

Washington University in St. Louis

## Washington University Open Scholarship

---

Center for Public Health Systems Science

Brown School

---

1-1-2015

### MFH TPCI Economic Evaluation, Updated through June 2014

Center for Public Health Systems Science

Sarah Bobmeyer

Follow this and additional works at: <https://openscholarship.wustl.edu/cphss>

---

#### Recommended Citation

Center for Public Health Systems Science and Bobmeyer, Sarah, "MFH TPCI Economic Evaluation, Updated through June 2014" (2015). *Center for Public Health Systems Science*. 93.  
<https://openscholarship.wustl.edu/cphss/93>

This Report Tool is brought to you for free and open access by the Brown School at Washington University Open Scholarship. It has been accepted for inclusion in Center for Public Health Systems Science by an authorized administrator of Washington University Open Scholarship. For more information, please contact [digital@wumail.wustl.edu](mailto:digital@wumail.wustl.edu).



## Introduction

In 2004, the Missouri Foundation for Health (MFH) announced the Tobacco Prevention and Cessation Initiative (TPCI). Over the course of nine years, TPCI has funded several strategies ranging from providing direct services to individuals to advancing policy change at the local and state level.

This brief report presents the main results from the fifth economic evaluation of TPCI, conducted by the Center for Public Health Systems Science at Washington University in St. Louis.

For details about the methodology, assumptions, and limitations of the analysis, refer to the full report: [http://cphss.wustl.edu/Products/Documents/TPCI\\_2012\\_EconomicEvaluationReport.pdf](http://cphss.wustl.edu/Products/Documents/TPCI_2012_EconomicEvaluationReport.pdf).

Table 1 outlines the strategies funded by the initiative to date; programs were implemented in numerous counties across the state.

**Table 1. Initiative strategy descriptions and timeframe for inclusion in economic evaluation**

| Strategy                    | Description  | Timeframe              |
|-----------------------------|--|------------------------|
| Tobacco Tax                 | Education campaign focused on increasing support for a tobacco tax increase  | Jan 2005-<br>Dec 2006* |
| Community Grants            | Funding for grants dedicated to increasing access to cessation services, advocating for smokefree environments, educating students, and promoting youth advocating for policy change | Jan 2007-<br>Jan 2014  |
| Tobacco Policy Change       | Funding to support short-term activities conducted to advance policy change at the local level   | Dec 2007-<br>Jun 2014  |
| Quitline Enhancement        | Support for expansion of Missouri Quitline services  | Dec 2007-<br>Nov 2010  |
| Tobacco-related Disparities | Multi-phase program to assess tobacco-related disparities and plan for and implement tailored interventions  | Not Assessed           |
| EX Campaign                 | Funding to support the Legacy Foundation's Become an Ex campaign in Missouri   | Not Assessed           |

\*A tobacco tax increase was also attempted in 2012. However, TPCI did not participate in advocating for that tax increase.

## Results

In Table 2, the tobacco tax strategy shows no benefits were gained from the educational campaign. Despite the 2006 tobacco tax increase not passing, the total combined benefits for the four TPCI strategies during the time period resulted in real savings: 16,983 quality-adjusted life years (QALYs) gained and lifetime medical care savings of \$108 million. The total combined cost for the four TPCI strategies was \$23,091,140; therefore TPCI resulted in a positive return on investment.

**Table 2. Total costs and benefits for TPCI strategies, January 2005 - June 2014**

| Strategy                | Costs        | Total QALYs gained | Total lifetime medical care savings | Cost per QALY gained | Medical care savings per dollar spent |
|-------------------------|--------------|--------------------|-------------------------------------|----------------------|---------------------------------------|
| Tobacco Tax             | \$654,000    | 0                  | \$0                                 | \$0                  | \$0                                   |
| Community Grants        | \$17,626,432 | 9,883              | \$62,022,013                        | \$1,783.56           | \$3.52                                |
| Tobacco Policy Change   | \$1,810,708  | 4,601              | \$31,015,578                        | \$393.51             | \$17.13                               |
| Quitline Enhancement    | \$3,000,000  | 2,499              | \$15,142,349                        | \$1,200.33           | \$5.05                                |
| All Strategies Combined | \$23,091,140 | 16,983             | \$108,179,940                       | \$1,359.63           | \$4.68                                |

Table 3 (see page 3) presents details regarding the benefits of individual interventions. The tobacco tax education intervention was excluded because the 2006 ballot measure to increase the tobacco tax failed, and therefore produced no benefits. Across all interventions, we estimate that 10,316 adults in Missouri quit smoking due to TPCI-supported efforts. For the youth education programs, we estimate that 201 school-aged children who would have initiated smoking were prevented from doing so.

Smokefree policy changes show the greatest benefits, particularly for community-wide policies. We estimate that 6,173 adults in Missouri quit smoking due to community-wide policy changes, and an additional 489 adults quit smoking due to worksite policy changes.

**Table 3. Benefits from each intervention of the TPCI strategies, January 2007 - June 2014**

| <b>Smokefree Policy Changes</b>                      |               |
|--|---------------|
| <i>Community-wide Policy Changes</i>                 |               |
| Estimated number of adults who quit smoking          | 6,173         |
| QALYs gained   | 9,753         |
| Lifetime medical care savings to society             | \$62,732,823  |
| <i>Worksite Policy Changes</i>                       |               |
| Estimated number of adults who quit smoking          | 489           |
| QALYs gained   | 774           |
| Lifetime medical care savings to society             | \$4,946,230   |
| <b>Cessation Services</b>                            |               |
| <i>In-person Group/Individual Services</i>           |               |
| Estimated number of adults who quit smoking          | 2,072         |
| QALYs gained   | 3,274         |
| Lifetime medical care savings to society             | \$21,207,143  |
| <i>Quitline Services</i>                             |               |
| Estimated number of adults who quit smoking          | 1,582         |
| QALYs gained   | 2,499         |
| Lifetime medical care savings to society             | \$15,142,349  |
| <b>Youth Education</b>                               |               |
| Estimated number of youth who will not start smoking | 201           |
| QALYs gained   | 684           |
| Lifetime medical care savings to society             | \$4,151,395   |
| <b>Totals</b>  |               |
| Estimated number of adults who quit smoking          | 10,316        |
| Estimated number of youth who will not start smoking | 201           |
| QALYs gained   | 16,984        |
| Lifetime medical care savings to society             | \$108,179,940 |

**For more information, please contact:**  
 Sarah Bobmeyer  
 Center for Public Health Systems Science  
 (314) 935-3723  
 sbobmeyer@wustl.edu  
<http://cphss.wustl.edu>