

Two-Year Outcomes Show Effectiveness of The Prevention Program in Lowering Health Risks and Costs

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TO TURN THE TIDE OF PREVENTABLE and costly chronic conditions that threaten individuals, employers, payers, and our economy, we must move beyond our illness-based, reactive-oriented, sick-care system to a more proactive, wellness-focused health care system—built on the pillars of preventive medicine. In a study¹ published last October in *Population Health Management*, we illustrated the effectiveness of such a model.

Among a cohort of 2606 employees from multiple employer groups who participated in The Prevention Plan from U.S. Preventive Medicine for 1 year, we found significant reductions in 10 of 15 key health risk measures that are predictors of future conditions. The cohort also showed a net movement from higher to lower overall health risk levels: 48.70% moved from high (5 or more risk factors) to moderate overall health risk (3–4 individual risk factors); 46.35% moved from moderate to low overall risk (2 or fewer individual health risk factors); and 15.65% moved from high to low overall risk. Further, migration from lower to higher overall health risk levels was considerably lower than in the Edington Natural Flow model.²

While encouraged by these results as further proof of the power of prevention, we conceded that 1-year outcomes may not necessarily translate into permanent—or at least persistent—health improvements. However, we are pleased to report that, after following a subcohort of that study population through their second year of participation in The Prevention Plan, the health improvements were found to be sustainable and even more compelling.

A subcohort of 1298 employees measured at baseline and then after 2 years of being on The Prevention Plan (2009 and 2010) showed reduction from high risk in 14 of 15 health risk factors with a few of the notable findings as follows: 90.7% improved physical activity; 89.4% lowered blood pressure; 78.3% report fewer health-related sick days; 76.2% lowered cholesterol; 74.2% reduced stress; 70% improved fasting blood sugar; 22.6% quit smoking/tobacco use; and 16.6% lowered body mass index measures.

There was, again, a net movement from higher to lower overall health risk levels illustrating that the participants were able to maintain—and in many cases accelerate—health improvements over the longer term. After 2 years on The Prevention Plan, 72.42% of the 1298 participants in this subcohort were

at low overall risk compared to 58.32% at baseline; 22.73% were at moderate overall risk compared to 30.20% at baseline, and 4.85% were at high overall risk compared to 11.48% at baseline.

Also, of those 58.32% (757) of participants that were in the low-risk category at baseline, 91.41% (692) remained at low risk after one year, and 90.75% (687) remained low risk at the end of two years. This compares to the Edington Natural Flow model (expected rate without intervention) of only 70% of those starting at low risk remaining low risk.

In addition, as has been demonstrated in many prior studies discussed in Dr. Edington's book, *Zero Trends*,² we found health-related costs follow health risks, such that as individuals moved from the high-risk category to lower-risk categories, medical claims costs and absenteeism days were lowered as well.

It is possible to reduce the unsustainable healthcare cost burden in our society by reducing the burden of health risk and chronic illness. However, it will take the collective efforts of employers, providers, health plans, government entities, other stakeholders, and—most importantly—individuals to accomplish this. Programs that empower health and wellness can be the catalyst for this transformation.

Author Disclosure Statement

Drs. Loepke, Bég, and Bender are employees of U.S. Preventive Medicine. Dr. Edington is an advisor/consultant of U.S. Preventive Medicine. USPM owns the proprietary system, The Prevention Plan.

References

1. Loepke R, Edington DW, Bég S. Impact of the Prevention Plan on employee health risk reduction. *Popul Health Manag.* 2010;13:275–284.
2. Edington, DW. *Zero Trends: Health as a Serious Economic Strategy*. March, 2009. Health Management Research Center, University of Michigan.

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