University of Montana
ScholarWorks at University of Montana

Health and Wellness | Rural Institute for Inclusive Communities

7-2004

Living Well and Medicaid: Better Health for Consumers -- Lower Costs for States

Craig Ravesloot Ph.D.
University of Montana Rural Institute - Research and Training Center on Disability in Rural Communities

University of Montana Rural Institute
scholarworks-reports@mso.umt.edu

Let us know how access to this document benefits you.

Follow this and additional works at: https://scholarworks.umt.edu/ruralinst_health_wellness

Recommended Citation

Ravesloot, Craig Ph.D. and Rural Institute, University of Montana, "Living Well and Medicaid: Better Health for Consumers -- Lower Costs for States" (2004). *Health and Wellness*. 39.
https://scholarworks.umt.edu/ruralinst_health_wellness/39

This Research Report is brought to you for free and open access by the Rural Institute for Inclusive Communities at ScholarWorks at University of Montana. It has been accepted for inclusion in Health and Wellness by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

July 2004

Research Report

Living Well and Medicaid: Better Health for Consumers, Lower Costs for States

The United States has the world's most expensive healthcare system. In 2002, health spending rose to nearly 15 percent of U.S. Gross Domestic Product.

Healthcare policymakers charged with balancing cost containment with quality healthcare for consumers are desperate for solutions (Levit, Smith, Cowan, Sensenig, and Catlin, 2004).

Background

Across the U.S. as Medicaid enrollments rise, states struggle with the increasing drain on their budgets; 45 states have now instituted measures to control growth in Medicaid spending (Kaiser Commission on Medicaid and the Underserved, 2002). From 1995 to 1999, Medicaid spending rose by 6.5 percent per year. In 2001 it increased by 10.2 percent, and in 2002 by 11.7 percent. Clearly, states desperately need solutions.

Medicaid is an entitlement program, but each state determines who is eligible based on income and characteristics (people with disabilities, families with children, etc.). In 1980, 33.6% of Medicaid spending went for beneficiaries with disabilities. By 2000, the 17.6% of Medicaid beneficiaries with disabilities accounted for 45.1% of Medicaid spending (Centers for Medicare and Medicaid Services, 2004). In just 20 years, the share of Medicaid spending for people with disabilities grew by 11.5%. Part of this may be attributable to their increased risk for secondary conditions, including expensive medical complications such as pressure ulcers and heart disease (Coyle, Santiago, Shank, Ma, & Boyd, 2000; Seekins, Clay & Ravesloot, 1994).

As part of a national health promotion movement for all people with disability, the Centers for Disease Control and Prevention (CDC) support our program of research, development, and services. Researchers at The University of Montana RTC: Rural and at the

The University of Montana Rural Institute
RTC RURAL
Research and Training Center on Disability in Rural Communities

RTC:Rural
52 Corbin Hall
The University of Montana
Missoula, MT 59812
Toll Free: 888.268.2743
Fax: 406.243.2349
TTY: 406.243.4200
rtcrural@ruralinstitute.umt.edu
rtc.ruralinstitute.umt.edu
Alternative formats available

University of Kansas RTC/IL have developed and evaluated the Living Well with a Disability program, a health promotion program for adults with physical disabilities.

Based on independent living philosophy and rural traditions of self-care, Living Well is an eight-week workshop which introduces a goal-setting and goal clarification process, and teaches problem-solving skills. Living Well also provides tools for managing health and making healthy lifestyle changes, increasing physical activity, developing and maintaining healthy relationships, improving nutrition, avoiding depression and frustration, and advocating for community changes that help maintain gains. Living Well improves participants' health and reduces medical care costs over 12 months (Research Progress Reports #6 and #7).

The goal of this current research was to examine the effects of the Living Well with a Disability program on the cost of providing healthcare to Medicaid beneficiaries.

Research Process

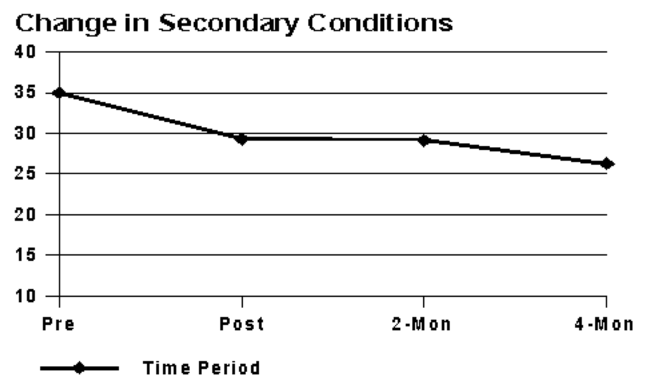
Nine centers for independent living in eight states recruited a convenience sample of 122 adult Medicaid recipients with mobility impairments to attend a two-hour Living Well session each week for eight weeks. Of the recruits, 103 completed a pre-measure and at least one post-measure and 78 completed pre-, post-, 2-, and 4-month follow-up surveys. Our previous research included a 12-month follow-up survey, but the current study's sample was too small for a 12-month analysis. We used a staggered baseline experimental design with random assignment to treatment start date. We also used an extended baseline measure collected two months before the intervention to assess the study's internal validity.

Respondents used the Secondary Condition Surveillance Instrument (Seekins, Clay, McCleary & Walsh, 1990) to rate the severity of limitation they experienced from each of 43 secondary conditions. To estimate respondents' healthcare costs, we used a 2-month retrospective recall of their physician and emergency room visits, outpatient surgeries and hospital days. We multiplied these utilization data by unit Medicare cost estimates to generate medical costs which were depreciated by 30% to estimate Medicaid costs.

Results

Participants reported striking reductions in their limitation from secondary conditions over the intervention period. These were maintained at the two- and four-month follow-up (Figure 1), and were consistent with previous reports on the effectiveness of the Living Well with a Disability program. Participants' average secondary condition ratings decreased by 25% between the pre- and the 4-month post-measure. Analysis of the extended baseline data supported the internal validity. No evident change over the baseline period was followed by substantial and statistically significant change during the intervention period.

Figure 1. Change in Secondary Conditions



Secondary Condition Severity Rating

Healthcare cost outcomes were very positively skewed, precluding the use of parametric statistics. Table 1 includes quartiles and mean for per person healthcare costs at pre-, post-, 2-month and 4-month post period. The Friedman non-parametric repeated measures test was not significant (2 3 = 3.71, p = .29), indicating that the change over time was no different than that expected by chance.

In order to increase the sample size and statistical power of the significance test, we also conducted the Wilcoxon paired samples test for the pre- and post-test. This indicated statistically

significant change (Wilcoxon Z = 2.82, p = .005) in healthcare costs over the pre- to post-intervention period.

Table 1: Per-Person Healthcare Cost Quartiles for Each Measurement Period

Measurement Period	Average Costs	Cost at Each Percentile		
		25th	50th (median)	75th
Pre-Intervention	$1,778.10	$0	$190.50	$569.50
Post-intervention	$657.60	$0	$119.00	$360.75
2-month post	$518.80	$0	$130.00	$441.75
4-month post	$735.10	$0	$89.50	$434.00

Next, we calculated the potential net benefit to Medicaid of implementing the Living Well program. The intervention cost $596 per participant, including program implementation and expenses of training facilitators for 2 1/2 days in Kansas City, Missouri. Using the mean per-person healthcare cost for each measurement period, we calculated that the net saving to Medicaid would be $2,828 per person over the six months from program implementation through four-month post follow-up. After accounting for Living Well implementation costs for 103 participants, this intervention saved the Medicaid program as much as $291,284 (in 1998 dollars).

Limitations

These estimates may change substantially with other samples. This study was limited by:

- convenience sampling;
- self-report outcome measures; and
- interpretation of cost outcome data. Cost savings were estimated by summing the difference between baseline cost and the cost estimates from all three follow-up measures. Based on the Wilcoxon signed rank test, only the first post-measure was judged to be statistically different from the baseline measure. An additional limit is the calculation of cost savings using the arithmetic mean (which is sensitive to the exact sample being analyzed when the distribution of data is skewed).

Conclusions and Next Steps

States are in crisis as more people with disabilities come to depend upon Medicaid services. To meet their needs, Medicaid must consider alternative perspectives and new paradigms. This study is consistent with other research in demonstrating that the health promotion paradigm for people with chronic illness and disabilities is effective (e.g. Lorig et al., Chronic Disease Study). It is possible to improve the quality of an individual's life while controlling healthcare costs. Individuals with disabilities report they are limited by an average of 14 secondary conditions annually. In this study, secondary conditions decreased by 25% during the intervention period and the decrease was maintained for 4 months after the intervention. In a larger study, this decrease was maintained over 12 months and healthcare costs during the intervention period were reduced by 37% (Research Progress Report #7).

Living Well with a Disability represents two notable paradigm shifts. First, it uses the World Health Organization's social model of disability (International Classification of Function, 2001). This model recognizes that disability outcome is the result of how a person's functional abilities interact with the environment in which the person lives. Second, Living Well is consistent with Independent Living philosophy's emphasis on consumer choice and empowerment. Living Well encourages participants to improve their health as a way to pursue meaningful goals, such as employment and relationships.

If the status quo dictates future Medicaid policy for people with disabilities, we can predict disaster for individuals and state governments.

The solution is large scale demonstration programs that can validate and build on the success of programs such as Living Well with a Disability.

Resources and References

Centers for Medicare and Medicaid Services (2004). 2004 Chartbook

Coyle, C. P., Santiago, M. C., Shank, J. W., Ma, G. X., & Boyd, R. (2000). Secondary conditions and women with physical disabilities: A descriptive study. Archives of Physical Medicine and Rehabilitation, 81, 1380-1387.

Levit, K. Smith, C. Cowan, C. Sensenig, A., & Catlin, A. (2004). Trends: Health spending rebound continues in 2002; Once again, hospital spending drives total health spending upward. Health Affairs, 23 (1).

Kaiser Commission on Medicaid and the Uninsured. (2002). Medicaid Spending Growth: Results from a 2002 Survey. Washington: Kaiser Commission.

Ravesloot, C., Ipsen, C., & Seekins, T. (2001). Living Well Could Save $31 Million Annually: Research Progress. Missoula: The University of Montana Rural Institute.

Ravesloot, C., Seekins, T., & Ipsen, C. (1999). Cost Effectiveness of Living Well with a Disability: Research Report. Missoula: The University of Montana Rural Institute.

Seekins, T., Smith, N., McCleary, T., & Walsh, J. (1990). Secondary disability prevention: Involving consumers in the development of policy and program options. Journal of Disability Policy Studies, 1, 21-35.

Seekins, T., Clay, J. A., & Ravesloot, C. (1994). A descriptive study of secondary conditions reported by a population of adults with physical disabilities served by three independent living centers in a rural state. Journal of Rehabilitation, 60, 47-51

Prepared by:

Craig Ravesloot

For additional information please contact:

Research and Training Center on Disability in Rural Communities
The University of Montana Rural Institute
52 Corbin Hall, Missoula, MT 59812-7056
888-268-2743 or 406-5467
http://rtc.ruralinstitute.umt.edu

© 2004 RTC:Rural.

Our research is supported by Cooperative Agreement R04CCR914204 from Centers for Disease Control and Prevention. The opinions expressed those of the author and are not necessarily those of the funding agency.