Table G10.A4. Medical Expenditures for Active Versus Inactive Persons

Reference, Study Design, and Time Period of Study	Cost Comparison	Number of Subjects, Percent Male, Age, Comorbidities	Measure of Usual Level of Activity	Adjustments
Pronk et al., 1999 (1) Cohort, stratified random sample of health plan members 1995-1996	4.7% reduction in costs per active day per week	5,689 subjects 47% male Mean age, 59 years (all 40+) 37% with no medical conditions	Self-reported BRFSS (pre 2001), type, frequency, duration	Age, sex, race, BMI, smoking, comorbidities
Tsuji et al., 2003 (2) Cohort, beneficiaries of National Health Insurance (Japan). 1995-1998	1.00 (ref) walk ≤30 minutes/week 0.97 walk 31-60 minutes/week 0.87 walk >60 minutes/week	27,431 subjects 55% male Mean age, 57 years (40-79) 100% with no limiting functional or medical conditions	Self-reported "How long do you walk a day, on average?"	Age, sex, BMI, smoking, alcohol intake
Ackerman et al., 2003 (3) Cohort, members of HMO 1997-2000	1.00 (ref) active 0.79 active	3,815 subjects 25% male Mean age, 75 years	Use of community fitness center 0 = inactive ≥1/week = active	Age, sex, entry date, chronic disease status, pre-enrollment costs
Wang F et al., 2004 (4) Cohort, GMC employees in PPO or indemnity plan 1996-1997	1.00 (ref) 0 times/week 0.89 1-2 times/week 0.91 3+ times/week	23,490 subjects 79% male Mean age, 47 years	Self-reported "In the average week, how many times do you engage in [moderate to vigorous] physical activity?"	Age, sex, BMI, health risk status (from HRA), comorbidities
Wang G et al., 2004 (5) Cross-sectional, linking 1995 NHIS and 1996 MEPS 1996	1.00 (ref) inactive, no CVD 0.93 active, no CVD 1.00 (ref) inactive, with CVD 0.60 active, with CVD	2,472 subjects 41% male Mean age, 47 years (estimate) 22% with CVD	Self-reported NHIS activity questions, active are those with ≥150 minutes/week moderate activity	Stratified by CVD status
Wang G & Brown, 2004 (6) Cross-sectional, 1987 NMES 1987	1.00 (ref) inactive 0.94 active	12,250 subjects 38% male Mean age, 46 years (estimate) 100% reported feeling "downhearted or blue" within past 30 days	Self-reported 30-minute moderate to strenuous activity 3+ times/week	Age, sex, race, BMI, smoking, SES, geographic region, physical limitations
Wang F et al., 2005 (7) Cohort, GMC retirees in PPO or indemnity plan 2001-2002	1.00 (ref) 0 times/week 0.86 1-3 times/week 0.78 4+ times/week	42,520 subjects 63% male Mean age, 74 years	Self-reported "In the average week how many times do you engage in [moderate to vigorous] physical activity?"	Age, sex, BMI, health risk status (from HRA), comorbidities

Table G10.A4. Medical Expenditures for Active Versus Inactive Persons (continued)

Reference, Study Design, and Time Period of Study	Cost Comparison	Number of Subjects, Percent Male, Age, Comorbidities	Measure of Usual Level of Activity	Adjustments
Brown et al., 2005 (8) Cross-sectional 1996 MEPS 1996	1.00 (ref) inactive with mental disorders 0.81 active with mental disorders	354 subjects 33% male Mean age, 45 years 87% white 100% with mental disorder 0% with physical limitation	Self-reported NHIS activity questions ≥60 minutes/week of vigorous or ≥150 minutes/week of moderate or vigorous	–

BMI, body mass index; BRFSS, Behavioral Risk Factor Surveillance System; CVD, cardiovascular disease; GMC, General Motors Corporation; HMO, health maintenance organization; HRA, Health Risk Appraisal; MEPS, Medical Expenditure Panel Survey; NHIS, National Health Interview Survey; NMES, National Medical Expenditure Survey; PA, physical activity; PPO, Preferred Provider Organization; SES, socioeconomic status

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