

Return-on-Investment Analysis: Oregon Tobacco Quit Line

In 2013, a return-on-investment (ROI) analysis was conducted to determine medical and productivity cost savings associated with people who have quit tobacco utilizing Oregon Tobacco Quit Line services.

4 separate groups of Quit Line participants were analyzed:

- Overall analysis = 6:1 ROI**
- Medicaid subgroup = 7:1 ROI**
- Asian and Pacific Islander (API) subgroup = 14:1 ROI**
- Web Only program = 34:1 ROI**

ORQL Overall Analysis

Satisfaction (very, mostly, somewhat)	93%
Quit Rate (30 day responder rate)	26%
Quits over 12 Months (Imputed) <i>5873 Multiple Call and Single Call Intervention participants in past 12 months x 26%</i>	1,527
<u>Annual Savings*</u> (Imputed) <div style="text-align: right;"> Medical: \$2,626 x 1,527 = \$4.0M Lost Productivity: \$962 x 1,527 = \$1.5M Worker's Comp: \$1,747 x 1,527 = \$2.7M </div>	\$8.1M
<u>Amount Spent-</u> <u>\$130 avg. per participant</u>	\$1.1M

***Citings**

1 Bureau of Labor Statistics. Average 2006 hourly salary in the U.S. (includes benefits).
 2 Bureau of Labor Statistics. Average annual increase in productivity in U.S. from 1997-2006.
 3 Washington Center for Studying Health Systems Change. Average annual increase in healthcare costs in the U.S. from 1991-2001.
 4 Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic costs--United States, 1995 - 1999, Centers for Disease Control and Prevention; MMWR, 51 (14): 300-3, April 2002.

5 The model excludes periodontal costs associated with tobacco use though dental professionals indicate they are significant.
 6 Effect of Smoking Status on Productivity Loss, Bunn WB, Stave GM, Downs KE, Alvir JM, Dirani R. JOEM 2006;48:1099-1108.
 7 Captures savings from reduction in annual health-related claims when smoker quits. The Association of Health Risks With Workers' Compensation Costs. Musich S et al. JOEM. 2001;43 (6):534-541.
 8 AHIP assumes smokers take one 5 minute break per day. Study: Warner KE et al. Health & economic implications of a work-site smoking cessation program. JOEM. 1996; 38:981-92

1 Prepared by Disa Cornish, Center for Social and Behavioral Research
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Medicaid Subgroup Analysis

Satisfaction (very, mostly, somewhat)	86%
Quit Rate (30 day responder rate)	19%
Quits over 12 Months (Imputed) <i>1230 Multiple Call and Single Call Intervention participants in past 12 months x 19%</i>	234
<u>Annual Savings*</u> (Imputed) Medical: \$2,626 x 234 = \$612,294.00 Worker's Comp: \$1,747 x 234 = \$408,274.00 Lost Productivity: \$962 x 234 = \$224,819.00	\$1,200,000.00
<u>Amount Spent-</u> <u>\$130 avg. per participant</u>	\$159,900.00

***Citations**

1 Bureau of Labor Statistics. Average 2006 hourly salary in the U.S. (includes benefits).
 2 Bureau of Labor Statistics. Average annual increase in productivity in U.S. from 1997-2006.
 3 Washington Center for Studying Health Systems Change. Average annual increase in healthcare costs in the U.S. from 1991-2001.
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API Subgroup Analysis

Satisfaction (very, mostly, somewhat)	100%
Quit Rate (30 day responder rate)	36%
Quits over 12 Months (Imputed) <i>34 Multiple Call and Single Call Intervention participants in past 12 months x 36%</i>	12
<u>Annual Savings*</u> (Imputed) <p style="text-align: right;">Medical: \$2,626 x 12 = \$32,069.00 Worker's Comp: \$1,747 x 12 = \$21,383.00 Lost Productivity: \$962 x 12 = \$11,774.88</p>	\$65,227.00
<u>Amount Spent-</u> <u>\$130 avg. per participant</u>	\$4,420.00

***Citations**

1 Bureau of Labor Statistics. Average 2006 hourly salary in the U.S. (includes benefits).
2 Bureau of Labor Statistics. Average annual increase in productivity in U.S. from 1997-2006.
3 Washington Center for Studying Health Systems Change. Average annual increase in healthcare costs in the U.S. from 1991-2001.
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Web Only Analysis

Satisfaction (very, mostly, somewhat)	91%
Quit Rate (30 day responder rate)	30%
Quits over 12 Months (Imputed) <i>1868 enrollments in past 12 months x 30%</i>	562
<u>Annual Savings*</u> (Imputed) Medical: \$2,626 x 562 = \$1,473,142.00 Worker's Comp: \$1,747 x 562 = \$982,282.00 Lost Productivity: \$962 x 562 = \$540,902.00	\$3.0M
<u>Amount Spent-</u> <u>\$45.05 avg. per participant</u>	\$84,150.00

***Citings**

1 Bureau of Labor Statistics. Average 2006 hourly salary in the U.S. (includes benefits).
 2 Bureau of Labor Statistics. Average annual increase in productivity in U.S. from 1997-2006.
 3 Washington Center for Studying Health Systems Change. Average annual increase in healthcare costs in the U.S. from 1991-2001.
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