



Calculating the Return on Investment: Employee Tobacco Cessation Coverage Utilizing Telephone Counseling and Medication

Tobacco use is costly to employers; however offering employees a cessation benefit that includes telephone counseling and medication through QuitlineNC has a positive return-on-investment (ROI). The following information can assist employers in calculating an approximate ROI for providing cessation coverage to their employees.

Consider the following when calculating a ROI for providing employees with cessation coverage:

- **North Carolina** has a smoking prevalence of **“20.9 percent”** among its total population. If a company’s smoking rate is unknown, the state’s prevalence rate can be used to calculate an ROI.
- The CDC estimates that companies spend \$3,856 per smoker per year in direct medical costs and lost productivity.¹
- **QuitlineNC** has a quit rate of **“31 percent”**.
- **QuitlineNC** services (counseling and medication) cost on average **\$206** per participant.
- Reach, the number of employees who participate in the cessation program, will depend on the amount of promotion, outreach and/or incentives provided to employees. The table below calculates an ROI based on three levels of reach.

Employer Estimated ROI for Employee Tobacco Cessation Coverage Using Telephonic Counseling (QuitlineNC) and Medication			
Calculate # of smokers based on the state’s smoking prevalence rate or the company’s smoking rate. <i>(# of employees x smoking prevalence). Insert that number in all three columns.</i>	= _____ # of smokers	= _____ # of smokers	= _____ # of smokers
Calculate # of program participants based on a 5%, 10%, 20% level of reach. <i>(# smokers x .05, .10 or .20) = # of program participants</i>	5% Reach = _____ program participants	10% Reach = _____ program participants	20% Reach = _____ program participants
Calculate the # of smokers who quit <i>(# of program participants x quitline quit rate) = # of smokers who quit smoking</i>	= _____ smokers who quit	= _____ smokers who quit	= _____ smokers who quit
Estimated quitline program cost <i>(“insert average quitline cost” x # of program participants) = program cost</i>	= \$ _____ program cost	= \$ _____ program cost	= \$ _____ program cost
Cost savings <i>(# smokers who quit x \$3,856) = annual cost of smoking incurred by the company</i>	= \$ _____ cost savings	= \$ _____ cost savings	= \$ _____ cost savings
ROI* = (Savings ÷ Cost)	= _____ ROI	= _____ ROI	= _____ ROI

*The result is expressed as a ratio. A ratio greater than one means that the benefit outweighs the cost.

Please note that this ROI calculation provides an approximate ROI. For a more stringent ROI calculation, visit <http://www.businesscaseroi.org/roi/apps/calculator/calcintro.aspx>.

For example:

Scott's Electric employs 16,000 employees. The state's smoking prevalence rate is 24 percent among the adult population. It is estimated that 5 percent of smokers would use the cessation program during the first year. The state's quitline has a success rate of 30 percent and has a quitline program cost of \$295* for counseling sessions and nicotine replacement therapy. The following calculations:

16,000 employees x .24% prevalence rate = 3,840 employees who smoke
3,840 smokers x .05 reach = 192 program participants
192 program participants x .30 (quit rate) = 58 employees who quit smoking
Cessation program cost: 192 program participants x \$295 per participant = \$56,640
Cost savings: 58 employees who quit smoking x \$3,856 = \$223,648
***ROI: (\$223,648 cost savings ÷ \$56,640) = 3.94**

* Quitline cost vary depending on counseling services and dosage of medication provided.

**The result is expressed as a ratio. A ratio greater than one means that the benefit outweighs the cost. In this example, an employer can anticipate saving \$3.94 dollars for every dollar invested in cessation treatment.

REFERENCES

¹Centers for Disease Control and Prevention. *Smoking-attributable mortality, years of potential life lost, and productivity losses: United States, 2000-2004*. Morbidity and Mortality Weekly Report, 2008; 57(45): 1226-8.



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