.69)
Month61	-540.8***	(-23.63)
trend	-0.22	(-0.45)

‡ statistics in parentheses
* p<0.10, ** p<0.05, *** p<0.01

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