SilverSneakers Outcomes: Published Evidence of Program Impact

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Introduction

The SilverSneakers® fitness program is an innovative well-being improvement program helping Medicare beneficiaries stay physically active and socially engaged. The program includes a fitness center membership and specialized classes that foster social interaction among members and encourage them to live healthy, active lifestyles. Tivity Health™ has compiled a series of longitudinal, peer-reviewed studies that consistently document improvement in individual well-being and reduction in medical costs for Medicare beneficiaries who participate in SilverSneakers.

Tivity Health strives to ensure that SilverSneakers is accessible and appealing to Medicare beneficiaries regardless of their current health status and whether or not they are accustomed to exercise. Program coordinators are trained to foster an environment that is welcoming and accommodating to differing levels of fitness and mobility. In fact, two-thirds of SilverSneakers participants have multiple chronic conditions and almost half report no previous fitness center membership. A key focus of several of the studies in this volume is how well the program works for beneficiaries with chronic conditions such as diabetes and depression. In some cases, the findings demonstrate that the greatest opportunities to improve in health and reduce costs lies with beneficiaries who have these conditions.

Despite the conventional wisdom that exercise is good for you, many have questioned whether a fitness program designed for Medicare beneficiaries really can improve well-being and reduce costs. Tivity Health and SilverSneakers have a proven record of doing just that.
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Impact of a Senior Fitness Program on Measures of Physical and Emotional Health and Functioning

Hamar, B, Coberley, C, Pope, JE, Rula, EY
Population Health Management, 2013

Abstract

The SilverSneakers® fitness program is a health plan benefit for Medicare beneficiaries that provides older adults with fitness center membership, customized group exercise classes, and a supportive social environment that promotes socialization among participants. This study evaluated the impact of the SilverSneakers program on the physical and emotional health and activities of daily living (ADL). A quasi-experimental retrospective analysis compared annual survey responses from SilverSneakers members (Treatment N=5,586) to a matched national random sample of Medicare Advantage Organization beneficiaries (Comparison N=22,344) in the Cohort 10 Medicare Health Outcomes Survey. Matching was performed based on 6 demographic and 6 disease status variables. 2007 and 2009 survey responses were evaluated using categorical and logistic regression analysis. The Treatment group presented significantly better physical and emotional health and lower impairment in both 2007 and 2009, less impairment for four of six ADLs in 2007 and all six in 2009, and a higher average number of days of good health within the prior month for both years. Three-year longitudinal analyses indicated a significantly more favorable Treatment group trend for nearly all measures of health and ADLs. Members exercising less frequently had poorer health and functioning. Overall, participation in the SilverSneakers program was associated with more favorable overall physical and social/emotional health status and fewer activity impairments, suggesting that the provision of senior-oriented group fitness programs may be a valuable approach to improve quality of life and reduce the burden associated with declining health and functioning as older adults age.

Key Takeaways:

- Participation in SilverSneakers is associated with better physical and emotional health, higher functioning, and lower disability among seniors across many measures.
- Over three years, SilverSneakers members demonstrate better trends than similar seniors with respect to overall health status, health status change, emotional health, social limitations due to health, overall disability level, and in ability to perform all 6 measured activities of daily living.
- Greater frequency of exercise is associated with significantly better outcomes among SilverSneakers members.
- The provision of SilverSneakers can serve to improve quality of life and reduce the burden associated with declining health and functioning as older adults age.

Managed-Medicare Health Club Benefit and Reduced Health Care Costs Among Older Adults

Nguyen, HQ, Ackermann, RT, Maciejewski, M, Berke, E, Patrick, M, Williams, B, LoGerfo, JP
Preventing Chronic Disease, 2008

Abstract

Introduction: Our study was undertaken to determine the association between use of a health plan-sponsored health club benefit by older adults and total health care costs over 2 years.

Methods: This retrospective cohort study used administrative and claims data from a Medicare Advantage plan. Participants (n = 4,746) were enrolled in the plan for at least 1 year before participating in the plan-sponsored health club benefit (SilverSneakers®). Controls (n = 9,035) were matched to participants by age and sex according to the index date of SilverSneakers enrollment. Multivariate regression models were used to estimate health care use and costs and to make subgroup comparisons according to frequency of health club visits.

Results: Compared with controls, SilverSneakers participants were older and more likely to be male, used more preventive services, and had higher total health care costs at baseline. Adjusted total health care costs for SilverSneakers participants and controls did not differ significantly in year 1. By year 2, compared with controls, SilverSneakers participants had significantly fewer inpatient admissions (-2.3%, 95% confidence interval, −3.3% to −1.2%; P <.001) and lower total health care costs (-$500, 95% confidence interval, −$892 to −$106; P = .01). SilverSneakers participants who averaged at least two health club visits per week over 2 years incurred at least $1,252 (95% confidence interval, −$1,937 to −$567; P < .001) less in health care costs in year 2 than did those who visited on average less than once per week.

Conclusion: Regular use of a health club benefit was associated with slower growth in total health care costs in the long term but not in the short term. These findings warrant additional prospective investigations to determine whether policies to offer health club benefits and promote physical activity among older adults can reduce increases in health care costs.

Key Takeaways:

- SilverSneakers participation resulted in reduced cost trends. Although SilverSneakers participants had higher healthcare costs at baseline, their costs were the same as non-participants by year one and were significantly lower (average, -$500) in year two.
- SilverSneakers participants had significantly fewer inpatient hospital admissions in the second year.
- Greater participation was associated with higher savings—participants who averaged two or more SilverSneakers health club visits per week had average savings of $1,252 in year two compared to those with fewer than one visit per week.

PDF available at: https://www.cdc.gov/pcd/issues/2008/jan/07_0148.htm.
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Health Care Use and Costs Associated With Use of a Health Club Membership Benefit in Older Adults with Diabetes

Nguyen, HQ, Maciejewski, M, Gao, S, Lin, E, Williams, B, LoGerfo, JP
Diabetes Care, 2008

Abstract

Objective: The purpose of this study was to determine whether elective use of a health plan-sponsored health club membership had an impact on health care use and costs among older adults with diabetes.

Research and Methods: Administrative claims for 2,031 older adults with diabetes enrolled in a Medicare Advantage plan were obtained for this retrospective cohort study. Participants (n=618) in the plan-sponsored health club benefit (SilverSneakers®) and control subjects (n=1,413) matched on SilverSneakers enrollment index date were enrolled in the plan for at least 1 year before the index date. Two-year health care use and costs of SilverSneakers participants and control subjects were estimated in regressions adjusting for baseline differences.

Results: SilverSneakers participants were significantly more likely to be male, had a lower chronic disease burden, used more preventive services, and had a lower prevalence of arthritis (P 0.05). SilverSneakers participants had lower adjusted total health care costs than control subjects in the first year after enrollment ($1,633 [95% CI $2,620 to $646], P 0.001), and adjusted total costs in year 2 trended lower ($1,230 [$2,494 to $33], P 0.06). Participants who made an average of 2 SilverSneakers visits/week in year 1 had lower total costs in year 2 ($2,141 [$3,877 to $405], P 0.02) than participants who made 2 visits/week.

Conclusions: Use of a health club benefit by older adults with diabetes was associated with slower growth in total health care costs over 2 years; greater use of the benefit was actually associated with declines in total costs.

Key Takeaways:

- SilverSneakers can help control health care costs for older adults with diabetes.
- SilverSneakers participants with diabetes had $1,633 lower average health care costs than the control group after one year in the program.
- Year two costs were $1,230 less for SilverSneakers participants than the control group and significantly fewer participants were hospitalized.
- Higher program participation was associated with greater savings. Participants averaging two or more fitness center visits declined in cost over two years and had savings of $2,141 in year two relative to those with lower participation.

Depression and Use of a Health Plan-Sponsored Physical Activity Program by Older Adults

Nguyen, HQ, Koepsell, T, Unützer, J, Larson, E, LoGerfo, JP
American Journal of Preventive Medicine, 2008

Abstract

Background: The purpose of this study was to determine the associations between depression and the likelihood of enrollment in a health plan-sponsored physical activity program and pattern of program participation over 2 years; a secondary aim was to examine the association between participation dose and depression risk. There are no published studies on how depression influences participation in health plan-sponsored physical activity programs and how participation affects depression risk in older adults in nonresearch settings.

Methods: This study used administrative data from a Medicare Advantage plan. Participants (n=4,766) were enrolled in the plan for at least 1 year prior to participating in the plan-sponsored health club benefit (SilverSneakers®). Controls were age- and gender-matched to participants (n=9,035). Members were identified as having depression based on ICD-9-CM codes. Multivariate regression and generalized estimating equations models were used. Data were collected between 1998 and 2003 and analyzed in 2008.

Results: Members who had a history of depression were as likely to participate in SilverSneakers as nondepressed members (OR 1.03; 95% CI 0.89, 1.20; p=0.67). The risk of lapse in SilverSneakers attendance was 28%–55% (p=0.05) higher for depressed participants during months 15–24. For nondepressed SilverSneakers participants, attendance of at least 2 visits/week during Year 1 was significantly associated with lower risk of depression in Year 2 (OR 0.54; 95% CI 0.37, 0.79; p=0.002); a similar but statistically nonsignificant association was observed for previously depressed participants (OR 0.51; 95% CI 0.26, 1.02; p=0.06).

Conclusions: While depressed older adults are as likely to enroll in a health plan-sponsored physical activity program as nondepressed members, they were at higher risk of attendance lapses. Greater participation in the physical activity program was associated with lower depression risk.

Key Takeaways:

- Medicare Advantage members with depression were as likely to join SilverSneakers as members without depression.
- Depression was associated with higher risk for lapses in participation, but only after 15 months.
- Greater participation in SilverSneakers was associated with lower future depression risk.
Effectiveness of Health and Wellness Initiatives for Seniors

Coberley, C, Rula, EY, Pope, JE
Population Health Management, 2011

Abstract
Given the increasing prevalence of obesity and lifestyle-related chronic diseases in the United States and abroad, senior wellness initiatives have emerged as a means to stem the troubling trends that threaten the wellbeing and the economy of many nations. Seniors are an important demographic for such programs because this age group is growing, both as a proportion of the overall population and as a contributor to health care cost escalation. The goal of senior wellness programs is to improve the overall health of seniors through a variety of approaches, including increased physical activity, better nutrition, smoking cessation, and support of other healthy behaviors. Outcomes of particular interest are the effects of participation in these programs on health care utilization and expenditures. This review describes several studies that demonstrate reduced inpatient admissions and health care costs, as well as improved health-related quality of life as a direct result of participation in large-scale senior wellness programs. Programs that effectively engage seniors and change behavior as a direct result of participation provide strong evidence that health improvements and decreased health care expenditures can be achieved. However, solutions to the challenges of broader enrollment and sustained participation in these programs would increase the impact of their outcomes and health-related benefits.

Key Takeaways:
- This review of the literature evaluated the impact of various wellness programs for Medicare beneficiaries on health care costs, utilization, behavior change, health status, and quality of life
- Fitness programs, including SilverSneakers, and a workplace wellness program demonstrated significant health care cost savings for participants
- Reduced hospital utilization was a common outcome across evaluated senior fitness and wellness programs
- Fitness and coaching programs had significant outcomes in other important areas including improved health-related quality of life, gait speed, self-care activities and health behaviors
- Regular and sustained engagement were key factors to program success

About Tivity Health
Tivity Health, Inc., (NASDAQ:TVTY) is a leading provider of fitness and health improvement programs, with strong capabilities in developing and managing network solutions. Through its existing three networks, SilverSneakers® - the nation’s leading fitness program for older adults, Prime® Fitness and WholeHealth Living®, Tivity Health is focused on targeted population health for those 50 and over. With more than 13.5 million Americans eligible for SilverSneakers, over 10,000 fitness centers in the Prime Fitness Network, and more than 25 years of clinical and operational expertise in managing specialty health benefits and networks, including chiropractic services, physical therapy, occupational therapy, speech therapy, acupuncture, massage and complementary and alternative medicine (CAM) services, the company touches millions of consumers across the country and works directly with hundreds of healthcare practitioners and many of the nation’s largest payers and employers.